

University of the Philippines Open University

Faculty of Information and Communication Studies

Course Module Archive

MMS 150: User Interface and User Experience (UI/UX) Design

3rd Trimester, AY 2022-2023

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This archive contains the instructional materials for MMS 150: User Interface and User Experience (UI/UX) Design, a core course under the Bachelor of Arts in Multimedia Studies (BAMS) program at the University of the Philippines Open University (UPOU). Developed and refined by Diego Maranan, this version of the course package was implemented during the 3rd Trimester of Academic Year 2022-2023. While the course has been previously offered, this iteration represents a significant refinement of earlier versions and is submitted for formal consideration.

MMS 150 introduces students to the foundational principles, tools, and collaborative practices of UI/UX design. Framed around the 5-phase Design Thinking model, the course guides learners through activities in user research, problem definition, ideation, prototyping, and usability testing. Emphasis is placed on ethical design, user empathy, and critical engagement with design processes across multiple platforms. Students work in teams to create functional low- and high-fidelity prototypes that address real-world needs and reflect iterative design thinking.

Modules were delivered asynchronously through UPOU's Moodle-based learning management system, MyPortal. Students engaged with interactive activities, online workshops, discussion forums, and a peer-evaluated final project. The course culminated in a public-facing presentation and design critique session.

This PDF archive includes:

1. A copy of the full authored course package;
2. A snapshot of the LMS course site (teacher view) showing how the content and activities were structured and implemented.

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Module 1. UI/UX Core Concepts

Faculty of Information and Communication Studies
Bachelor of Arts in Multimedia Studies

MMS 150

User Interface and User Experience Design



Activities and Tasks

Activity 1.1. What does design mean for you?

Activity 1.2. What is user interface and user experience (UI/UX) design?

Task 1.1.1. Think about and share your definition of good design

Task 1.1.2. Provide an example of what you believe to be a well-designed (non digital) product

Task 1.1.3. Compare and contrast your idea of usable design with those of your classmates

Task 1.2.2. Listen to and understand Dr. Rosa Arriaga's lecture on core concepts in UI/UX

Task 1.2.1. Study Morville's UX honeycomb diagram

Task 1.2.3. Read and watch Interaction Design Foundation's introductory material on UX

Task 1.2.4. Compare the definitions of UX

Activity 1.1. What does design mean for you?

Most of us have some idea of what the word "design" means. Before we launch into how we will be using the term for this course, it's worth reflecting on and sharing with the class what your idea of design is.



Task	Time required
Task 1.1.1. Think about and share your definition of good design	5 minutes
Task 1.1.2. Provide an example of what you believe to be a well-designed (non digital) product	10 minutes
Task 1.1.3. Compare and contrast your idea of usable design with those of your classmates	15 minutes

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Task 1.1.1. Think about and share your definition of good design

Time required: 5 minutes



Good design means different things to different people. What does good design mean to you?

1. Without looking at any other definition, write down what you think good design means for you. Don't take too much time thinking about this. Just jot down the first things that come to mind within a 2-4 minute timeframe.
2. Share your ideas in the appropriate discussion forum for the course.

Related resources

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recGKEdEsKB3I5nIA>

Task 1.1.2. Provide an example of what you believe to be a well-designed (non digital) product

Time required: 10 minutes



Pick an example of a product that you consider well-designed and share it with the class in the appropriate discussion forum. Why do you say that this is a well-designed product? It doesn't have to be a digital product.

Add images or other media to the discussion forum post that you make to illustrate your point more clearly.

Related resources

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rec8kwK5kTdexFAQy>

Task 1.1.3. Compare and contrast your idea of usable design with those of your classmates

Time required: 15 minutes



How does idea of good design compare to those of your classmates'?

1. Find examples posted by your classmates in the discussion forum where their definition was markedly different from yours. Leave a comment on your classmate's post by responding to the following questions.
 - a. How is their definition of good design different from yours?
 - b. What does that tell you about how different people have different ideas of what good design is?

If you are interested in reading about my own perspective of design, see an article that I wrote for Rappler many years ago (the link is in the Resources list below), where it talk about not so much what design *is* but what it *does*.

Related resources

'Thinking Through Design: Understanding its significance' by Diego Maranan	https://www.rappler.com/life-and-style/thinking-through-design-significance
'The Design of Everyday Things' by Don Norman	https://www.nngroup.com/books/design-everyday-things-revised/

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Activity 1.2. What is user interface and user experience (UI/UX) design?

User interface design is different from but related to user experience design. Having a well-designed user interface is part of a positive user experience.



Task	Time required
Task 1.2.2. Listen to and understand Dr. Rosa Arriaga's lecture on core concepts in UI/UX	15 minutes
Task 1.2.1. Study Morville's UX honeycomb diagram	15 minutes
Task 1.2.3. Read and watch Interaction Design Foundation's introductory material on UX	30 minutes
Task 1.2.4. Compare the definitions of UX	10 minutes

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Task 1.2.1. Study Morville's UX honeycomb diagram

Time required: 15 minutes



In this resource, Usability.gov discusses designer Peter Morville

1. According to Morville, when does a user have a positive experience of a technology product?

Related resources

'New pathways'
by Usability.gov

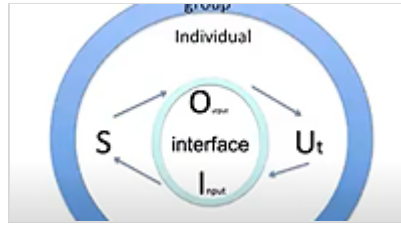
<https://www.usability.gov/what-and-why/user-experience.html>

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Task 1.2.2. Listen to and understand Dr. Rosa Arriaga's lecture on core concepts in UI/UX

Time required: 15 minutes



As you listen to the speaker's talk, take note of answers to the following questions:

1. What is an interface?
2. How do the key components of an interface relate to each other?

Related resources

'Core Concepts in UX' by Rosa Arriaga / Coursera	https://drive.google.com/file/d/1Z68SWM4UzCINwUeDk0_BzlhPD9Vh-WAD/view?usp=sharing
'User Engagement Ethics' by Rosa Arriaga / Coursera	https://www.coursera.org/learn/user-experience-design/lecture/yehDq/user-engagement-ethics

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Task 1.2.3. Read and watch Interaction Design Foundation's introductory material on UX

Time required: 30 minutes



1. What is the relationship between the fields of study known as HCI (human-computer interaction), interaction design, and UX?
2. What was the core question that the field of HCI tackled?
3. Is UI design a part of UX design, or is UX design a part of UI design?

Related resources

'User Experience (UX) Design'
by Interaction Design Foundation

<https://www.interaction-design.org/literature/topics/ux-design>

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rec2aUIVnu0e1Sxpv>

Task 1.2.4. Compare the definitions of UX

Time required: 10 minutes



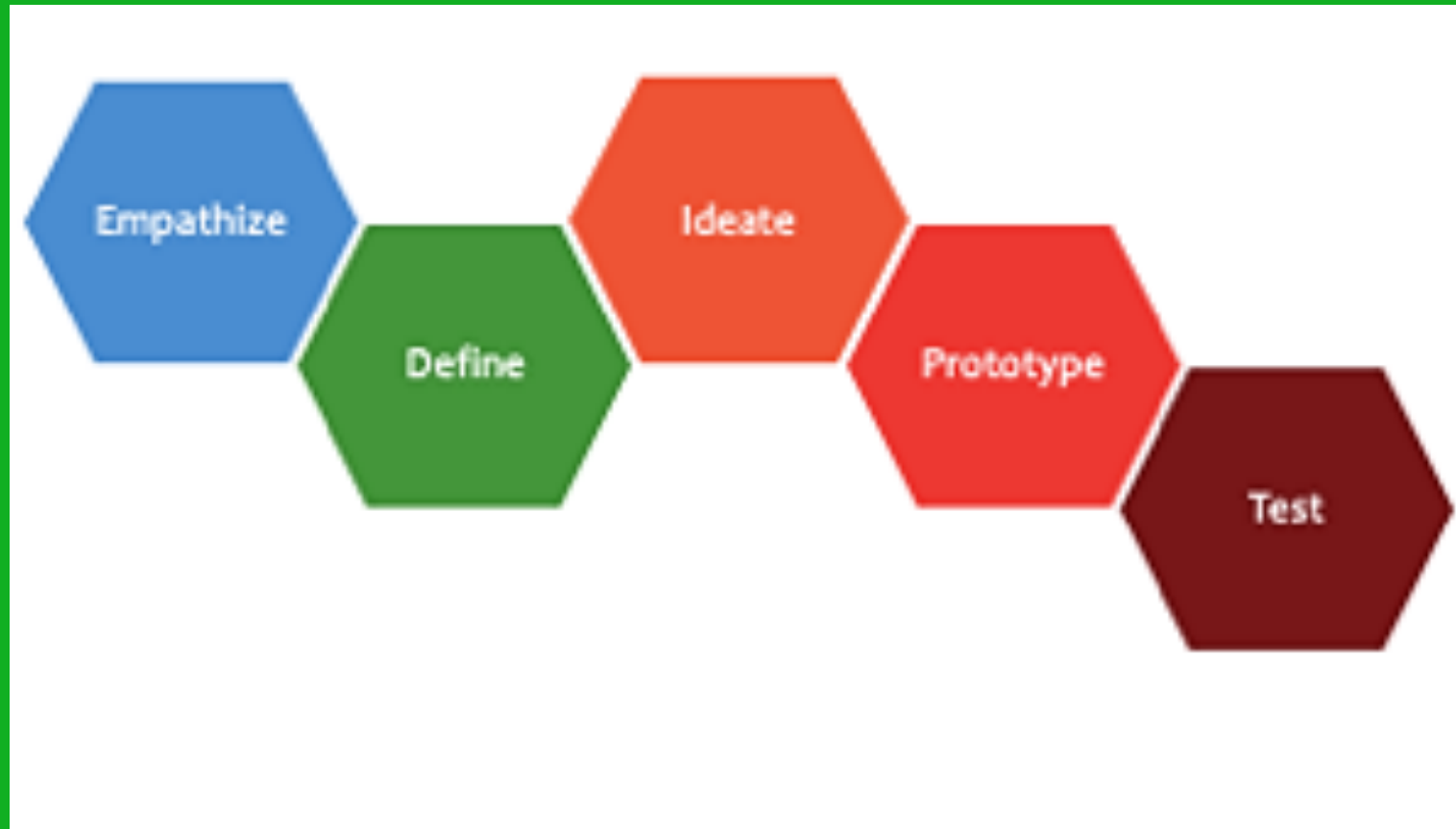
Compare the definitions of UX between the three materials you read and listened to in previous activities. Notice that they all have slightly different ways of defining UX. Identify one such difference and share it with the class.

Related resources

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recXqAllhHxME5fsv>

Module 2. Design Processes



Activities and Tasks

Activity 2.1. Experience a design iteration through a design thinking workshop

Activity 2.2. How is UX design done?

Activity 2.3. Start exploring project tools

Task 2.1.1. (Option 1) Attend a synchronous design thinking workshop

Task 2.1.2. (Option 2) Learn about design thinking by following along a recording of a d.school Starter Kit workshop done for the 2020-3T class of MMS 150

Task 2.2.1. Watch IDEO's shopping cart challenge and learn about the 5-step Design Thinking Process from IDEO

Task 2.2.2. Review and recall the 4-step User Interface Design Cycle

Task 2.2.3. Browse through 3 types of methods Human-Centered Design framework from IDEO's Design Kit

Task 2.2.4. Identify the two main types of activities that is involved in all design processes.

Task 2.2.5. Map the activities from the workshop to design process theories

Task 2.3.1. Start familiarizing yourself with a prototyping tool

Activity 2.1. Experience a design iteration through a design thinking workshop

So far, all of our discussion has been very theoretical. To really understand the essence of UX design, nothing beats hands-on experience. In this activity, you will participate in a synchronous, videoconference-based design thinking workshop. If you are not able to participate in the workshop, an alternative task will be provided.



Task

Time required

Task 2.1.1. (Option 1) Attend a synchronous design thinking workshop

180
minutes

Task 2.1.2. (Option 2) Learn about design thinking by following along a recording of a d.school Starter Kit workshop done for the 2020-3T class of MMS 150

180
minutes

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Task 2.1.1. (Option 1) Attend a synchronous design thinking workshop

Time required: 180 minutes



Your course instructor will schedule a 2-3 hour design thinking remote workshop using the using the Stanford d.school Starter Kit. Participating in this workshop is a great way to appreciate the fundamentals of experience design.

(Please note that if you participate in the workshop, the workshop will be recorded in order and shared with the class so that your classmates who did not manage to attend can have some idea of what the workshop was like.)

Related resources

'd.school Starter Kit'
by Hasso Plattner Institute of Design at Stanford University

<https://dschool.stanford.edu/resources/dschool-starter-kit>

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recCSCKd4zTrTBGRE>

Task 2.1.2. (Option 2) Learn about design thinking by following along a recording of a d.school Starter Kit workshop done for the 2020-3T class of MMS 150

Time required: 180 minutes



If you are not able to take Option 1, you can get some of the experience of the d.school Starter Kit workshop by trying out the workshop on your own time:

1. Find an activity partner (a friend, a relative, or a classmate) that can do the workshop with you. (Actually, you can have more than the two of you participating. Feel free to recruit other activity partners to the workshop; just make sure there's an even number of you!)
2. Arrange a 3-hour block that you and your activity partner can do the workshop together. You should also prepare some pens and about 3 to 8 sheets of paper for each person.
3. Watch the recording of the Starter Kit workshop with the 2020-3T class of MMS 150 students (see the list of resources). Follow along with the video and do the activities as if you were doing the workshop yourself. You don't need to be in the same physical space but you need to be able to watch the recording of the workshop video at the same time.

You are also welcome to go through the slides of the d.school Starter Kit, paying close attention to the embedded videos. You could also then run the workshop yourself using a few people, or ask a friend to run the workshop for you while you participate.

As an additional task, you can also watch an abridged recording of a different design thinking workshop being run by Justin Ferrell for the Irish Times to see what a design thinking workshop is like.

Related resources

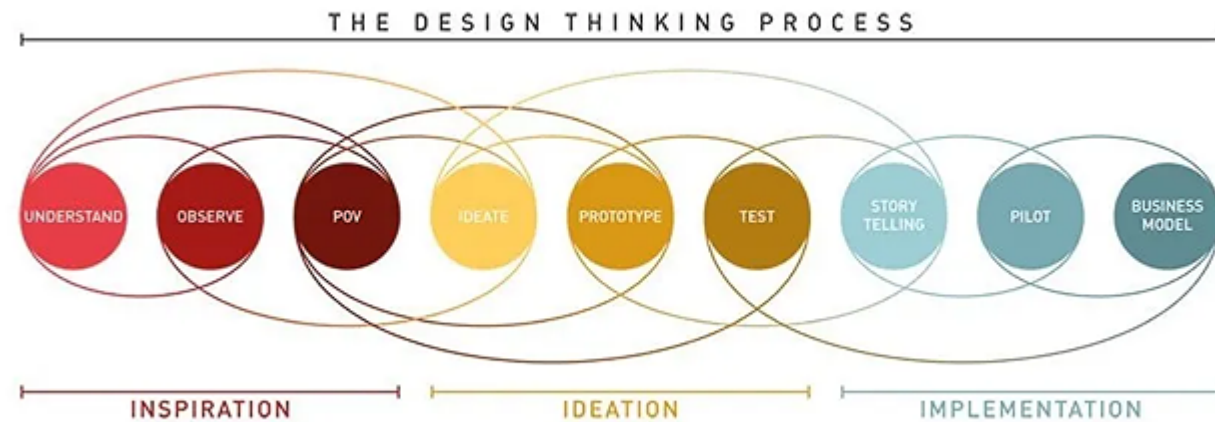
'Recording of d.school Starter Kit workshop run during MMS 150 2020-3T ' by Diego Maranan / UPOU	https://drive.google.com/file/d/1lcF7YapUP_pT06AznDorgJauUWLyj58n/view?usp=sharing (video recording), https://drive.google.com/file/d/176tvix1UZ9tqJfSROt9jdIXEJ_9F4MUr/view?usp=sharing (chat transcript). Log in using your UP account to access the file. Please do not share these files with anyone else.
'd.school Starter Kit' by Hasso Plattner Institute of Design at Stanford University	https://dschool.stanford.edu/resources/dschool-starter-kit
'Design Thinking workshop with Justin Ferrell of Stanford d. School at The Irish Times' by Johnny Ryan / Justin Ferrel	https://www.youtube.com/watch?v=Z4gAugRGpeY&ab_channel=JohnnyRyan

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rechNvPTj0F9p2S8s>

Activity 2.2. How is UX design done?

There several frameworks that can help describe the activities involved in UX design. No framework is ever 100% complete or accurate, so a good way to understand the UI/UX design process to look at and compare a few different frameworks. In this activity, we look at at three such frameworks. Then you'll use these frameworks to reflect on your experience of the d.school Starter Kit workshop.



Task	Time required
Task 2.2.1. Watch IDEO's shopping cart challenge and learn about the 5-step Design Thinking Process from IDEO	60 minutes
Task 2.2.2. Review and recall the 4-step User Interface Design Cycle	5 minutes
Task 2.2.3. Browse through 3 types of methods Human-Centered Design framework from IDEO's Design Kit	10 minutes
Task 2.2.4. Identify the two main types of activities that is involved in all design processes.	20 minutes
Task 2.2.5. Map the activities from the workshop to design process theories	5 minutes

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Task 2.2.1. Watch IDEO's shopping cart challenge and learn about the 5-step Design Thinking Process from IDEO

Time required: 60 minutes



Design Thinking is a framework that was made famous by IDEO and the d.school at Stanford University. You might have encountered it when you took MMS 100. For this activity, you will review the module in MMS 100 which covers the design thinking framework. Go through all the activities in the module, but if you're short on time, watch the shopping cart challenge video at a minimum and read the rest of the text in the module.

The shopping cart challenge is a classic in the field of design. The video is somewhat dated but not quite outdated! There's still lots to learn from this case study.

Related resources

'A Design Thinking Perspective on the BAMS Program'
by Diego Maranan

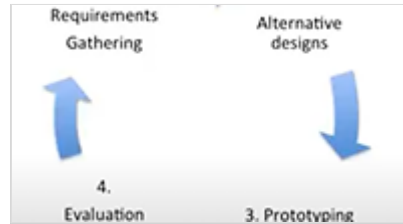
<https://sites.google.com/upou.edu.ph/mms100-2018-2t/unit-1-key-concepts/module-3-a-design-thinking-perspective-on-bams>

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Task 2.2.2. Review and recall the 4-step User Interface Design Cycle

Time required: 5 minutes



Review Dr. Rosa Arriaga's talk on user interface design and note the 4-step user interface design cycle that she presents in her talk. How is it similar to the 5-phase design thinking process? How is it different?

Related resources

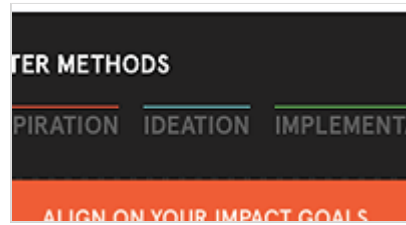
'Core Concepts in UX' by Rosa Arriaga / Coursera	https://drive.google.com/file/d/1Z68SWM4UzCINwUeDk0_BzlhPD9Vh-WAD/view?usp=sharing
'User Engagement Ethics' by Rosa Arriaga / Coursera	https://www.coursera.org/learn/user-experience-design/lecture/yehDq/user-engagement-ethics

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recODyP02N548LG0i>

Task 2.2.3. Browse through 3 types of methods Human-Centered Design framework from IDEO's Design Kit

Time required: 10 minutes



Design Thinking has evolved over the years. In this Task and in the next one, you'll see how the original 5-phase process can be simplified into three or even just two main kinds of activities. In IDEO's Design Kit resource, they list methods used for three kinds of main activities. While the *ideation* phase remains the same, empathizing and defining can be thought of as belonging to the more general activity of *inspiration*, while prototyping and evaluation is lumped under *implementation*. Take a few minutes to browse through the different kinds of methods listed under each kind of activity in IDEO's Design Kit. Can you recognize some of the methods in the design thinking workshop you previously did?

Related resources

'Design Kit - Methods'
by IDEO

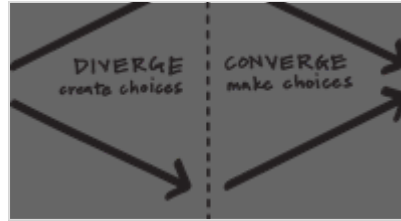
<https://www.designkit.org/methods>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/reclwBmUt6VC3oTW>

Task 2.2.4. Identify the two main types of activities that is involved in all design processes.

Time required: 20 minutes



From 5 phases to 4, then to 3, we can ultimately think about all design processes as being composed of two types of activities: those that involve *divergent* thinking and those that involve *convergent* thinking. In addition to reading the resource listed in this task, use the Web to search for what divergent and convergent thinking involves. In your own words, summarize these two concepts and provide an example of each.

Related resources

'Design Thinking Defined'
by IDEO

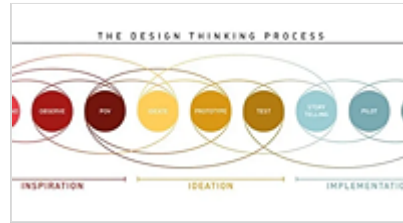
<https://designthinking.ideo.com/>

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rec7P3Wn43i6Re3EF>

Task 2.2.5. Map the activities from the workshop to design process theories

Time required: 5 minutes



1. Recall **all** the different activities that you did in the d.school Starter Kit design thinking workshop that you did in Activity 1.3. (Just to get you started, remember that one of the first things you did was introduce yourself through the chat box; then you participated in the blind contour drawing stroke; then you did a user journey map.)
2. Choose one activity that you did.
3. How does that activity map to the different phases in the UI/UX design processes that you had previously looked at?
 - a. The 5-step Design Thinking process
 - b. The 4-step User Interface Design Cycle
 - c. The 3-phase Human Centered Design Process
 - d. The 2-phase analysis of design Thinking
4. Share your idea with in the appropriate discussion forum for your class.

Don't worry about getting the answer 100% "correct" on this one, and don't spend more than recommended number of minute for this task! This is just about getting you think about how certain design activities fit in different kinds of frameworks.

Related resources

'd.school Starter Kit' by Hasso Plattner Institute of Design at Stanford University	https://dschool.stanford.edu/resources/dschool-starter-kit
'Design Thinking: A Quick Overview' by Interaction Design Foundation	https://www.interaction-design.org/literature/article/design-thinking-a-quick-overview

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Activity 2.3. Start exploring project tools

For your final project, you will find it necessary to use tools for communicating with each other and prototyping your ideas. In this activity you will get started with a couple of these tools.



Task

Task 2.3.1. Start familiarizing yourself with a prototyping tool

Task 2.3.2. Explore communication and collaboration tools

Time required

45 minutes

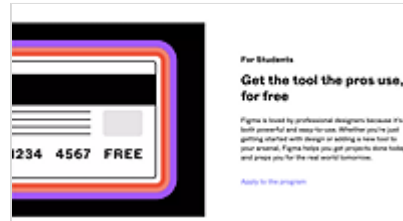
30 minutes

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Task 2.3.1. Start familiarizing yourself with a prototyping tool

Time required: 45 minutes



While some prototyping techniques such as low fidelity prototyping requires nothing more than a pen and paper, you may find a need to use more sophisticated tools to do more detailed mock-ups. For your Final Project, you will be developing a prototype for a website or mobile app. There are a number of different prototyping tools you can use for this purpose (see the related resource listed here).

1. I recommend you try out Figma, because you can sign up for an educational account using your @up.edu.ph email account. When you sign up for an educational account, mention that you are a student of MMS 150 a course at UP Open University on UI/UX Design (<https://fics.upou.edu.ph/programs/bachelor-of-arts-in-multimedia-studies-curriculum-2018/mms-150/>)
2. Once you've signed up for an educational account, I recommend that you start exploring the tool and follow along any of the many tutorials out there on the Web on how to use the tool. A Figma video tutorial is listed in the Related Resources section of this task

Related resources

'14 best prototyping tools for UI/UX designers' by Jeff Cardello / webflow	https://webflow.com/blog/prototyping-tools
'Figma Educational Account Signup' by Figma	https://www.figma.com/education/
'Figma Tutorial' by DesignCourse	https://www.youtube.com/watch?v=3q3FV65ZrUs&ab_channel=DesignCourse

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Task 2.3.2. Explore communication and collaboration tools

Time required: 30 minutes



While Moodle is a great learning management system, it's not ideal for the kinds of communication and collaborative activities that will probably need to happen in your final project team. One current industry standard for team communication is [Slack](#). Another useful tool collaboration tool (and one that I personally use more often) is [Discord](#).

1. Create a Discord account. You can optionally install Discord on your desktop computer and/or your phone.
2. To get used to how Discord works, choose one from the many [public Discord servers](#) and join it.

Related resources

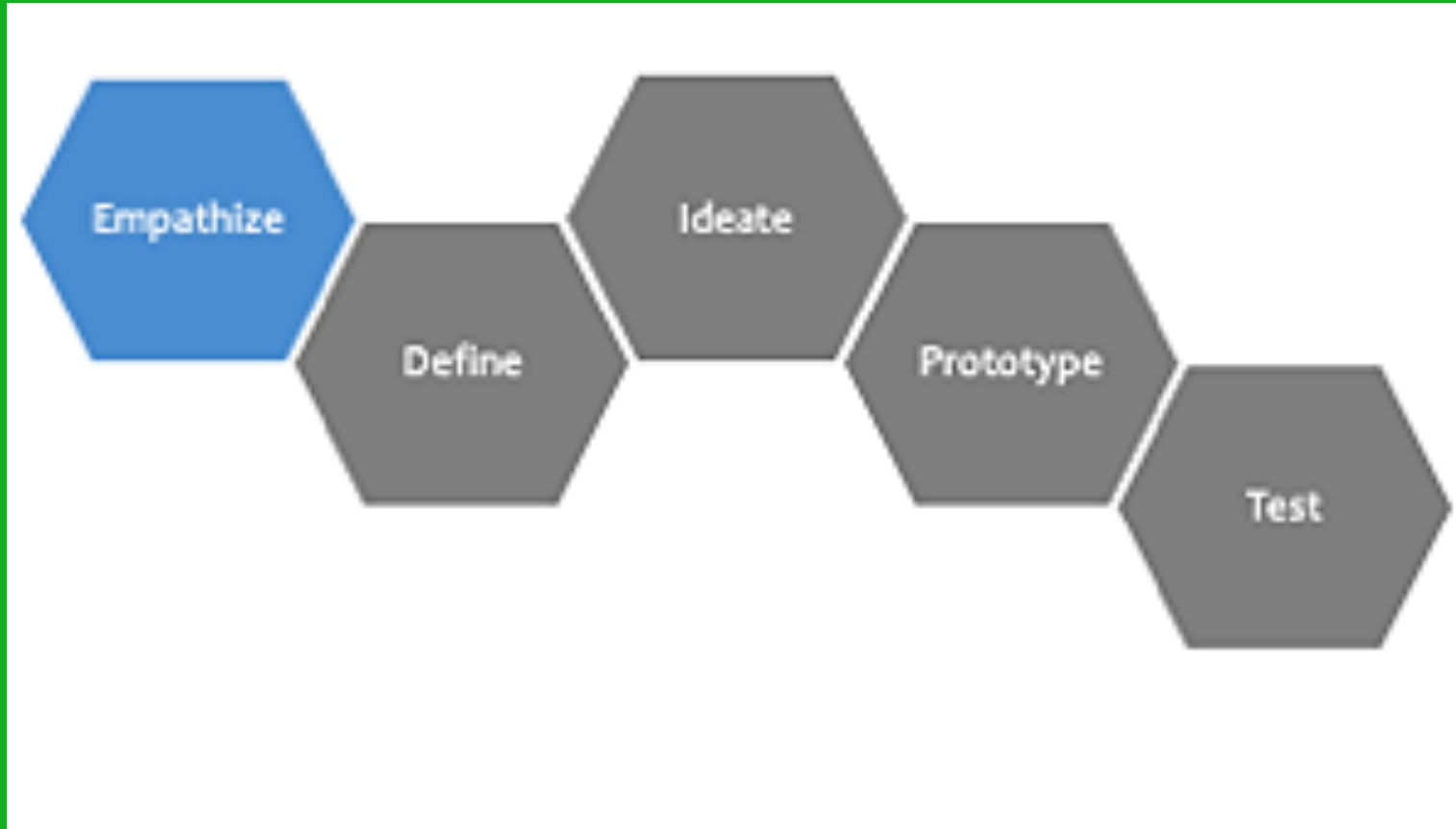
'Discord vs Slack – Gaming, Working or Both?'
by Olga Mykhoparkina / Chanty.com

<https://www.chanty.com/blog/discord-vs-slack/>

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Module 3. Understanding User Needs



Activities and Tasks

Activity 3.2. Understanding and describing your audience
Activity 3.1. Defining your audience
Activity 3.3. Ethical interactions with users and research participants

Task 3.2.1. Report on a method that you can use to understand your users better
Task 3.2.2. Find and share examples of frameworks for describing your user research findings
Task 3.1.1. Define your audience
Task 3.3.1. Engaging with communities
Task 3.3.2. Getting informed consent
Task 3.3.3. Interacting with users during prototype evaluation sessions

Activity 3.1. Defining your audience

The first part of any design process is getting inspired by a problem and identifying a group of people that might be affected by it.



Task

Task 3.1.1. Define your audience

Time required

180 minutes

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Task 3.1.1. Define your audience

Time required: 180 minutes



Defining your audience is particularly important for your Final Project. You had already done some work in defining your audience when you were pitching your project proposal to the class, but you might need to spend more time refining your audience even further once you've formed your Final Project team. If you are having trouble figuring out your audience, try the *Define Your Audience* method from the Design Kit.

Related resources

'Define Your Audience'
by IDEO

<https://www.designkit.org/methods/define-your-audience>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rec77xrHcEjdOJNVc>

Activity 3.2. Understanding and describing your audience

After you have a pretty clear idea of who you're going to be designing for, you will now try to understand them and their pain points. In the IDEO Shopping Cart challenge, for example, the design researchers went to a grocery store and observed shoppers (observation), interviewed them in the grocery store (contextual interviews), and interviewed grocery store staff (expert interviews). The data from these methods can then be synthesized to create overviews such as journey maps, relation maps, and 2x2 category grids.



Task

Time required

Task 3.2.1. Report on a method that you can use to understand your users better

60 minutes

Task 3.2.2. Find and share examples of frameworks for describing your user research findings

20 minutes

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Task 3.2.1. Report on a method that you can use to understand your users better

Time required: 60 minutes

There are many methods you can use to better understand the potential users of your product. Individual interview, key informant (expert) interviews, and focus groups are the most well-known ones, but there are many others, include diaries, photovoice, event sampling, card sorting, Web-based data scraping, and secondary research.

Pick one method from the following and report on it in the class:

- The [Field Guide to Human-Centered Design](#)
- [Resources tagged with *empathize* and *methods*](#) in the MMS 150 course package
- The book [Universal Methods of Design](#)

Related resources

'The Field Guide to Human-Centered Design' by IDEO.org	https://www.designkit.org/resources/1
'The Universal Methods of Design' by Bruce Hanington and Bella Martin	https://www.amazon.com/Universal-Methods-Design-Expanded-Revised-ebook/dp/B084P74NNT/ref=sr_1_1?keywords=Universal+Methods+of+design&qid=1623596333&sr=8-1

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Task 3.2.2. Find and share examples of frameworks for describing your user research findings

Time required: 20 minutes



The Field Guide to Human-Centered Design describes on page 89 three different kinds of frameworks for synthesizing information related to your UI/UX project: **journey maps**, **relation maps**, and **2x2 grids**. These frameworks are particularly useful for summarizing your findings about your users. See for example the **task analysis** and a **user journey map** from a project that Curiosity had worked on. (The cover image you see here is the user journey map for that project.) Both of these are examples of journey maps.

1. Using the Web, find one other example of **either a journey map, a relationship map, or some kind of grid (usually a 2x2 one)** that synthesizes user research for a particular project. Be sure to post an example that no one else has already posted in the discussion forum. (Hint: Google is your friend!)
2. Try to make an educated guess about how the data that was used to construct that framework came from. Do you think it came from interviews? Key informant interviews? Focus groups? Secondary research? Diaries?
3. Share your answers with the class.

Related resources

'The Field Guide to Human-Centered Design' by IDEO.org	https://www.designkit.org/resources/1
'Example of task analysis and example of user journey map: Development of a Doctor Scheduling App' by Curiosity	http://www.curiosity.ph/development-of-doctor-scheduling-app/

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rec3xIAJI0IVK5yCz>

Activity 3.3. Ethical interactions with users and research participants

Before you conduct research that will help you empathize with your target audience better or a testing session to evaluate your product/prototype, you should keep in mind a few key considerations on how you can ethically engage with participants and users. If there's one thing you should remember about ethical engagement is, it is that you should always strive to *do no harm*.

You will cover research ethics in more detail in other courses such as MMS 197 and MMS 200.



Task	Time required
Task 3.3.1. Engaging with communities	10 minutes
Task 3.3.2. Getting informed consent	5 minutes
Task 3.3.3. Interacting with users during prototype evaluation sessions	7 minutes

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Task 3.3.1. Engaging with communities

Time required: 10 minutes



If you work in industry, civic society, or in academia and are involved with UX research and design projects with real users, you will need to start more than ever thinking about how to engage with users ethically. This is particularly true especially if you work with marginalized communities. Think very carefully about how you introduce your project to a community, what kinds of promises you make, and how much of their time and effort you ask members of the community to put into your project. Many communities often have researchers and designers come to them to gather data or test prototypes, but weren't compensated for the time and effort in participating in the design process or don't directly benefit from the final solution produced by the designers or researchers. There are many approaches to dealing with this conundrum. In this reading, you will learn about one of them, which is the principle of not conducting any research with a community before first having given offered service to them.

For the purposes of your MMS 150 project, make sure you that you explain to the participants of your design process that you are working on a school project which may not go anywhere after the course is done. Manage your participants' expectations and be careful about overpromising against what you can realistically deliver, even if you intend to continue to work on your project after the course is done.

Related resources

'No survey without service – Tips for Solution Based Advocacy (26)'
by AI Etmanski

<https://aetmanski.com/series/tips-for-solutions-based-advocacy/no-survey-without-service-tips-for-solution-based-advocacy-26/>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/reckD5zPEXut57FxD>

Task 3.3.2. Getting informed consent

Time required: 5 minutes

Research Title: Adolescents Engagement and Skills Acquisition in Digital Spaces Understanding Opportunities, Engagement, and Inclusion Online	
Carefully read the following statements before deciding to participate in the research study.	
<p>WHAT IS RESEARCH? Research is something we do to find new knowledge about the way things and people work. Research also helps us to find better ways of helping and improving people's lives.</p> <p>WHAT IS THIS RESEARCH ALL ABOUT? This is about the study of adolescents like you, which aims to explore how you are presently engaged in digital learning, for</p>	<p>WHAT ARE THE RISKS AND BENEFITS OF PARTICIPATING IN THIS RESEARCH? There is no risk or discomfort when you participate in the activities. The results of this research will be helpful for classmates, teachers, and parents to understand how adolescents like you engage and develop your skills while using varied technologies for learning. Furthermore, the use and influence of digital spaces</p>

Once you have established a relationship with a target community, one of the things you should keep in mind is how to get informed consent and how to explain to your participants what your research is about. There are two ways of getting informed consent (verbally and in writing) and which one you will use will depend on who you are engaging with and under what circumstances. The Resource List below includes examples of consent and assent forms that we have used at Curiosity in the past. You are welcome (but not required) to adapt these forms if you do any kind of user engagement activity for your Final Project.

You can learn more about informed consent in Activity 8.2 in this course, or in one of your other BAMS courses such as MMS 197. For the purposes of your MMS 150 Final Project, just make sure that your participants understand that you are collecting data from them for educational purposes and that the information they provide will not be used for anything else other than for your learning. This means, for example, that if you are engaging users in an informal way for your project, but later on you decide to run with your project and use it as the basis for a startup company, you may need to take additional steps before using the research data you gathered when your project was still a school activity.

Related resources

'Assent Form (English)' by Curiosity	https://drive.google.com/file/d/1G8znSVGhf-AMhllwMFb6mSnjKSZ3chiL/view?usp=sharing
'Consent Form (English)' by Curiosity	https://drive.google.com/drive/u/1/folders/1DhOAt06oyDq2pROiNd_D62q_RFSovZNs

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Task 3.3.3. Interacting with users during prototype evaluation sessions

Time required: 7 minutes



Watch Rose Arriaga's lecture on how to interact with users during a prototype evaluation session. In particular, pay attention to the three parts of a user interaction session (Introduction, Interaction, Closing).

(I would also recommend that you *disregard* the distinction Rose Arriaga makes between research and user engagement, in which she argues that research is only research if the aim is to disseminate the findings. If you engage users, get data from them, and do something with that data such as creating a product or service based on data-driven insights, that is still research!)

Related resources

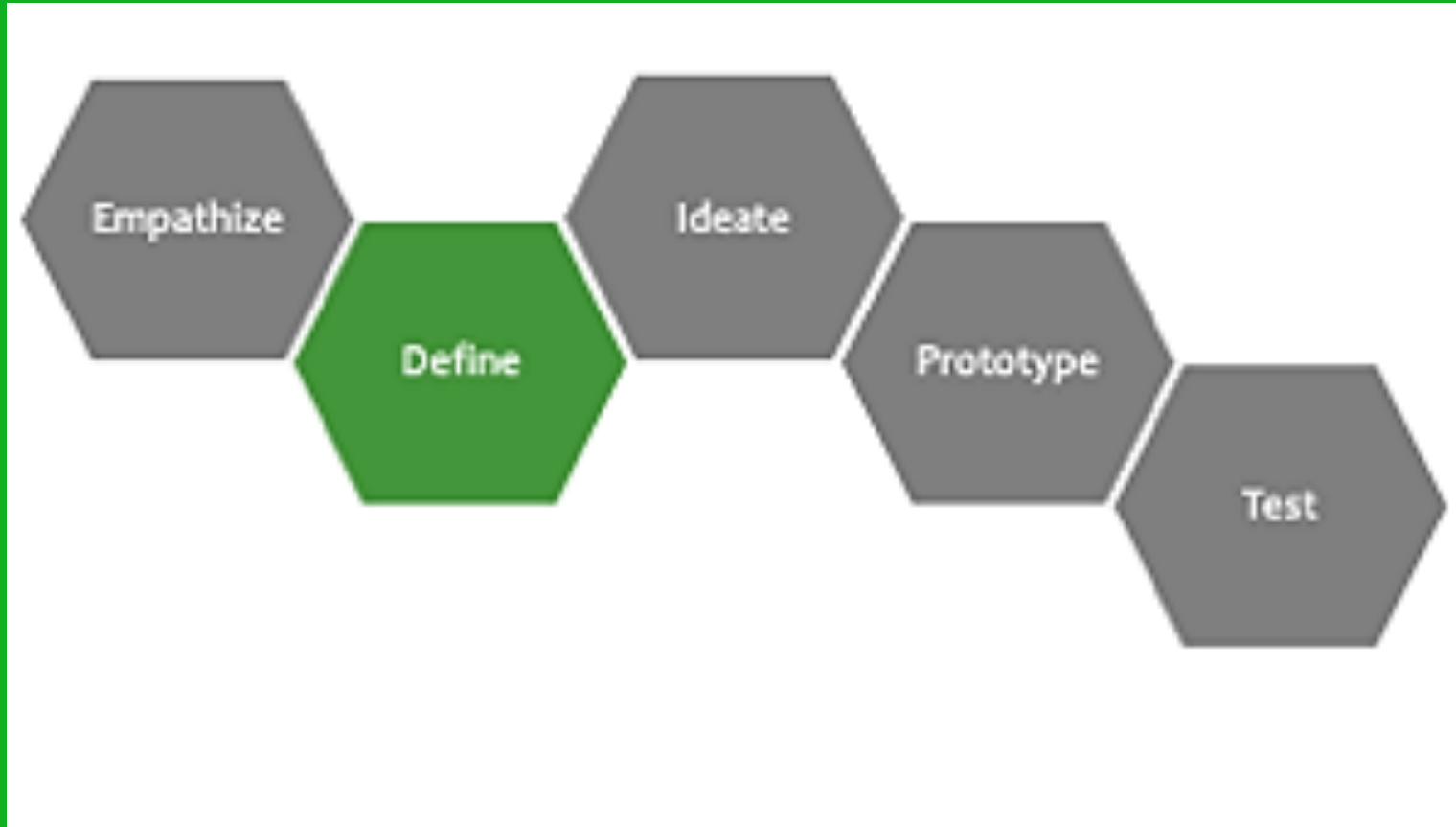
'User Engagement Ethics'
by Rosa Arriaga / Coursera

<https://www.coursera.org/learn/user-experience-design/lecture/yehDq/user-engagement-ethics>

Need a mobile-friendly version? View this page online:

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Module 4. Defining the problem space



Activities and Tasks

Activity 4.1. Framing the question

Activity 4.2. Forming your Theory of Change

Task 4.1.1. Review the 'How can I help...!' format

Task 4.1.2. Formulate a 'How might we...' (HMW)

Task 4.2.1. Learn about Theory of Change

Task 4.2.2. Create your own Theory of Change

Activity 4.1. Framing the question

Once you have identified your audience and have understood their needs and pain points, you are ready to frame the problem. In the design thinking workshop, you already had used the "How Can I Help..." way of framing a problem. The other common way of doing this is through creating a "How Might We..." statement.



Task

- Task 4.1.1. Review the 'How can I help...' format
- Task 4.1.2. Formulate a 'How might we...' (HMW)

Time required

- 30 minutes
- 30 minutes

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Task 4.1.1. Review the 'How can I help...!' format

Time required: 30 minutes



There are many ways of defining a design challenge, and the "How can I help..." format is one such technique, prioritising empathy with your person for whom you are designing. It asks you to "step into a person's shoes [and] understand areas of frustration" before even thinking about designing a solution for them.

1. Read about the technique in the resource listed below.
2. Think about someone in your life that articulated a need. Remember, this is about what **they say** they need, **not** what **you think** they need! Sometimes, those two can be very different.
3. Write out a "How can I help..." question for this person following the guidelines in the resource.
4. Share your question with the person you have I mind. Do they agree that the way you have framed your question is appropriate to what they need?

Related resources

'How Can I Help...?'
by Kimberly Crawford / Atomic Object

<https://spin.atomicobject.com/2020/06/30/design-thinking-how-can-i-help/>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recj2FbAQpNsXmqUP>

Task 4.1.2. Formulate a 'How might we...' (HMW)

Time required: 30 minutes



Your HMW statement will guide your Final Project team's design. Learn how to create one by doing the following. Read the resources listed below. (Be sure to check out the video embedded in the IDEO page; it gives an example of the level of detail that your HMW statement could take!)

Related resources

'How Might We...?' by IDEO.org	page 85 of the Field Guide to Human-Centered Design; see https://www.designkit.org/resources/1
'How Might We...?' by Kimberly Crawford / Atomic Object	https://spin.atomicobject.com/2018/12/12/how-might-we-design-thinking/

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/reciS8ZOblqnROeNf>

Activity 4.2. Forming your Theory of Change

In real-world design situations, it is ideal if you form a Theory of Change that can justify the design solutions you propose to implement. A Theory of Change is a framework that you create that can help explain to other people *why* you think the solution you propose will *actually* solve the problem you have identified. This is a more difficult challenge than it might seem. In this activity, you will learn about how theories of change work and optionally get the opportunity to craft one (e.g., for your Final Project).



Task

Task 4.2.1. Learn about Theory of Change

Task 4.2.2. Create your own Theory of Change

Time required

90 minutes

270 minutes

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Task 4.2.1. Learn about Theory of Change

Time required: 90 minutes



Watch Birdie Salva's talk on Theory of Change for Social Enterprises. As you do, keep in the back of your mind your Final Project and consider how this talk might influence your Final Project.

Related resources

'Theory of Change for Social Enterprises'
by Birdie Salva

<https://www.facebook.com/watch/live/?v=190113075989712>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/reccWbzRbHRjjjFU>

Task 4.2.2. Create your own Theory of Change

Time required: 270 minutes



Creating your Theory of Change is a very challenging but worthwhile activity, if not for your Final Project then for other projects you might work on in the future. Theories of Change help you systematically formulate potential solutions to a preexisting challenge. Use the resources listed here to create your own Theory of Change.

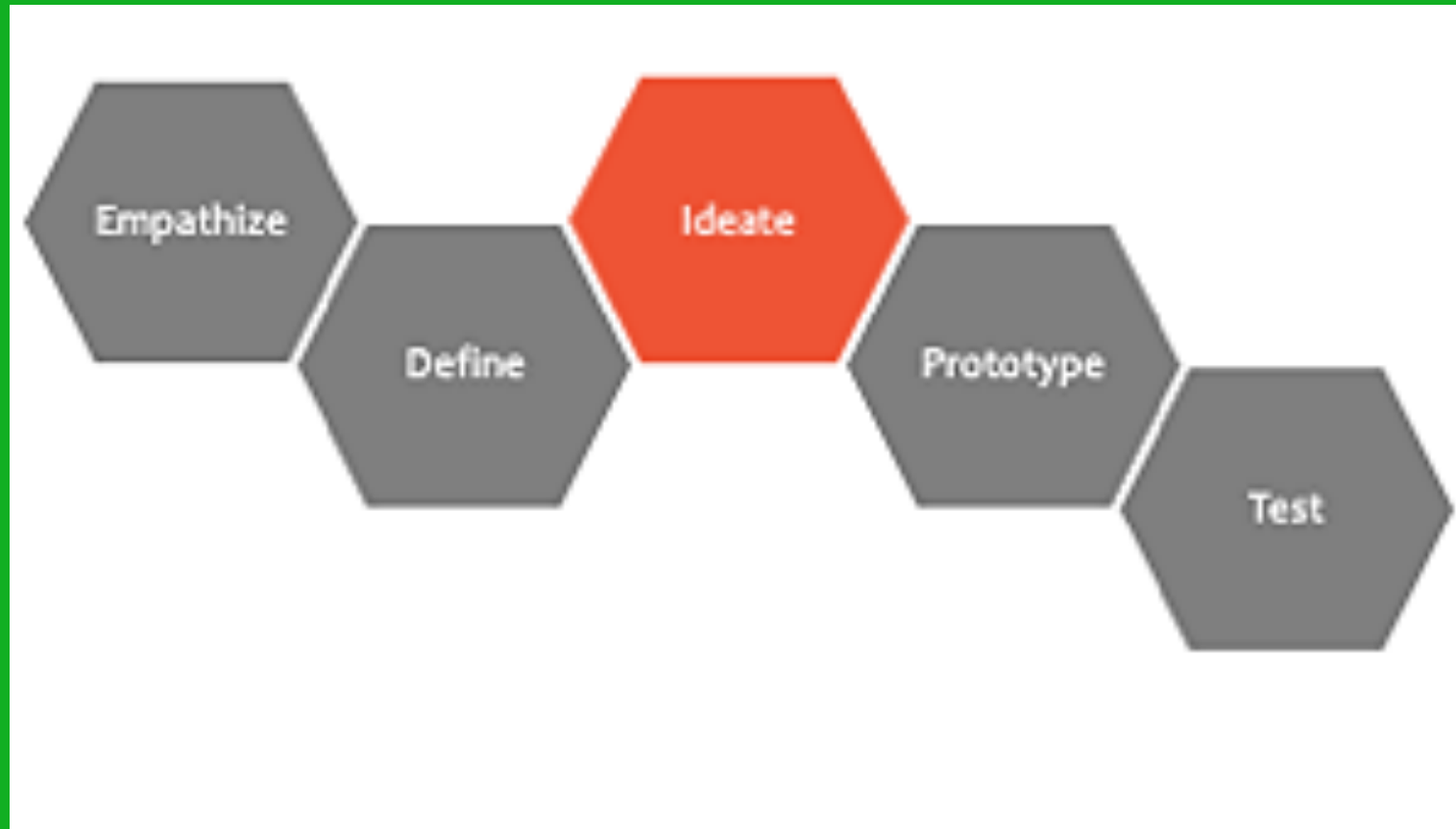
Related resources

'Theory of Change for Social Enterprises' by Birdie Salva	https://www.facebook.com/watch/live/?v=190113075989712
'Explore Your Theory of Change' by IDEO.org	https://www.designkit.org/methods/explore-your-theory-of-change

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recAlkLsa7y1rSl6w>

Module 5. Ideation and Selection: Arriving at potential solutions



Activities and Tasks

Activity 5.1. Divergent and convergent thinking exercises
Activity 5.2. Co-creation for ideation (and other phases of the design cycle)
Activity 5.3. Card sorting

Task 5.1.2. Learn more about divergent thinking
Task 5.1.1. Learn more about convergent thinking
Task 5.1.3. Distinguish between activities that require divergent thinking and convergent thinking
Task 5.2.1. Learn about co-creation and its value in idea generation process
Task 5.2.2. Learn about methods that you can use in a co-creation activity
Task 5.3.1. Read about card-sorting
Task 5.3.2. Read about how to do a card-sorting remotely
Task 5.3.3. Try out card-sorting (optional)

Activity 5.1. Divergent and convergent thinking exercises

Recall the IDEO shopping cart challenge, where the design team generated "hundreds" of potential solutions, clustered them, voted for them, and then eventually narrowed it down to a handful go design solutions for prototyping. Of all the phases in a design process, the ideation phase is the one that requires you to exercise divergent thinking skills the most, while selecting the one you will eventually implement as a testable prototype is the one that will force you to use convergent thinking skills the most.

In this activity, you will briefly review the theory of divergent and convergent thinking before learning about activities that exercise these skills. *Tip: these divergent thinking and convergent thinking activities can be used as stokes (i.e., as an icebreaker or creative warm-up activity) when you are working with your team, or when you are conducting a co-creation session or design thinking workshop!*



Task

Time required

Task 5.1.2. Learn more about divergent thinking

15 minutes

Task 5.1.1. Learn more about convergent thinking

15 minutes

Task 5.1.3. Distinguish between activities that require divergent thinking and convergent thinking

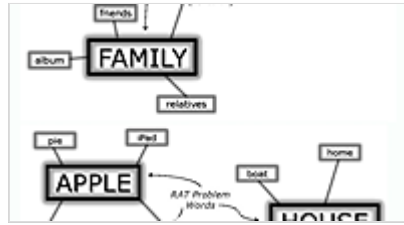
10 minutes

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<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/reccFL73XPBcNosxY>

Task 5.1.1. Learn more about convergent thinking

Time required: 15 minutes



1. Read about the theory behind convergent thinking.
2. Try out the Remotes Associates Test (RAT), a classic exercise in convergent thinking. Share with the class a RAT challenge that you were particularly proud to solve!

Related resources

'Design Thinking Defined' by IDEO	https://designthinking.ideo.com/
'Convergent Thinking' by ScienceDirect	https://www.sciencedirect.com/topics/psychology/convergent-thinking
'Remote Associates Test: A collection of tasks from the Remote Associates Test of Creativity' by remote-associates-test.com	https://www.remote-associates-test.com/

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recM7OU1MCuhkRjrA>

Task 5.1.2. Learn more about divergent thinking

Time required: 15 minutes



1. Read about the theory behind divergent thinking.
2. Try some exercises that require you to exercise divergent thinking. The Paper Clip Test from the "18 Creativity Exercises" resource is a particularly fun one to do!

Related resources

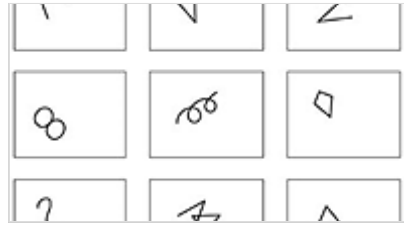
'Design Thinking Defined' by IDEO	https://designthinking.ideo.com/
'Divergent Thinking' by ScienceDirect	https://www.sciencedirect.com/topics/psychology/divergent-thinking
'18 Creativity Exercises To Improve Creative Thinking and Problem-Solving at Work' by Indeed Editorial Team	https://www.indeed.com/career-advice/career-development/creativity-exercise

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/reclGp0mV0bl842ZB>

Task 5.1.3. Distinguish between activities that require divergent thinking and convergent thinking

Time required: 10 minutes



1. Browse through the exercises in the resource below.
2. Not all of the exercises in the "18 Creativity Exercises" is about divergent thinking (or is about divergent thinking alone). Can you identify which ones require you to exercise divergent thinking and which ones require you to exercise convergent thinking?

Related resources

'18 Creativity Exercises To Improve Creative Thinking and Problem-Solving at Work'
by Indeed Editorial Team

<https://www.indeed.com/career-advice/career-development/creativity-exercise>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recXuvQc5MQECDnuR>

Activity 5.2. Co-creation for ideation (and other phases of the design cycle)

During the d.school Starter Kit design thinking workshop, you created your four sacrificial concepts (using the prompts "expensive", "tomorrow", "game", and "robot") on your own before you discussed them with your partner for feedback. This is an example of how a design team can do an ideation workshop separately from the client or potential end-user, before presenting the results of their ideation session. However, a design team could also involve clients or end-users even in the ideation session. In fact, you could involve clients or end-users in multiple points in the design process.

Involving stakeholders in the design process takes is called *co-creation*. In this activity you will learn more about how to incorporate co-creation in your design process.



Task

Task 5.2.1. Learn about co-creation and its value in idea generation process

Task 5.2.2. Learn about methods that you can use in a co-creation activity

Time required

20 minutes

15 minutes

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Task 5.2.1. Learn about co-creation and its value in idea generation process

Time required: 20 minutes



Co-creation is when involve the end user and other stakeholders (who are not part of the design team) in the design process. Using the articles listed in the resource list below, answer the following questions.

1. When can you involve the end user in the design process?
2. What are the advantages and disadvantages of involving end users in the design process?

Related resources

'Co-Creation: Designing With the User, For the User' by Patrizia Bertini and Elsa Plumley	https://www.uxbooth.com/articles/co-creation-designing-with-the-user-for-the-user/
'Co-design / Co-creation' by Innovation Champions	https://www.innovationchampions.com.au/toolkit/co-design-co-creation
'Co-creation: New pathways to value - An overview' by Thorsten Roser and Alain Samson / Promise Corporation	https://tinyurl.com/y2k878nu

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Task 5.2.2. Learn about methods that you can use in a co-creation activity

Time required: 15 minutes



You can use other methods in a co-creation session that involves end users and other stakeholders; some of these are included in the resource list below. Browse through this list. Are there any other methods you can think of that you think might work well in a co-creation session?

Related resources

'Experimenting with Online Live Action Role Play' by Alex Taylor	https://docs.google.com/document/d/1clGjGABB2h2qbduTgfqribHmog9B6P0NvMgVuiHZCl8/mobilebasic#h.3oitysxth5ap
'Scenarios' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/scenarios.html
'Design Kit - Methods' by IDEO	https://www.designkit.org/methods
'The Universal Methods of Design' by Bruce Hanington and Bella Martin	https://www.amazon.com/Universal-Methods-Design-Expanded-Revised-ebook/dp/B084P74NNT/ref=sr_1_1?keywords=Universal+Methods+of+design&qid=1623596333&sr=8-1

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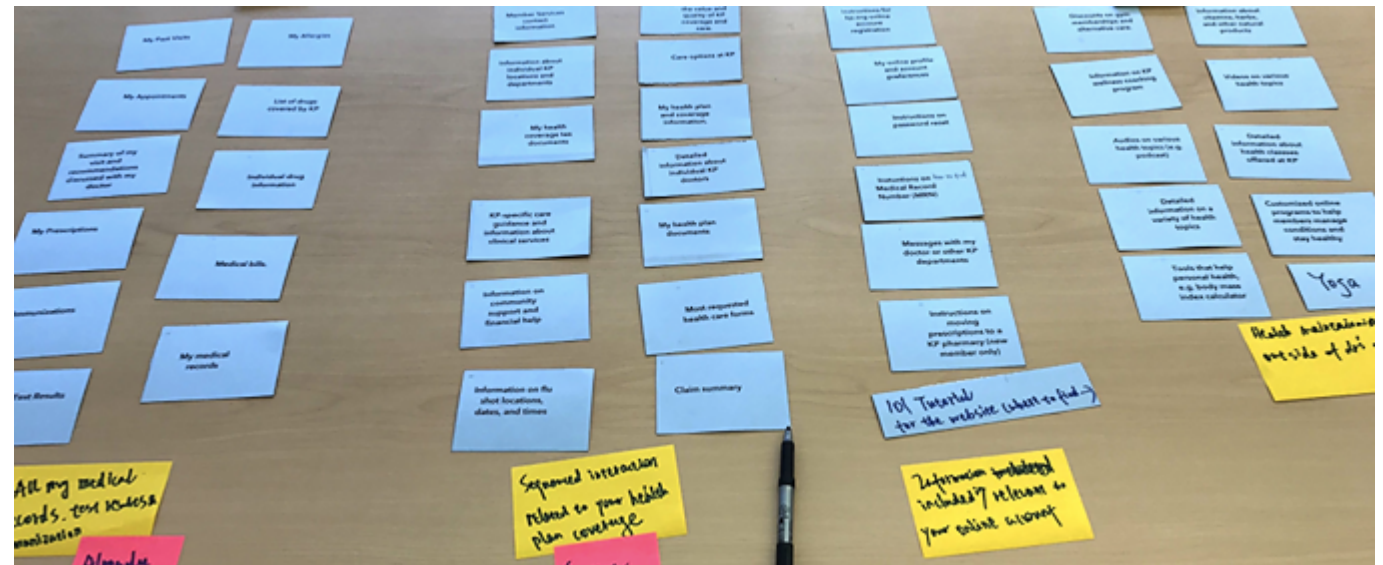
<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recaGjUbV1IGQdqYt>

Activity 5.3. Card sorting

A particularly useful method you can incorporate in a co-creative ideation session is *card sorting*. Card sorting is very versatile, and it can count both as a user research (empathy-generating research) method as well as an ideation and even a prototyping method. Card sorting is one method that allowed you to understand the values, beliefs, and priorities that your users have even as it can reveal to your design team what information your digital media product should present to the user, as well as *how* that information should be organised and presented.

Card sorting helps with determining the *information architecture* of your product. If you would like to know more about information architecture, you can also refer to the MMS course on Knowledge Management as well as the course on Software Engineering.

Card sorting is usually done in person, when you are in the same space as your research participants. However, you can also adapt the method to be used in remote research situations.



Task

- Task 5.3.1. Read about card-sorting
- Task 5.3.2. Read about how to do a card-sorting remotely
- Task 5.3.3. Try out card-sorting (optional)

Time required

- 60 minutes
- 45 minutes
- 45 minutes

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Task 5.3.1. Read about card-sorting

Time required: 60 minutes



Read the resources below about card-sorting. Based on what you've read, answer the following questions for yourself or in the appropriate DF for your class:

1. Why is card-sorting a particularly useful tool in the design process? (Hint: think about how it can be used in multiple phases of the design process.)
2. What is the difference between open and closed card-sorting?

Related resources

'Card Sorting Technique - Planning a website' by Tim Gentle, Captain at Design Experts	https://www.youtube.com/watch?v=FTzHeYPB9c8&ab_channel=DesignExperts
'Card sorting (from Usability.gov)' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/card-sorting.html
'Card sorting (from Atomic Objects)' by Kimberly Crawford / Atomic Object	https://spin.atomicobject.com/2018/01/18/card-sorting-user-research/
'Card Sorting: Uncover Users' Mental Models for Better Information Architecture' by Nielsen Norman Group	https://www.nngroup.com/articles/card-sorting-definition/

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recsxHLZx9fXBQy3r>

Task 5.3.2. Read about how to do a card-sorting remotely

Time required: 45 minutes



Card-sorting is a very useful activity; traditionally it is done in person. However, it is possible to conduct a card-sorting activity remotely if doing the activity in person is impossible. Watch or read the resources in the list below and note the specific tools and techniques you can apply to conduct a remote card-sorting session.

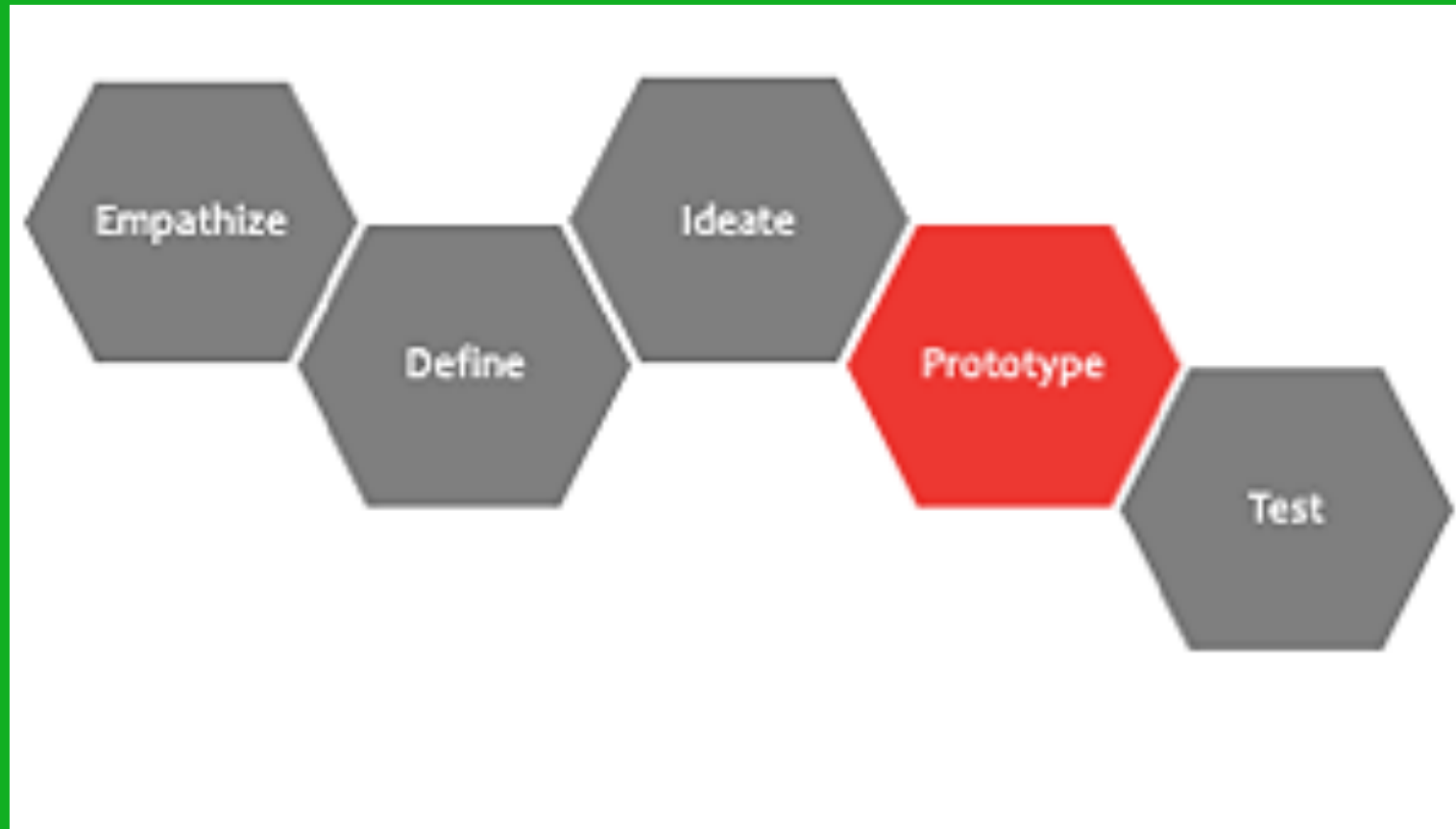
Related resources

'Remote Card Sorting' by NNGroup	https://youtu.be/d9SIbri2HIA
'Card Sorting Template' by Miro	https://miro.com/templates/card-sorting/
'Card Sorting for UX Research and Open versus Closed card sorting' by Matt Borchert	https://youtu.be/EXBitTp47rs

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recX773yvvgvYcZrh>

Module 6. Prototyping



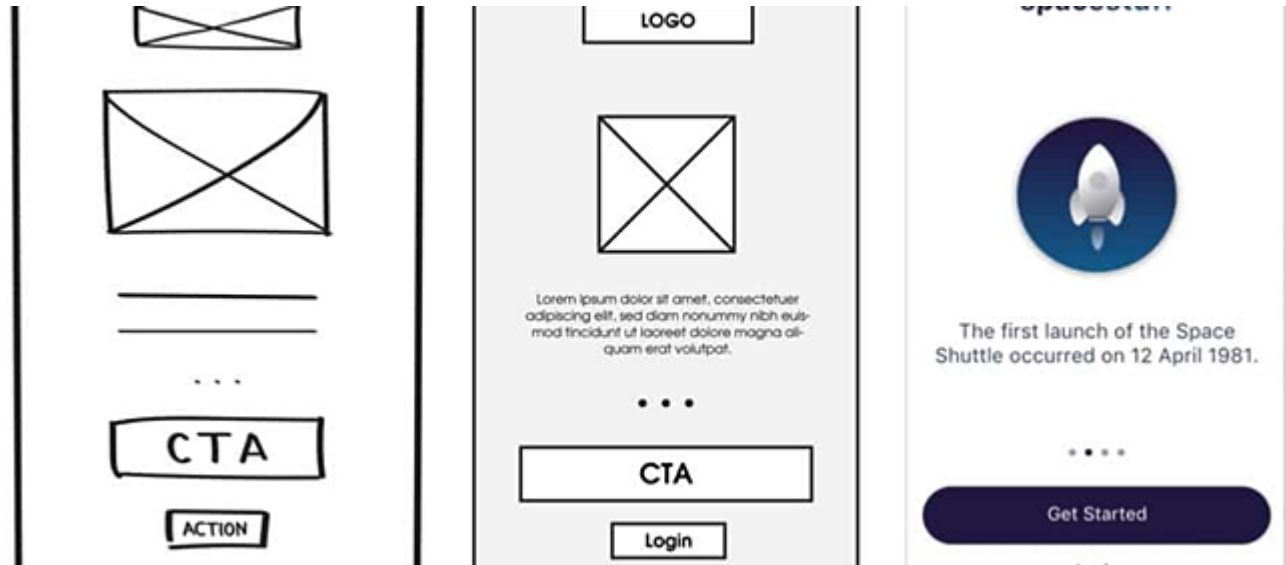
Activities and Tasks

Activity 6.1. Introduction to prototyping
 Activity 6.2. Low(er)-fidelity prototyping
 Activity 6.3. High(er)-fidelity prototyping
 Activity 6.4. Bad by design
 Activity 6.5. Terminology used in describing graphical user interface (GUI) elements and interactions
 Activity 6.6. Introduction to usability design principles for GUIs
 Activity 6.7. Other GUI design guidelines, tools, and techniques

Task 6.1.1. Read about the value and different types of prototypes
 Task 6.2.1. Read about paper prototyping
 Task 6.2.2. Make a paper prototype
 Task 6.3.1. Learn about digital prototyping
 Task 6.3.2. Get started on digital wireframing
 Task 6.4.1. Prototype a terrible user interaction
 Task 6.5.1. Learn or recall terms related to basic graphical UI (GUI) elements
 Task 6.5.2. Review terms related to GUI interaction
 Task 6.6.1. Read up on essential UI usability principles
 Task 6.6.2. Report on any UI usability principle.
 Task 6.7.1. Browse this list of design resources

Activity 6.1. Introduction to prototyping

In this activity, you will learn about what prototyping is and why it's important. You will also learn the difference between different kinds of prototypes.



Task

Task 6.1.1. Read about the value and different types of prototypes

Time required

20 minutes

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<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recS44qZHJWreNxf3>

Task 6.1.1. Read about the value and different types of prototypes

Time required: 20 minutes

<< Lower fidelity		Higher fidelity >>>			
Sketch	Paper prototype	Non-clickable digital wireframe	Clickable wireframe	Interactive digital prototype	Native / coded prototype
Pen and paper, whiteboard		Powerpoint, Illustrator, Keynote	Figma, Adobe XD		iCode

Read the materials in the Resource List below.

You may notice that there's some inconsistency in the terminology around prototyping: when does a prototype count as "low fidelity" and does it count as "high fidelity"? For example, sometimes designers will include sketches and pen-and-paper prototypes in their definition of "low fidelity" prototypes, while for other designers, a non-interactive digital wireframe is the minimum for a low fidelity prototype. Your FIC will discuss this with you in class.

Related resources

'Prototyping' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/prototyping.html
'Prototyping 101: The Difference between Low-Fidelity and High-Fidelity Prototypes and When to Use Each' by Nick Babich / Adobe	https://blog.adobe.com/en/publish/2017/11/29/prototyping-difference-low-fidelity-high-fidelity-prototypes-use.html#gs.62tbga

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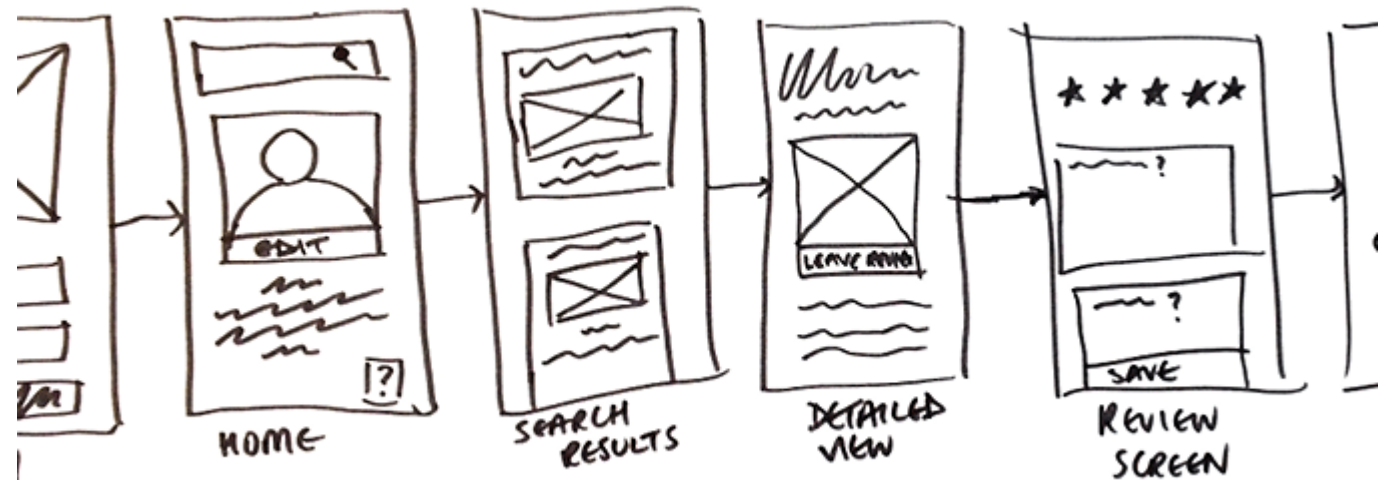
<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/receVaE5f4z0ulmV6>

Activity 6.2. Low(er)-fidelity prototyping

In this activity, you will learn lower-fidelity prototyping and its benefits. Even if you are skilled at creating digital assets of all kinds, paper prototypes can be a cost- and time-effective approach to getting ideas out.

When you are user-testing a low fidelity prototype, you might find that you need to fake some interactions in order to convey to the user how the prototype works. This is known as a *Wizard of Oz*, and is not so much a type of prototype as it is technique that you can use for any kind of prototype, but especially lower fidelity prototypes like paper prototypes. An example is provided in this activity on how you can "Wizard of Oz" a series of hand-drawn wireframes.

For your MMS 150 Final Project, you will be asked to do a paper prototype for your potential solution based on the findings from your user research (Empathize) stage.



Task

Task 6.2.1. Read about paper prototyping

Task 6.2.2. Make a paper prototype

Time required

20 minutes

30 minutes

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<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recXyjDUeWR5w7pl0>

Task 6.2.1. Read about paper prototyping

Time required: 20 minutes



1. Read or watch the materials presented in the Resource List on paper prototyping, and as you do, pay particular attention to any discussion on the advantages and disadvantages of sketches and paper prototypes over higher-fidelity prototypes.
2. Read or watch the materials below on the Wizard of Oz technique for demonstrating low-fidelity prototypes. (If you have a copy of *Universal Methods of Design*, you can also refer to its entry on the Wizard of Oz technique.)

Related resources

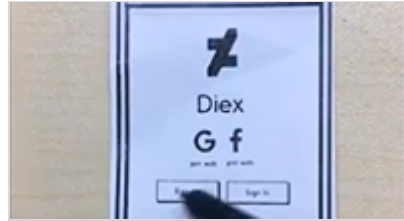
'Rapid Prototyping: Sketching' by Google for Startups	https://www.youtube.com/watch?v=JMjzqJS44M&ab_channel=GoogleforStartups
'Wizard of Oz Prototypes' in Prototyping: Learn Eight Common Methods and Best Practices' by Interaction Design Foundation	'Wizard of Oz Prototypes' section under https://www.interaction-design.org/literature/article/prototyping-learn-eight-common-methods-and-best-practices
'Wizard of Oz Prototyping Technique' by Her Şeyden Biraz	https://www.youtube.com/watch?v=YmcuN3NlnDU&ab_channel=Her%C5%9EeydenBiraz
'Prototyping' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/prototyping.html

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recXj6hcBRuNICPp>

Task 6.2.2. Make a paper prototype

Time required: 30 minutes



1. Take an existing mobile app or website (say, your favorite app or website) and choose two screens, views, or pages from the site or app. For example, say you chose the UPOU MyPortal site. The first screen/page/view you choose could be the landing page after you've just logged in. The second screen/page/view that you could choose could be the one that appears after you've clicked the "Dashboard" link. Or maybe the other view is the one that happens after you've scrolled down the page.
2. Make two *hand-drawn* representations of these two screens/views/pages. Remember that if you are doing a wireframe, you don't need to add detailed graphic elements. Let this be very rough!
3. Create a short (~5 second) video showing how you might do a Wizard of Oz demonstration or testing session using your two hand-drawn wireframe diagrams, illustrating the user interaction that leads to one screen being displayed after another. User interactions could include clicking/tapping, scrolling, pinching in, pinching out, refreshing the screen, etc. Refer to the Wizard of Oz demonstrations in the Resource List as an example.
4. Share your short video with the class in the appropriate discussion forum!
5. When you share your video, also answer the following question: Aside from paper prototypes being easy to do for the designer, why else might it be valuable to do sketches and paper prototypes? (There are several possible answers.)

Remember that there are many ways of creating even hand-drawn representations. You could use pieces of paper, index cards, Post-it notes. You could draw on a whiteboard, or use a digital drawing tool.

Related resources

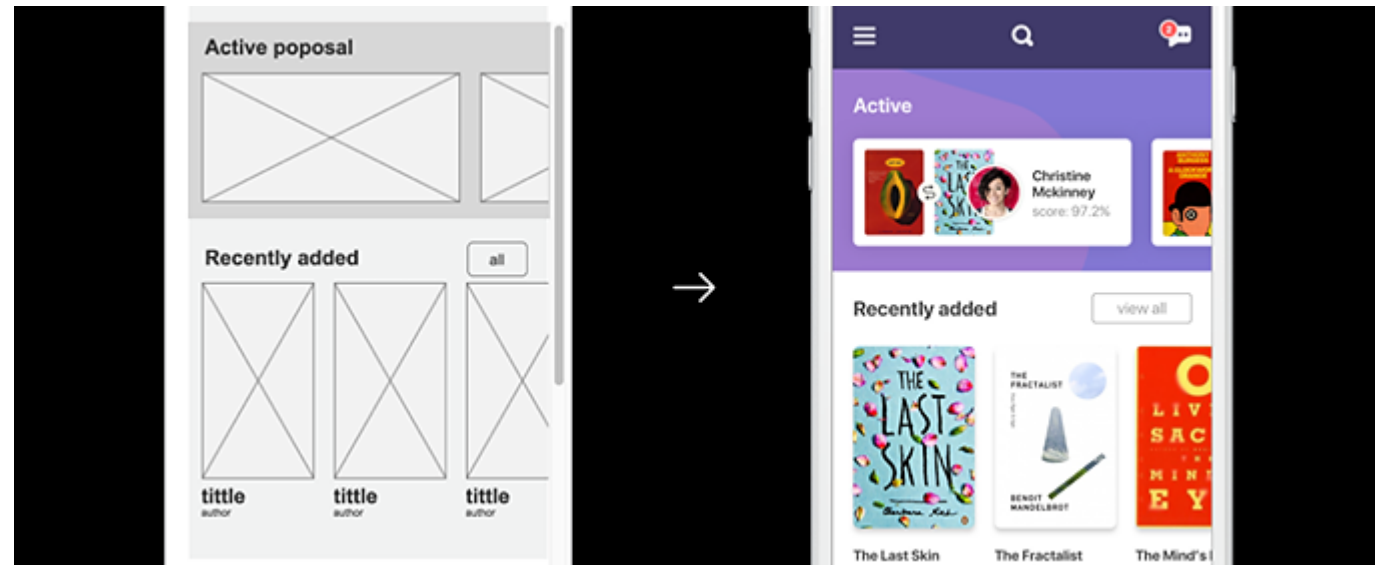
'Wizard of Oz Prototyping Technique' by Her Şeyden Biraz	https://www.youtube.com/watch?v=YmcuN3NlnDU&ab_channel=Her%C5%9EeydenBiraz
'Example Usability Test with a Paper Prototype' by BlueDuckLabs	https://www.youtube.com/watch?v=9wQkLthhHKA&ab_channel=BlueDuckLabs

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rechR4UJHmEDw4yyG>

Activity 6.3. High(er)-fidelity prototyping

As your design team goes through Prototyping and Evaluation phases and you begin to understand what your proposed solution should behave, what features it should have, and how it should look and feel, you will start move towards doing higher-fidelity prototype, such as clickable wireframes and (non-coded) interactive digital prototypes.



Task

Task 6.3.1. Learn about digital prototyping

Task 6.3.2. Get started on digital wireframing

Time required

20 minutes

40 minutes

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<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recuEhO8l0e3yq2dm>

Task 6.3.1. Learn about digital prototyping

Time required: 20 minutes



Read and watch the resources listed below.

Note that what the resources discuss is what I earlier called "medium-fidelity" prototypes, which include clickable wireframes and interactive digital prototypes. You will not be asked to make truly high-fidelity prototypes (i.e., so-called native or coded prototypes) in this course.

Related resources

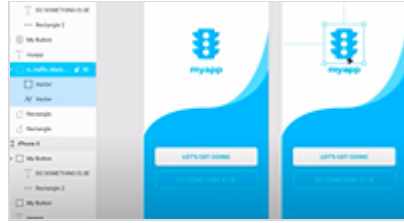
'Rapid Prototyping: Digital' by Google for Startups	https://www.youtube.com/watch?v=KWGBGTGryFk&ab_channel=GoogleforStartups
'Wireframing' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/wireframing.html

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rechKtlytSaadyAd>

Task 6.3.2. Get started on digital wireframing

Time required: 40 minutes



In a previous activity, you were asked to start getting familiar with a digital prototyping tool. For this activity, you will share with the class your first attempt at digital wireframing:

1. Take the two hand-drawn diagrams that you created from the previous activity and using your digital prototyping tool of your choice (e.g., Figma), create a digital version of these two diagrams
2. Share screenshots or a video of your digital wireframes with the class.

Related resources

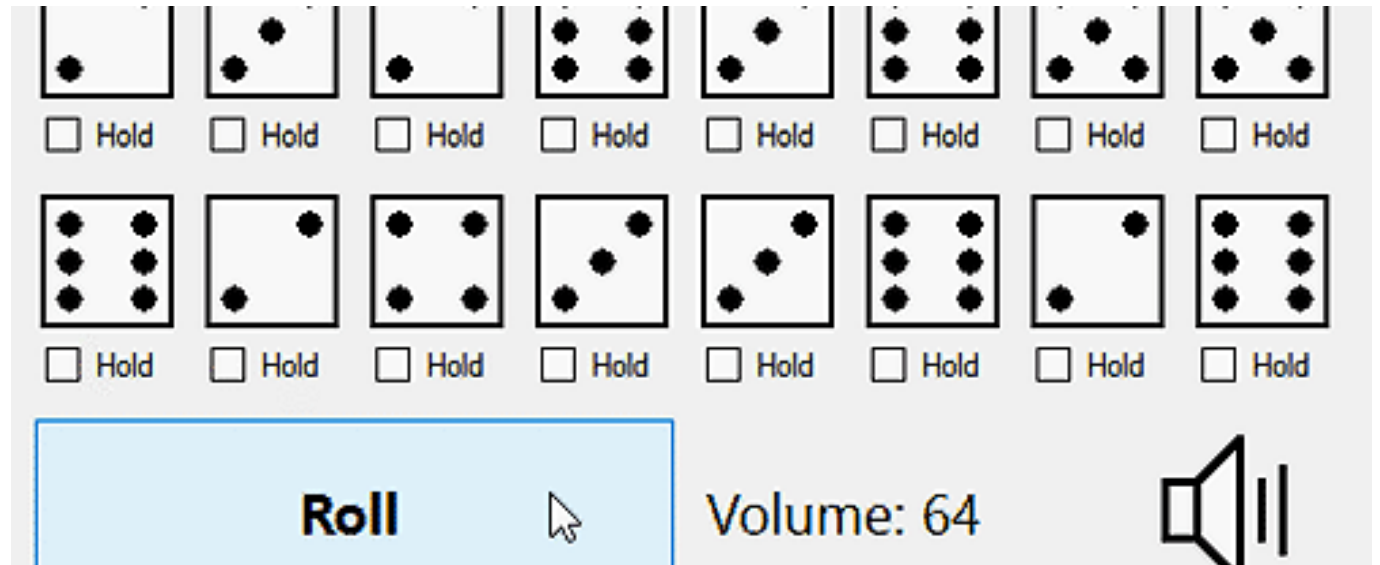
'Figma Tutorial' by DesignCourse	https://www.youtube.com/watch?v=3q3FV65ZrUs&ab_channel=DesignCourse
'Basic Prototyping using Figma (Walkthrough)' by Alyza "Aly" Miranda (a BAMS alumna and professional UI/UX designer)	https://www.youtube.com/watch?v=UP_yeaCWlg

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Activity 6.4. Bad by design

Sometimes, a good way to understand good design is to think about badly designed products! In this activity, you will be exercising your divergent thinking abilities and your low-fidelity prototyping abilities.



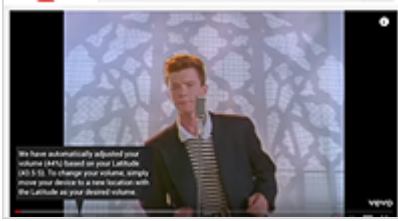
Task	Time required
Task 6.4.1. Prototype a terrible user interaction	60 minutes

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<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recEUuwC1izZETIYy>

Task 6.4.1. Prototype a terrible user interaction

Time required: 60 minutes



Propose a ridiculous way to execute an otherwise common task when using a digital product. Your FIC will announce what that user interaction will be.

1. Look at the examples in the "The Worst Volume Control" article in the Resource List below to get inspired (and to laugh at the outrageous ideas that people have come up with).
2. Create an image, a series of images, or a video clip showing your proposal for your awful idea of that user interaction. It doesn't need to be polished; it just needs to clearly communicate the idea!
3. Share your idea with the class.

Your solution could be subtle and clever in a that-made-me chuckle kind of way, or it could be outrageous and hilarious in a laugh-out-loud kind of way.

Related resources

'The worst volume control UI in the world'
by Fabricio Teixeira Fabricio Teixeira / UX Collective

<https://uxdesign.cc/the-worst-volume-control-ui-in-the-world-60713dc86950>

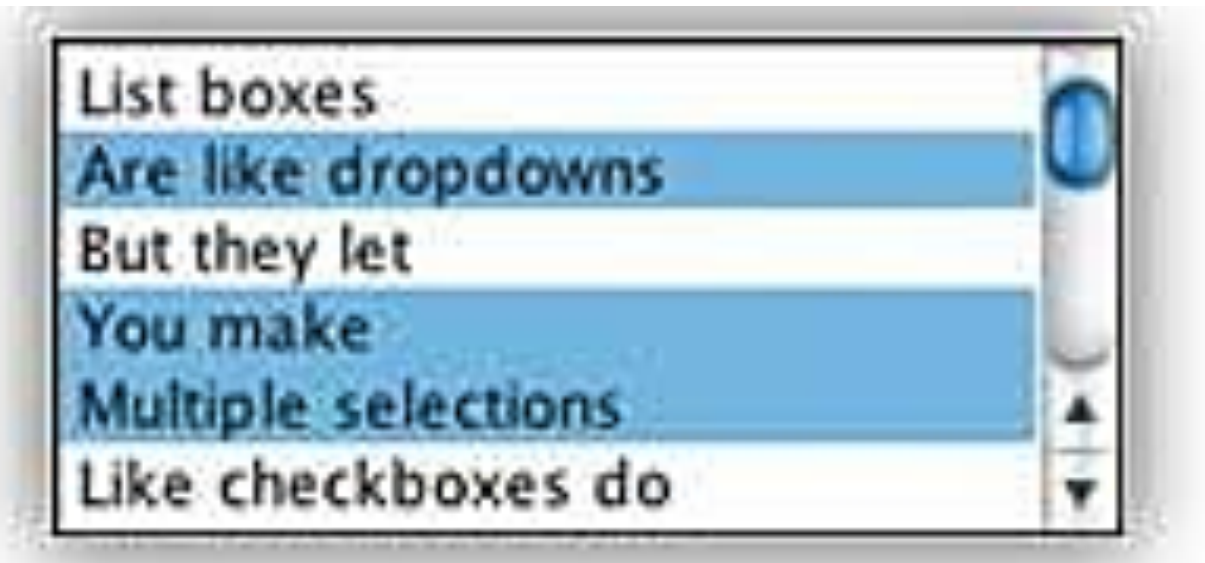
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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recFJSDXpk9kKOkcM>

Activity 6.5. Terminology used in describing graphical user interface (GUI)

elements and interactions

Familiarize yourselves or (if you have already covered the information in a previous class) or review terminology that is often used to describe such elements and interactions.



Task

Time required

Task 6.5.1. Learn or recall terms related to basic graphical UI (GUI) elements

20 minutes

Task 6.5.2. Review terms related to GUI interaction

20 minutes

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View this page online:

<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recQg9eJRuujyonuy>

Task 6.5.1. Learn or recall terms related to basic graphical UI (GUI) elements

Time required: 20 minutes



Read the resources listed below to learn or recall common types of GUI input elements, output elements, and helper elements (such as navigational components, containers, and others). Two resources are given here because neither quite cover the range of GUI elements that exist. (For example, the UXPin article covers more recent and now-common elements such as a *toast*, which is not included in the Usability.gov resource). As you read through the articles make a mental note of how many elements you already knew the names of and how many were new to you.

Related resources

'User Interface Elements' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/user-interface-elements.html
'User Interface Elements Every Designer Should Know' by UXPin	https://www.uxpin.com/studio/blog/user-interface-elements-every-designer-should-know/

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rec5Iz1E AJwJmDu7>

Task 6.5.2. Review terms related to GUI interaction

Time required: 20 minutes



Read the resources listed below to learn or recall common types of GUI interactions using a mouse or touch gestures (as you might use on a touchscreen). There are of course other ways of interacting with an application, such as through using a keyboard or through voice commands, but we will not cover those in this class.

Only the first two resources are required readings. The other two (the article by Kyle Sanders in Smashing Magazine and the guide from Microsoft) are interesting though optional resources.

Related resources

'The UWP app mouse language in "Mouse interactions" by Microsoft	https://docs.microsoft.com/en-us/windows/apps/design/input/mouse-interactions#the-uwp-app-mouse-language
'Touch Gesture Reference Guide' by Luke Wroblewski	http://www.lukew.com/touch/
'The table of touch interactions under the section "Custom touch interactions" in "Touch interactions" by Microsoft	https://docs.microsoft.com/en-us/windows/apps/design/input/touch-interactions#custom-touch-interactions
'To Use Or Not To Use: Touch Gesture Controls For Mobile Interfaces' by Kyle Sanders / Smashing Magazine	https://www.smashingmagazine.com/2017/02/touch-gesture-controls-mobile-interfaces/

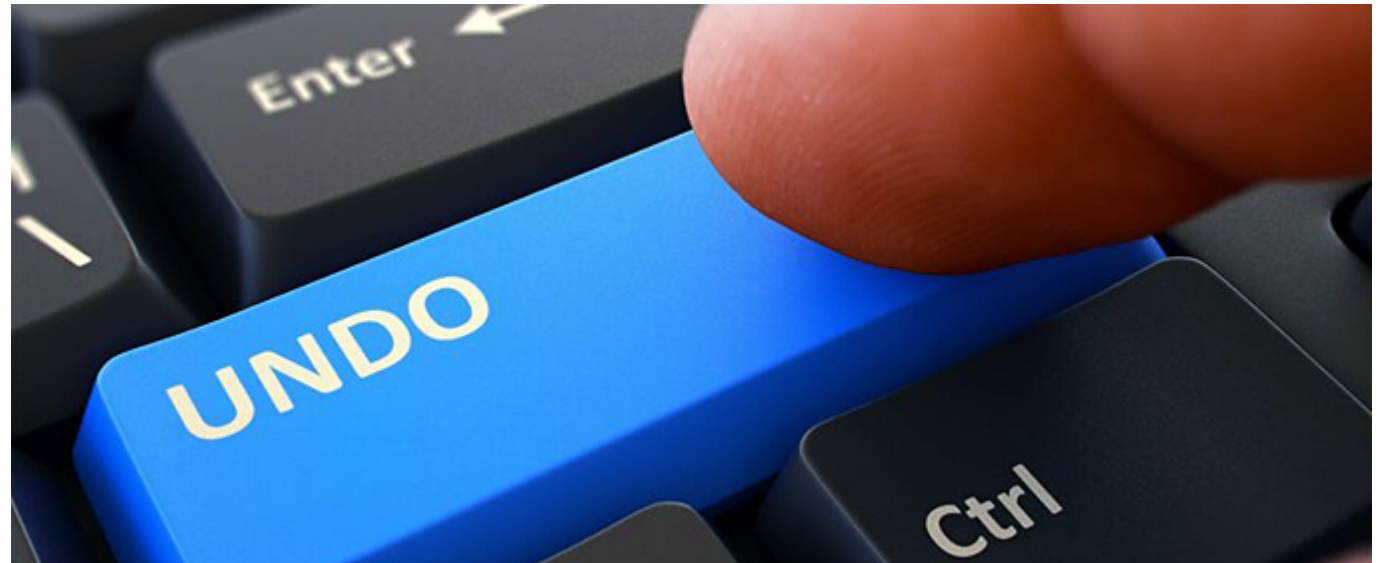
Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/reclP2ArUrMUUSa9n>

Activity 6.6. Introduction to usability design principles for GUIs

As your prototypes become increasingly refined and reach higher levels of fidelity, the more you will have to think about how you want to organize and present information to the user, and how the elements of the graphical user interface (GUI) should look, feel, and behave.

In this activity you will be asked to familiarize yourself with essential principles for designing GUIs and to dig deeper into a design principle of your choosing, which you will report in class.



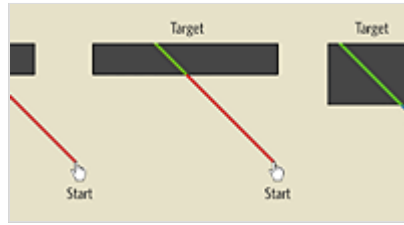
Task	Time required
Task 6.6.1. Read up on essential UI usability principles	90 minutes
Task 6.6.2. Report on any UI usability principle.	90 minutes

Need a mobile-friendly version?
View this page online:

<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/rec9Rkg2At3fi4ljd>

Task 6.6.1. Read up on essential UI usability principles

Time required: 90 minutes



A selection of usability principles taken from *The Laws of UX* and *Universal Principles of Design* have been selected for you in the table on <https://airtable.com/shr8w3RZEn7RrioD8>.

Read up and familiarize yourself with principles whose importance (which is the last column of the table) is marked "Essential".

You will *not* be expected to recall all the various examples presented in the text, or to recount the history of the discovery and development of each principle, but you should be able to recall the definition and to recognize how these principles are relevant to a given example.

Related resources

'Selected usability design principles'
by Diego Maranan

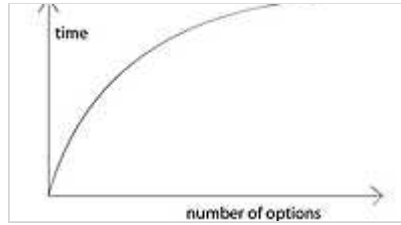
<https://airtable.com/shrYUigcZx144NM1X>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/reckTwyPSYf1yARte>

Task 6.6.2. Report on any UI usability principle.

Time required: 90 minutes



Choose *any* of the usability design principles from the resource list below (not just the ones tagged "Essential") and prepare a report on it.

Your FIC will tell you how to present your report.

Related resources

'Selected usability design principles'
by Diego Maranan

<https://airtable.com/shrYUigcZx144NM1X>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rec9FGAbY3GENO8Jj>

Activity 6.7. Other GUI design guidelines, tools, and techniques

We won't be going in-depth into aspects of the creation of user interfaces such as typography, color, branding, aesthetics, information architecture, and native prototyping. There is not enough time to cover all topics in one course! Some of these issues may be covered in a future course on advanced UI design, or in your production courses on graphics, text, Web accessibility, or software engineering. Use this activity to familiarize yourself with topics related to these other issues.



Task

Task 6.7.1. Browse this list of design resources

Time required

10 minutes

Need a mobile-friendly version?
View this page online:

<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recVvTmsWozA2Prat>

Task 6.7.1. Browse this list of design resources

Time required: 10 minutes

Forms, Icons, and Typography		
1	Form Accessibility By Tom Waisel	Industry standard for quick deployment of forms
2	Forms in Use By Tom Waisel	Great resource for exploring new forms and old ones...
3	The Visual Hierarchy By Tom Waisel	What every non-designer should know
Mobile patterns and checklists for		
4	Form Design By Tom Waisel	
5	Designing for the Mobile Web By Tom Waisel	
6	Mobile By Tom Waisel	How to design the perfect mobile app
7	Mobile Patterns By Tom Waisel	

Designer and FICS affiliate faculty Pieter Steyaert has compiled a list of resources that may be useful for you on issues not covered in this course: <https://airtable.com/shrnybbbWxEmHbC4D>

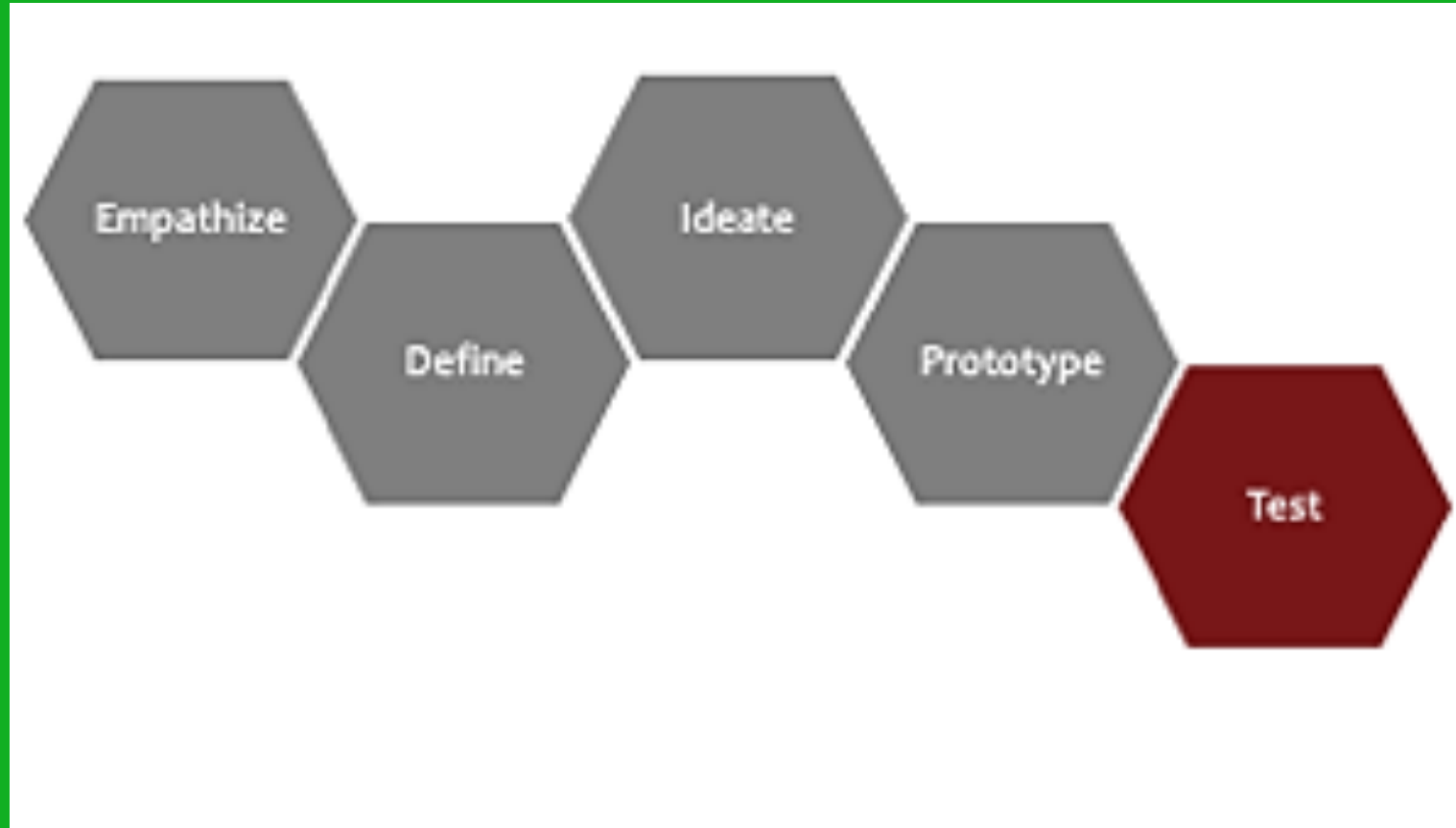
Browse his list and go through the resources at your leisure, paying particular attention to topics that you are less knowledgeable about.

Related resources

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recDOLpXYcLdKEYWj>

Module 7. Evaluation



Activities and Tasks

Activity 7.1. Expert evaluations

Activity 7.2. User-based evaluations

Task 7.1.1. Learn about heuristic evaluation and expert reviews

Task 7.1.2. Conduct an expert evaluation

Task 7.2.1. Learn about usability testing with users

Task 7.2.2. Learn about the Think-Aloud protocol

Task 7.2.3. Learn about the System Usability Scale

Task 7.2.4. Familiarize yourself with other kinds of user-based testing

Activity 7.1. Expert evaluations

Expert evaluations involve trained UI/UX designers or researchers using their expertise to evaluate an existing product or prototype to identify its strengths and usability gaps. Expert evaluations rely on experts' experience of designing and testing other products in the past, and on their grasp of design principles and heuristics.



Task

Task 7.1.1. Learn about heuristic evaluation and expert reviews

Task 7.1.2. Conduct an expert evaluation

Time required

20 minutes

30 minutes

Need a mobile-friendly version?
View this page online:

<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/rexpGkiUfvaKGkpZ>

Task 7.1.1. Learn about heuristic evaluation and expert reviews

Time required: 20 minutes



Read about heuristic evaluation using Nielsen's heuristics. Many of Nielsen's heuristics maps closely with the usability design principles from the course textbooks, *The Laws of UX* and *Universal Principles of Design*. Indeed, Nielsen's heuristics are based on his judgment of which design principles are most relevant to usability. Pick two of Nielsen's heuristics and identify which usability design principle they correspond or related to.

Related resources

'Heuristic Evaluations and Expert Reviews'
by Usability.gov

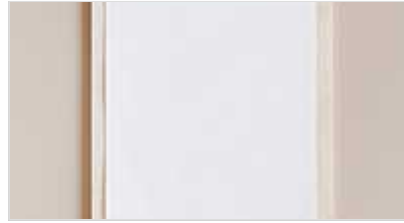
<https://www.usability.gov/how-to-and-tools/methods/heuristic-evaluation.html>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recyRn39KUI3GzpKS>

Task 7.1.2. Conduct an expert evaluation

Time required: 30 minutes



Your instructor will assign you a digital resource like a mobile app or website, or you will be asked to choose the digital resource yourself.

As an example of how to do a thorough heuristic evaluation using Nielsen's heuristic, see the example in the related resource listed here. Your instructor will provide you the tasks that you will use and a version of the worksheet that you can use for your evaluation.

Related resources

'Online learning environment design: A heuristic evaluation'
by E.A. Hildebrand et al.

https://www.researchgate.net/publication/289914134_Online_learning_environment_design_A_heuristic_evaluation

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recywDvuwPcr8bbBt>

Activity 7.2. User-based evaluations

Expert evaluations are useful to quickly estimate the usability of your product. However, users can interact in unexpected ways with your product. To really understand how usable your product or product prototype is, relying on heuristic-based expert evaluation will not be enough; you will need to test it with its potential users. As you go through the tasks listed below, answer the the following questions for yourself:

- Which evaluation methods can be used with lower fidelity prototypes? Why?
- Which evaluation methods can be used with higher fidelity prototypes? Why?



Task

Task 7.2.1. Learn about usability testing with users

Task 7.2.2. Learn about the Think-Aloud protocol

Task 7.2.3. Learn about the System Usability Scale

Task 7.2.4. Familiarize yourself with other kinds of user-based testing

Time required

40 minutes

20 minutes

10 minutes

15 minutes

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<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recBEqaNSWlwBNze8>

Task 7.2.1. Learn about usability testing with users

Time required: 40 minutes



There are different kinds of usability evaluation techniques you can use when evaluating your prototype with potential users. One of the basic techniques is through a usability test. During a usability test, you ask users to complete certain tasks. As they attempt to do the tasks, you observe their attempts and possibly record their behavior for later analysis.

Usability tests are appropriate for low-, medium-, and high-fidelity prototypes. You just need to adjust the tasks you want your participants accomplish and the data you are capturing and analyzing. For example, when evaluating an early paper prototype, it would not be appropriate to do *desirability* testing. However, it would be appropriate to examine participants' *first-click* responses. (We will cover these tests in another Activity Task.) In fact, during a usability test, you can include a variety of techniques and methods.

Read the resources in this list to learn more about how usability testing is done.

Related resources

'Usability Testing' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/usability-testing.html
'Planning a Usability Test' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/planning-usability-testing.html
'Recruiting Usability Test Participants' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/recruiting-usability-test-participants.html
'Reporting Usability Test Results' by Usability.gov	https://www.usability.gov/how-to-and-tools/methods/reporting-usability-test-results.html

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/reccjzbaFVjamAgOx>

Task 7.2.2. Learn about the Think-Aloud protocol

Time required: 20 minutes



The *Think-Aloud protocol* is a basic technique that you can incorporate in a usability test. Simply put, you ask participants to perform a series of tasks using your prototype while talking out loud about they're thinking and feeling as they do the tasks.

If there's one evaluation method you should have handy with you at any time, it should be this one. In fact, your FIC may ask you to run a Think-Aloud session with users during an evaluation session.

Read the resources listed below to learn how to run a Think-Aloud session.

Related resources

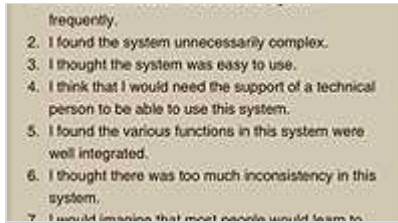
'Thinking Aloud' by Norman Nielsen Group	https://www.nngroup.com/articles/thinking-aloud-the-1-usability-tool/
'The Universal Principles of Design ' by William Lidwell et al.	https://www.amazon.com/Universal-Principles-Design-Revised-Updated-ebook/dp/B00A3T5UO4/ref=tmm_kin_swatch_0?_encoding=UTF8&qid=1623596312&sr=8-1

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<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recp4yvzeFMMLTjNQ>

Task 7.2.3. Learn about the System Usability Scale

Time required: 10 minutes



Another easy-to-deploy usability evaluation method is the System Usability Scale (SUS), originally created in 1986 by John Brooke. You could incorporate an SUS evaluation while running a usability test, or you could deploy it as part of a *remote evaluation* strategy (e.g., when you cannot be in the same room as your test participants) or as part of an online *questionnaire*. You could use it on its own, or deploy it in tandem with other techniques, such as the Think-Aloud protocol. The SUS is another one of those basic tools that you should keep in your toolbox of prototype evaluation methods.

An SUS is appropriate for higher-fidelity prototypes like coded prototypes, or products that have already been released for use. It is not appropriate for low-fidelity prototypes.

Related resources

'System Usability Scale (SUS)'
by Usability.gov

<https://www.usability.gov/how-to-and-tools/methods/system-usability-scale.html>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rectoaHlwd4lhg1t>

Task 7.2.4. Familiarize yourself with other kinds of user-based testing

Time required: 15 minutes



There are many other evaluation techniques, strategies, or methods that you can use to evaluate your product or product prototypes. And the higher the fidelity of your prototype, the more evaluation methods you can use, because you have more things that you might want to test other than the basic functionality of your product. Do users have an emotional response to your product? Do your choices of typographic and other visual design elements align with your branding strategy? Is information organized in the most optimal way possible so that the user will find the information that they need, when they need it? Are there unexpected technical issues that crop up when users are trying to perform a specific task?

Browse through the selection of usability evaluation methods. You do not need to know details of all the methods listed here, but you should be familiar with which method is appropriate for which circumstance. Focus on the ones labelled "0. Essential" and "1. Important".

Remember, too, that some of the methods that can be used in the Empathy (user research) stage could be adapted to be used for evaluating your prototype.

Related resources

'Selected Usability Evaluation Methods'
by Diego Maranan

<https://airtable.com/shrdnObBdmGo00Egw>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recZMCPgamzIqR5Nu>

Module 8. Advanced UI/UX topics



Activities and Tasks

Activity 8.2. Critiquing Human-Centered Design and Design Thinking

Activity 8.1. Responsible design

Activity 8.3. Furthering your abilities in UI/UX design

Task 8.2.1. Read critiques of Human-Centered Design and (Popularized) Design Thinking

Task 8.2.2. Remix the 5-step Design Thinking diagram

Task 8.1.1. Review Unit 4 of MMS 100

Task 8.1.2. Read and reflect on ethical principles in UI design

Task 8.3.1. Take advantage of professional development opportunities

Task 8.3.2. Get certification in research ethics (Optional)

Activity 8.1. Responsible design

The overall guiding principle for ethical design and ethical research is "Do no harm." However, UI/UX design principles can be exploited for questionable purposes, as the tasks in this activity will explore.



Task

Task 8.1.1. Review Unit 4 of MMS 100

Task 8.1.2. Read and reflect on ethical principles in UI design

Time required

15 minutes

60 minutes

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<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/receVmPu8OdZ8sDsF>

Task 8.1.1. Review Unit 4 of MMS 100

Time required: 15 minutes



Back when you took MMS 100, you might have encountered a few case studies on how design principles can be exploited for questionable purposes. Review Unit 4 from MMS 100 as preparation for the next task. Don't take too long; just take a bit of time to refresh your memory on the material so that you can connect MMS 150 with your other BAMS courses.

Related resources

'Unit 4 ("How multimedia affects individuals") in MMS 100 Course Package'
by Diego Maranan / UP Open University

<https://sites.google.com/upou.edu.ph/mms100-2018-2t/DCD044452214?authuser=0>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recqH3aflmUBnerD3>

Task 8.1.2. Read and reflect on ethical principles in UI design

Time required: 60 minutes



1. Before you read the readings in the list below, take 10 minutes to reflect on what you've learned about UI design principles from the previous activities. Can you think of how these principles could be used for unethical purposes? Jot down your ideas.
2. Now read the chapter on responsible design in Laws of UX and (optionally) the article by Hila Yonatan from UsabilityGeek. What points did they raise that you had not considered?
3. Can you provide an example not discussed in the readings that demonstrates what you think is an unethical application of UI design principles?

Related resources

'With Power Comes Responsibility' by Jon Yablonski	pp. 107-120 in Laws of UX
'Ethics In User Experience Design' by Hila Yonatan	https://usabilitygeek.com/ethics-in-user-experience-design/

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recZ0wQgwdwpygxk0>

Activity 8.2. Critiquing Human-Centered Design and Design Thinking

In MMS 150, we studied UX and UI design through two approaches. Human-Centered Design is an approach that places the end user at the center of the design process. Design Thinking is a framework that attempts to provide a guide to the design process in order. There is plenty of overlap between the two concepts. While both approaches have made it easier to tackle the teaching UI and UX design, they have their limits. In this activity, you will read about and make sense of criticisms of these approaches.



Task	Time required
Task 8.2.1. Read critiques of Human-Centered Design and (Popularized) Design Thinking	60 minutes
Task 8.2.2. Remix the 5-step Design Thinking diagram	30 minutes

Need a mobile-friendly version?
View this page online:

<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recwAwbSRVlgDQgc7>

Task 8.2.1. Read critiques of Human-Centered Design and (Popularized) Design Thinking

Time required: 60 minutes



Criticisms of Human-Centered and Design Thinking include the following:

1. They preserve political and economic status quo.
2. Not all user feedback is good.
3. They do not always lead to inspiring, transformative, or profound creations.
4. They focus on the needs of a small group at the exclusion of everybody else. For example, what would you do if you were hired to develop a solution that addresses the some unmet need of, say, jewelry thieves? You could definitely apply the principles that we have covered in this course to satisfy your clients, but at what cost?
5. Design Thinking as it is often taught is a popularized, simplified, and overly linear version of trained designers do. It may not capture depth, rigor, and complexity of the discipline of design. Taking a single workshop in design thinking doesn't automatically make one a designer.
6. Too anthropocentric; what about the needs of other, non-human living systems?

Browse through the resources in the list below, and pick two that grab your attention to read. As you read through your choice of readings, consider your own position. To what extent do you agree with the criticisms presented? How does your chosen influence your current ideas of how design is (or should be) done?

Related resources

'Critique of Human-Centered Design OR Decentering Design' by Thomas Wendt	https://www.slideshare.net/ThomasMWendt/critique-of-humancentered-design-or-decentering-design
'A Critique of User Centered Design: Have UCD Practices Hindered an Ecologically Sustainable Future?' by Eilish McVey	https://medium.com/@eilishmcvey/a-critique-of-user-centered-design-have-ucd-practices-hindered-an-ecologically-sustainable-future-da0c2b1c2ef8
'Human-Centered Design Considered Harmful' by Donald Norman	https://interactions.acm.org/archive/view/july-august-2005/human-centered-design-considered-harmful1
'Design Thinking Is Fundamentally Conservative and Preserves the Status Quo' by Natasha Iskander	https://hbr.org/2018/09/design-thinking-is-fundamentally-conservative-and-preserves-the-status-quo
'Design Thinking Is B.S.' by Natasha Jen	https://www.fastcompany.com/90166804/design-thinking-is-b-s
'IDEO breaks its silence for on design thinking's critics' by Katharine Schwab	https://www.fastcompany.com/90257718/ideo-breaks-its-silence-on-design-thinkings-critics
'Design Thinking is Kind of Like Syphilis — It's Contagious and Rots Your Brains' by Lee Vinsel	https://blog.usejournal.com/design-thinking-is-kind-of-like-syphilis-its-contagious-and-rots-your-brains-842ed078af29

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recrCkOewu40KXzqN>

Task 8.2.2. Remix the 5-step Design Thinking diagram

Time required: 30 minutes



Given what you've learned so far during the course, your experience working on the Final Project, the feedback you've received on your contributions to the DFs, and the critiques of Human-Centered Design and (Popularized) Design Thinking that you've read in Task 8.2.1, *alter, adapt, and/or annotate the 5-phase Design Thinking diagram popularized by IDEO* to reflect your current view on how UI/UX design could be best carried out. Share it with the class and explain your work.

If you feel like you are pressed for time, don't try to make the perfect diagram! Just use your remixed version of the diagram as a jump-off point to formulate your critique. In your explanation, make sure you reference and react to ideas presented in at least two of the readings from Task 8.2.1. On the other hand, you are welcome to be as creative as you wish in your remixing of the diagram and as rigorous as you can be in your critique.

Related resources

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recuONkDzrCdrfKX>

Activity 8.3. Furthering your abilities in UI/UX design

There is much, much more to UI design than what MMS 150 is able to offer. If you enjoyed this course and think that you might want to become a professional UI/UX designer once you graduate, fantastic! The tasks in the activity provide you some tips on how you might go about doing this.

In addition to these tasks, consider taking BAMS electives that focus on technical skills in software such as Database Management, Software Engineering, and Object Oriented Programming.



Task	Time required
Task 8.3.1. Take advantage of professional development opportunities	20 minutes
Task 8.3.2. Get certification in research ethics (Optional)	240 minutes

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View this page online:

<https://airtable.com/shrGq9rf59hEqOCUu/tbIMNJ0Z10JMR07aK/recB0btPc3b1x4m9L>

Task 8.3.1. Take advantage of professional development opportunities

Time required: 20 minutes



If you are interested in working professionally as a UI/UX designer after graduating from BAMS, consider doing the following:

1. Get to know your local UI/UX community by signing up for a mailing list, attending a meetup, or joining a Facebook group in your area.
2. Build up your experience by joining hackathons.
3. Use what you've learned in this course as the framework for your MMS 200 project.
4. Take advanced courses in UI/UX design.

The resources listed below provides you some ideas on how to get started.

Related resources

'Some resources to help you get started in pursuing a career in UI/UX'
by Diego Maranan

<https://airtable.com/shrnOHCWoWgZDywRp>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/recofDnq8pHjftMyl>

Task 8.3.2. Get certification in research ethics (Optional)

Time required: 240 minutes



In MMS 200, you will likely be asked to complete the TCPS 2 research ethics certification course (see the resource below). If you haven't completed the certification program yet, you can get a head start on this by doing the certification course even before you begin MMS 200. You can even put down this certification in your CV!

There are other ethics certification programs available, such as the [Good Clinical Practice course](#), but the TCPS one would be sufficient for general (non-clinical) research purposes.

Related resources

'TCPS 2: CORE (Course on Research Ethics) '
by Panel on Research Ethics, Government of Canada

<http://tcps2core.ca/welcome>

Need a mobile-friendly version? View this page online:

<https://airtable.com/shrTA5azqHGAEC285/tblvEkPb4VZbgNS6B/viwWgiezh9zHsR9GN/rec7h5G6ORcDwqiOh>

x

General information and a...

- FIC Wiki - For MMS 150 tea...
 - [N0] Course overview and g...
 - [DF0a] Announcements
 - [DF0b] General discussi...
 - ☆ [A0] Academic Dishones...
- 19 June - 25 June
- Course housekeeping
 - [W1.A1] MMS 150 Hono...
 - [W1.A2] Self-check: Ho...
 - [W1.A3] Update your prefer...
 - [W1.A4] PSVP to the desian

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MMS_150_3T_2022-2023-User Interface and User Experience Design

User Interface and User Experience Design

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General information and activities

Collapse all

- FIC Wiki - For MMS 150 teachers and tutors only Completion
 Hidden from students
This
- [N0] Course overview and guidelines Completion
- [DF0a] Announcements Completion
- [DF0b] General discussion forum Completion
 Not available unless: The activity [DF0a] Announcements is marked complete ... Show more
- ☆ [A0] Academic Dishonesty Reporting Completion

19 June - 25 June

Week 1: UI/UX Design Foundations

After you complete some housekeeping tasks--including two brief activities related to academic integrity--we start the course by going through some core concepts related user interface (UI) and user experience (UX) design. Successful UI/UX design projects require collaboration between a diverse group of people who have different skills and perspectives but who can also work well together. To help make this happen, every week, we will be working on on various activities that either help you assemble your team or (once your team has been assembled) to help your team develop a shared mindset and vocabulary.

Course housekeeping

- [W1.A1] MMS 150 Honor Code Completion
 Not available unless: The activity [N0] Course overview and guidelines is marked complete ... Show more
- [W1.A2] Self-check: How well do you think can you follow the schedule of course activities? Completion
 Not available unless: The activity [W1.A1] MMS 150 Honor Code is marked complete
- [W1.A3] Update your preferred name in your MyPortal profile Completion

Please enter your preferred name in MyPortal so that it is easier to address you. Manually mark this activity as completed when you have finished.



Diego Maranan Message

Diego Maranan

General

First name	Diego
Surname	Maranan
Alternate name	Diego



[W1.A4] RSVP to the design thinking workshop

Completion

I will be leading an introductory workshop on design thinking, based on the Stanford d.school Starter Kit. The workshop will happen next week on **Monday, June 26, at 2:45 pm (Philippine Time)**. The workshop will last for no more than three hours. The workshop will start officially at **3:00pm** but it is **important that everyone logs in early** because you will be working in pairs for the entire duration of the workshop, so **being late might mean that you will not be allowed into the meeting room**. To prepare for the workshop, all you need to is make sure you have **pens** (multiple colors would be great) and about **4-8 sheets of blank paper** on hand.

For details about the workshop and the alternative if you can't attend the workshop, see [Activity 2.1](#). If you are joining the synchronous workshop, details are provided below:

<https://up-edu.zoom.us/j/98107925894?pwd=VHZOVkoyTWVEbysvbGI1Qm1lY0RHZz09>

Meeting ID: 981 0792 5894

Passcode: 58047053

Final Project Activities



[W1.FP.A5] What kinds of challenges are you interested in?

Completion

Not available unless: The activity [\[W1.A2\] Self-check: How well do you think can you follo...](#) [Show more](#)



[W1.FP.DF1] Introduce yourself and two examples of problems that you are interested in (Pitch version 1 of 3)

Completion

Not available unless: The activity [\[W1.FP.A5\] What kinds of challenges are you interested i...](#) [Show more](#)

General Course Activities



[W1.DF2] What does design mean for you?

Completion

Not available unless: The activity [\[W1.FP.A5\] What kinds of challenges are you interested i...](#) [Show more](#)



[W1.DF3] What is user interface and user experience (UI/UX) design?



Completion

Not available unless: The activity [\[W1.FP.A5\] What kinds of challenges are you interested i...](#) [Show more](#)

26 June - 2 July

Week 2: Design Processes

In the previous week, we tackled UI design and how it differs from UX design. UI design is about creating a useful and usable interface so that when the user provides the product a certain input, the product provides an output that meets the expectation of the user. Other, older terms (but which are still in use) related to UI design include interaction design and human-computer interaction (HCI). The aim of UX design is broader, encompassing all aspects of how the user experiences the product, including the design of its UI, yes, but also tackling the personal, social, economic, and cultural aspects of how a user can form a useful and meaningful relationship with the product.



Since MMS 150 is just an introduction to the subject, we will not be able to dig deep into all aspects of UI/UX. For example, we will not be looking into the business-side and entrepreneurship aspects of UX design, such as all the many steps you might need to take in order to bring a prototype to market. However, there are other opportunities for you to pursue this outside of MMS 150, such as through looking for and joining hackathons, taking a digital entrepreneurship course, or applying for business incubation schemes.

This week, you will experience firsthand a crash course into thinking like a designer through the d.school Starter Kit-based workshop. This workshop is meant to give you a taste for UX designers think and work. You will also take one step closer to forming your Final Project teams.

Not available unless: The activity [W1.FP.A5] What kinds of challenges are you interested in? is ... [Show more](#)

General Course Activities

[W2.A6] Participate in the design thinking workshop and upload your storyboard (based on Activity 2.1) [Completion](#)

[W2.DF4] How is UX design done? [Completion](#)

Not available unless: You belong to a group in **Course Sections**

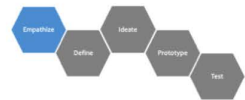
Final Project Activities

[W2.FP.DF5] Pitch (version 2 of 3) and indicate interest in potential projects [Completion](#)

3 July - 9 July

Week 3: Empathizing - Understanding the potential users of your product and their pain points

Design is a dynamic and often messy process. At the most basic level, design is an interplay between *generating* ideas (diverging) and *selecting* ideas (converging). This applies to all aspects of the design process: your selection of your target audience, what needs you aim to address, how you use materials, what methods you decide to follow. As discussed in the readings from the previous week, you can expand this generation+selection process in different ways, for example:



- Inspiration, ideation, and implementation
- Requirements specification, ideation, implementation, and evaluation
- Empathizing (user research), problem identification, solution ideation, solution selection, implementation (prototyping), and evaluation

These are other ways to describe the design process. To make things more manageable, we will use IDEO's 5-phase Design Thinking Framework for the remainder of this course as a way to structure our discussion and your project activities.

It's worth repeating that in a true human-centered design process, you wouldn't always know the form that your solution will take at this stage. In the Shopping Cart challenge, for example, none of the designers could have anticipated that in their aim to redesign the shopping cart, what they would actually do is to attempt to redesign the grocery shopping experience as a whole, which included designing a whole new way of scanning and paying for grocery items. For the purposes of MMS 150, you will have to work backwards a bit and assume that you will be creating a mobile app or website (or perhaps redesigning an existing mobile app or website).

The first part of any design process is getting inspired by a problem. In human-centered design, this means getting to understand as deeply the people you are designing for and the pain points they experience. In the IDEO Shopping Cart challenge, for example, the design researchers went to a grocery store and observed shoppers (*observation*), looked up statistics on how often accidents and injuries occur in grocery stores (*secondary research*), interviewed shoppers in the grocery store (*contextual interviews*), and interviewed grocery store staff (*expert interviews*). This week, you and your classmates will describe different methods for understanding the potential users of your solution.

Not available unless: The activity [W1.DF3] What is user interface and user experience (UI/UX) ... [Show more](#)

General Course Activities

★ [W3.DF6] Empathize: How can you understand your users better? (An Unahan! challenge) (based on Task 3.1.1) [Completion](#)

Not available unless: The activity [W2.A6] Participate in the design thinking workshop and... [Show more](#)

[W3.DF7] Formulate a user-centric question (based on Activity 4.1) [Completion](#)

Final Project Activities

[W3.FP.A7] Organize yourselves into Final Project teams by doing one more pitch (Pitch version 3 of 3) [Completion](#)

🔒 Not available unless: The activity **[W2.A6] Participate in the design thinking workshop and...** [Show more](#) ▾

 **[W3.FP.C1] Final Project DF (separated by teams)**  [Completion](#) ▾

Use this activity if you need to chat with your current Final Project teammates. (This is not a graded activity.) You will need to have joined a team in the previous activity (FP.G1) in order to participate in this DF.

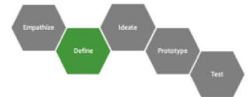
 **[W3.FP.C2] Final Project chat room (for the entire class)** [Completion](#) ▾

Use this activity if you need to chat with the entire class (e.g., if you're looking for a team to join, or you're looking for others to join your team). (This is not a graded activity.)

▾ 10 July - 16 July

Week 4: Defining the problem - HMW questions and Theory of Change

In the Shopping Cart challenge, the IDEO designers turned the challenge of redesigning the shopping cart into a question: How might they improve the grocery shopping experience by reimagining the shopping cart? To answer this question, the researchers took their data from their user research stage and analyzed it together to better understand general question of what the pain points in the grocery shopping experience are. They identified both different themes and common patterns in the user experience data that they gathered. From there, they began to refine the original challenge that they had into four areas of concern: shopping, safety, checkout, and finding what you're looking for.



During the design thinking workshop, you had already learned about the "How Might I Help..." way of framing a problem. This week, you will learn about a very similar framing technique--"How Might We" (HMW)--and how a Theory of Change can you help prepare for the ideation phase that follows after you have defined your problem.

You should be continuing forming your Final Project teams this week; by next week, you will be asked to finalize your team. In the meantime, you should start familiarizing yourself with collaboration and prototyping tools that you and your team will use for your project.

🔒 Not available unless: The activity **[W2.DF4] How is UX design done?** is marked complete ... [Show more](#) ▾

◀ Final Project Activities ▶


 **[W4.FP.DF8] Communication, collaboration, and prototyping tools (Activity 1.5)**  [Completion](#) ▾

Do [Activity 2.3](#), which involves trying out different communication, collaboration, and prototyping tools, and sharing your experience with the class.

◀ General Course Activities ▶

 **[W4.DF9] Empathize: Synthesizing and reporting user research findings**  [Completion](#) ▾

Do [Task 3.2.2](#). (Find and share examples of frameworks for describing your user research findings) and share your findings in this DF.

 **[W4.A8] Learn about why a Theory of Change can help your team answer your HMW question (from Activity 4.2)** [Completion](#) ▾

Your team will not be required to formulate your own Theory of Change, but you should familiarize yourself with how Theories of Change work.

▾ 17 July - 23 July 🔒

Week 5: Ideation (and selection)

Remember how the IDEO team generated "hundreds" of potential solutions (a divergent process) of which many turned out to be sacrificial, and then eventually got pared down into a few feasible prototypes (a convergent process)? That's an example of the brainstorming part of the design thinking process. In the IDEO model, you will notice that this phase is termed ideation, but in addition to generating ideas, you also eventually need to discard many and keep only a few, so it's more accurate to call this an *ideation-and-selection* phase. But to keep it simple, let's just call this the ideation phase.



Before you enter the ideation phase, you should have:

1. a reasonable understanding of who you're designing for and what their pain points are (because of the work you did in the Empathizing phase); and
2. some idea of the user needs or experience gaps that you are trying to design a solution for (as part of the Defining phase).

You will probably also have a hunch, hypothesis, or belief on how these problems might be solved (because you have formulated your Theory of Change).

Once you have all of this under your belt, you can that knowledge to use through an ideation (brainstorming) session in your design process. You've already seen ideation in action at least twice: the first time was in the d.school Starter Kit design thinking workshop, when you created four concepts based on the prompts "expensive", "tomorrow", "game", and "robot". Remember that those concepts were meant to be *sacrificial*, meaning that they are not intended to be the final solutions; rather, they are created with the knowledge that they will be discarded later on but that they nevertheless helped you understand your users' needs better. These sacrificial concepts were also used in reexamining and reframing your solution. The second time was in the IDEO shopping cart challenge.

🔒 Not available unless: The activity [\[W4.A8\] Learn about why a Theory of Change can help your team ...](#) [Show more](#) ▾

◀ General Course Activities ▶

[\[W5.A9\] Divergent and convergent thinking](#)

Completion ▾

The best way to learn about ideation is to try it. However, ideation is the phase where the theme of divergent and convergent thinking is most apparent. If you want to learn more about the theory behind divergent and convergent thinking, and if you want to try out some fun exercises in divergent and convergent thinking, check out [Activity 5.1](#). If you're looking for something fun to do, I highly recommend doing Paper Clip Test and the Remote Associates Test test!

[\[W5.DF10\] Co-creation and card-sorting](#)

Completion ▾

Co-creation is another important tool of any UX designer, and while it can be applied in almost any phase of the design process, it is particularly suited for the ideation phase. Do [Activity 5.2](#) and [Activity 5.3](#) then answer the following questions in this forum:

- Why is co-creation useful?
- Card-sorting is a method that you might have encountered previously when we tackled the user research (Empathy) phase. Why is card-sorting a particularly useful method in UI/UX design?

◀ Final Project Activities ▶

[\[W5.FP.N3\] Learn about the requirements of your final project](#)

Completion ▾

By this time you should be finalizing the composition of your team. If you are happy with your team membership, password-protect your team so that no one else can join. You are also encouraged to come up with a cool name for your team and to rename your team this week!

Let's review what we have covered so far about the UI/UX design process:

- You've had a taste of a full design cycle is like in the d.school Starter Kit workshop.
- You've learned about a classic example of a design process, the IDEO shopping cart challenge.
- You've learned about how you can describe design processes using the 5-phase Design Thinking framework.

Now that you have all of this under your belt and have formed your team, you are now ready to learn about what your final project entails. Click the link to learn more.

24 July - 30 July 🔒

Week 6: Prototyping

After the Ideation (and selection) phase, you should now have one or more related

potential solutions that you need to now flesh out so that you can test it. This is what prototyping is about: making your ideas more tangible so that they can be evaluated for usability and usefulness. The activities this week will introduce you the basics of prototyping and will ask you to try out a couple of prototyping exercises.



Not available unless: The activity [\[W4.DF9\] Empathize: Synthesizing and reporting user research fin...](#) [Show more](#)

General Course Activities

Do the reading and watching tasks from the following activities. You do *not* need to create the prototypes described in Activity 6.2 or Activity 6.3.

[\[W6.A10\] Introduction to prototyping \(from Activity 6.1.\)](#) Completion

[\[W6.A11\] Low\(er\)-fidelity prototyping \(from Activity 6.2.\)](#) Completion

[\[W6.A12\] High\(er\)-fidelity prototyping \(from Activity 6.3.\)](#) Completion

[\[W6.N3\] A note about fidelity in prototyping](#) Completion

[\[W6.DF11\] Bad by design! Prototype an awful control](#) Completion

Sometimes, a good way to understand good design is to explore bad design! Read the directions for [Activity 6.4](#) and make sure you see the examples of badly-designed volume controls there.

For this term, your challenge is to create an absolutely terrible design solution to [log into a program or an app](#). What is an awful, funny, bizarre, clever, or outrageous way for [logging in](#)? Create a low- to medium-fidelity prototype of your ridiculous proposal and share it in this DF! If you are doing a paper prototype, you must do a Wizard of Oz demonstration of how it works.

You do not (yet) need to reply to your classmates' posts to complete this activity, but you *will* be asked to make at least one reply after you accomplish the following week's activities, in which you will learn about design principles and usability evaluation heuristics.

Rate your classmates' posts out of 10 points based on two criteria:

1. how unique, original, clever, or and imaginative their proposals are (50%)
2. how well they managed to convey how their proposed solution function through their prototyping skill (50%)

Rating guide

	1-4 points	5-7 points	8-10 points
Uniqueness, originality, cleverness, or imagination	"Meh."	"Cool."	"Wow that is interesting."
How clearly the idea was conveyed through the prototype	The prototype doesn't really get the idea across and/or not a lot of work went into the prototype	The prototype conveys the idea sufficiently and/or some work went into making the prototype.	The prototype illustrates the idea incredibly well and/or a lot of work went into the prototype.

Not available unless: The activity [\[W6.A10\] Introduction to prototyping \(from Activity 6.1.\)...](#) [Show more](#)

Final Project Activities

[\[W6.FP.N4\] Final Project notes for Week 6](#) Completion

There are no Final Project-specific activities that are listed on MyPortal this week. However, you should refer to the example timeline from the previous week for working on your projects. By this week, you should be starting to identify who your target audience (user group) is. By this time, you should be getting pretty good at identifying a user group that is neither too broad nor too specific.

In the industry, when you work on very large projects, you will often have to work with professional *research participant recruiters* whose job it is to find participants who fulfill the inclusion criteria for your project (e.g., "single mothers between the ages of 22 and 40 with at least 1 dependent child"). You won't be needing to do this for MMS 150. Instead, for this course, I suggest that you should be able to **easily find** at least **three** individuals who represent your target audience, *and* who you think **might willingly participate in user research and evaluation sessions** that your team will conduct. This means for example that if your intended target user group is small-scale fisherfolk, but no one in the team actually lives near a fishing community or knows a *mangingisda*, then you should consider switching strategies (or what is sometimes referred to as "pivoting" in the tech industry) so that you can more easily recruit members of your target audience to participate in your design process.

When you do get to the point where you are trying to recruit participants, make sure you that you explain to the participants of your design process that you are working on a school project which may not go anywhere after the course is done. Manage your participants' expectations and be careful about overpromising against what you can realistically deliver, even if you intend to continue to work on your project after the course is done.

31 July - 6 August

Week 7: Usability design principles for GUIs

Weeks 7 and (to a lesser extent) 8 will place demands on your time. This is because we will be covering topics that you will need to help you with executing your Final Project. But don't worry: Weeks 9 and 11 will be light weeks.



So far we have covered mostly topics related to user research, user needs identification, and problem specification, as well as an introduction to prototyping. In the next two weeks, we will dig deeper into principles that can help you when it comes to prototyping the user interface (UI).

Recall from the first part of the the course that an interface is that part of the system that maps user input to system output. From a usability perspective, an interface is well-designed when the output of the system corresponds to the output that a user expects, give a specific kind of input from or behavior by the user. There are many other aspects of UI design that matter other than usability, of course, such as aesthetics and branding. For the purposes of this course and in the interest of time, we will focus on principles for improving functionality and usability of an interface (even though aesthetics can have an impact on usability).

In these week's activities, you will be learning guidelines for creating graphic user interface (GUI) elements and interactions. But before you do, let's review what you should be doing for your Final Project this week and take a look at issues related to how you can interact with users ethically and professionally.

Not available unless: The activity [W5.A9] Divergent and convergent thinking is marked complete ... [Show more](#)

General Course Activities

[W7.A13] Terminology used in describing graphical user interface (GUI) elements and interactions (from Activity 6.5.) Completion

We will now look at principles and theories for how to design usable GUIs. However, in case you are unfamiliar with GUIs design jargon, use the readings from Activity 6.5 to review terminology often used to describe GUI elements and interactions.

[W7.DF12] How can you design usable interfaces? (An Unahan! challenge) Completion

[W7.A14] Browse through Pieter Steyaert's list of design resources Completion

We won't be going in-depth into aspects of the visual design of user interfaces such as typography, color, branding, and aesthetics. There is not enough time to cover all topics in one course! Some of these issues may be covered in a future course on advanced UI design, or perhaps in your production courses on graphics and text. However, if you wish to get started on these topics some more, designer and FICS affiliate faculty Pieter Steyaert has compiled a list of resources that may be useful for you on these issues. Browse his list and go through the listed resources at your leisure.

Final Project Activities

[W7.FP.A15] Ethical interactions with users and research participants (from Activity 3.3.) Completion

Before you proceed to engage participants in your user research (empathy-generation) phase, make sure you familiarize yourselves with important points on ethical and professional interactions with users.

[W7.FP.A16] Book a midterm consultation with your FIC for your Final Project team Completion

As I mentioned earlier, all teams are invited to book a 40-minute feedback session with me to receive feedback on your projects. All feedback sessions will happen during **Week 9**. Use this link to make the appointment. Have one member of your Final Project Team book the feedback session on behalf of your entire team; try to find a time when most members of the team are available. You can also use this time to ask any questions you have about the course.

[W7.FP.A17] View previously completed MMS 150 projects Completion

By this week, you should be starting or in the middle of doing your empathy-generating user research. For the purposes of this course, you should engage at least 3 but no more than 5 participants. You can engage more than 5 *only if* you think that you need more data in order to generate a user experience framework later on using some kind of journey map, relationship map, grid, or other way of synthesizing your findings. Alternatively, you could use more than one method with your cohort of 3-5 participants as a way to getting a richer understanding of your users' experiences and pain points.

Now that you are further along in your projects, it's time for you to take a look at some of last year's most outstanding completed MMS 150 projects. Allow yourself to be inspired by these projects! This link will be accessible on or after Week 7 (31 July 2023).

7 August - 13 August

Week 8: Testing

The prototyping and testing phases are linked very closely to each other. Think back to the design thinking workshop. Right after you came up with your four sacrificial concepts (prototype) and drew them up for feedback from your activity partner (test), you then integrated the feedback into a new prototype. In the IDEO shopping cart case, the design team drew up low-fidelity prototypes on paper and medium-fidelity prototypes using scrap material. These were then subject to internal feedback from the team, leading to refined, high-fidelity prototypes that were the shown to grocery store employees for more feedback.



For every type of prototype, different evaluation methods are appropriate. Low-fidelity prototypes can be used to check with stakeholders whether you are going in the correct general direction and can also function as a user research tool. Increasingly higher-fidelity prototypes can be used for all of the same purposes, as well as to test market viability, branding, functional completeness and correctness, and technical performance. If you build a coded prototype, your evaluation needs will become more complex; if you are interested in building and testing coded prototypes, MMS 149 (Software Engineering in Multimedia Practice) may cover these topics.

For this course, we will deal mostly with evaluating prototypes for usability. There are two ways to do usability evaluation: expert (heuristic) reviews, and user testing with other stakeholders. Let's take a look at each of those in turn.

Not available unless: The activity [W6.A10] Introduction to prototyping (from Activity 6.1.) is marked... [Show more](#)

General Course Activities

[W8.A18] Read about expert reviews and do one of your classmate's awful design proposal (from Activity 7.1) Completion

[W8.A19] User-based evaluation (from Activity 7.2.) Completion

Expert evaluations are useful to quickly estimate the usability of your product. However, users can interact with your product in unexpected ways. To really understand how usable your product or product prototype is, relying on heuristic-based expert evaluation will not be enough; you will instead need to test it with actual or potential users. Follow the instructions for Activity 7.2 to learn about methods for user-based evaluation.

Final Project Activities

[W8.FP.N5] Final project notes for Week 8 Completion

By the end of this week, you should be finishing your user research and started to synthesize the results, ending the Empathy phase for this design cycle. Based on the results of user research and synthesis, you should be revisiting, refining, and potentially revising your problem definition to create a "How might we..." or "How might technology..." statement (Define).

Once you've created your problem statement, start to brainstorm possible solutions to address the problem, remembering to include wild and outrageous ideas as a way to create sacrificial concepts that can broaden the range of possible solutions you can explore (Ideate), before selecting from and integrating your ideas to help push you to the next phase (Prototype).

Remember to make sure that someone in your team books your Week 9 feedback sessions so you can present and receive initial feedback on your project.

14 August - 20 August

(Week 9) Feedback Sessions week

Congratulations! You have finished your deeper dive into methods, guidelines, and tools for the 5-phase Design Thinking framework and how they might be applied to UI/UX design. Now you need to apply all that you have learned to your Final Project.



This week, you will be meeting with your FIC to present where you are at with your Final Project. By this week, you should have selected a direction to pursue and have put

together a low-fidelity prototype. You should be conducting an evaluation of your low-fidelity prototype using at least 1 evaluation method, involving *at least 3* but *no more than 5* participants representing your target audience (could be the same participants as from the Empathize phase).

Next week is our last week of general course activities. You will take the midterm exam; discuss broader issues related to UI/UX and contribute to one last final DF; and be asked to provide course feedback. After that, you will focus on your Final Project and learn about the peer assessment system you will use to rate yourself and your teammates.

The midterm exam will be an open-book one and you will have ample time to complete it. There is no need to prepare for the exam as long as you have done all the activities leading up to it. The midterm exam will remain available until the end of the course.

🔒 Not available unless: You belong to a group in **Final Project Team**

◀ Final Project Activities ▶



[W9.FP.A20] Participate or attend the midterm project consultations

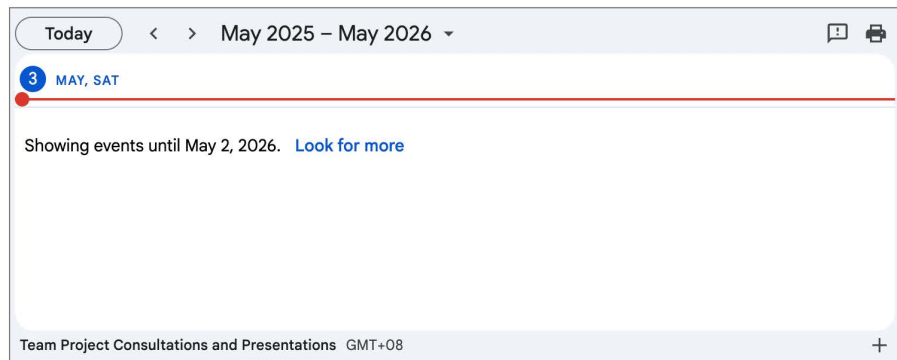
Completion ▾

If your team booked a consultation for feedback, it should be shown in the calendar below. If you cannot see the calendar, [view the calendar in a different page](#). (You will need to sign in using your UP email address.) You are welcome to attend the feedback session of other teams! This way, you can benefit from the feedback I give to--and conversations I have with--other teams.

To help prepare you for your own team's feedback sessions, you can:

- Review the evaluation criteria for the final project and preview the submission form on [\[W5.FP.N3\] Learn about the requirements of your final project](#); and/or
- Browse and be inspired by the showcase previously completed MMS 150 projects from [\[W8.FP.A19\] View previously completed MMS 150 projects](#)
- Sit in the feedback session for other teams;
- Review the recording of previous feedback sessions (you can access the link to completed recordings in the Calendar invite associated with each consultation);

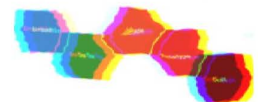
(If you can't access the showcase or the form, you can [use this link to sign up for Airtable](#) using your @up.edu.ph email address and log in using this Airtable account. You must use the @up.edu.ph email address to log into Airtable and access the showcase and the form.)



▼ 21 August - 27 August

(Week 10) Advanced Topics in Design Research

Welcome to the last week of new material taken from the course package! This week, you will be taking the open-book midterm exam. After that, we will cover more advanced concepts that are particularly applicable if you intend to use design research as a framework for your MMS 200 project or even pursue UI/UX design or design research as a career. To this end, all of this week's remaining activities are optional (except for a quick poll) and will not be required for your final grade. However, it is recommended that you complete these activities if you are interested in working professionally in UI/UX design or design research.



🔒 Not available unless: You belong to a group in **Final Project Team**

◀ General Course Activities ▶



★ [Q01] Midterm Exam

Completion ▾

This is an open book exam. As always, you are expected to obey principles of intellectual honesty.

- You will need to answer this quiz on a desktop computer or laptop with a working webcam. You cannot take this

quiz using your mobile phone.

- This exam has 10 questions selected randomly from a bank of questions.
- When answering this exam, work on your own and don't seek the help of your classmates.
- Do not share the solutions to this exam to anyone else.
- Do not seek the solutions from your classmates or from anyone else.
- You are allowed three attempts at this exam, but only the grade on your first attempt will be counted.
- You should complete this exam by the end of Week 10. **This exam has an automatic deadline extension (a hard deadline) built in: it will be open until the last week of classes.**

Good luck!

Not available unless: The activity [W1.A1] MMS 150 Honor Code is marked complete ... [Show more](#)

[W10.A21] Responsible design (from Activity 8.1) [Completion](#)

The overall guiding principle for ethical design and ethical research is "Do no harm." However, UI/UX design principles can be exploited for questionable purposes, as the tasks in this activity will explore. Mark this activity as done after you have finished with the tasks from Activity 8.1 of the course reference.

[W10.DF14] Create your own version of a design process that takes into account critiques of human-centered design and (simplified) design thinking (from Activity 8.2) [Completion](#)

Do [Activity 8.2](#) and share the results of Task 8.2.2 here. *This DF is optional and purely for your own professional development or intellectual enrichment, or if you would like earn the Emerging Design Thinker badge or the ultimate badge for this course: the Emerging UI/UX Designer badge.*



Not available unless: The activity [W7.FP.A15] Ethical interactions with users and research... [Show more](#)

[W10.A22] Furthering your abilities in UI/UX Design and Design Research (From Activity 8.3. This is a required but not graded activity) [Completion](#)

Do you think you might want to become a professional UI/UX designer once you graduate? Do [Task 8.3.1](#). from [Activity 8.3](#) and then answer this poll.

Final Project Activities

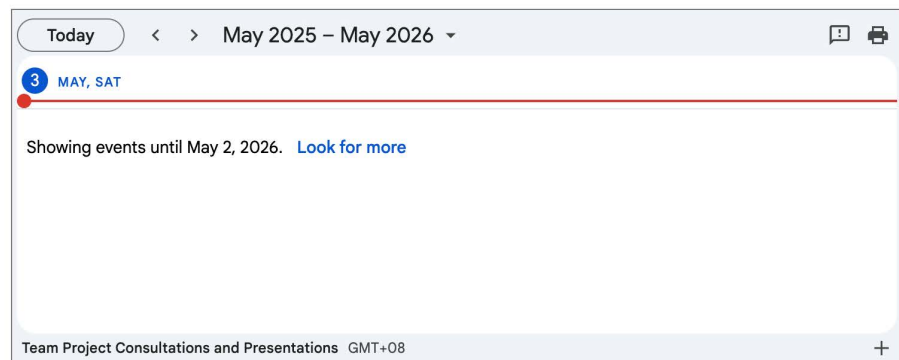
[W10.FP.N6] Final project notes for Week 10 [Completion](#)

By this week, you should be conducting an evaluation of your low-fidelity prototype using at least one of the evaluation methods described in [Week 8](#), involving *at least 3 but no more than 5* participants representing your target audience. (These could be the same participants as from the Empathize phase.) I recommend incorporating the Think-Aloud protocol in your testing.

[W10.FP.A23] Book a presentation slot for the second round of FIC feedback [Completion](#)

Book a 40-minute slot for your team during our Round 2 Feedback Session on Week 12 (**4 September to 10 September**). The complete schedule of presentations will be updated in the embedded calendar in the Week 12 section below. You are all encouraged to attend all the 2 Feedback Sessions and watch your classmates' presentations during the week so that you can learn from other teams.

The current schedule of presentations is shown below. If you cannot see the calendar below, [view the calendar in a different page](#). (You will need to sign in using your UP email address.)



Today < > May 2025 – May 2026

3 MAY, SAT

Showing events until May 2, 2026. [Look for more](#)

Team Project Consultations and Presentations GMT+08

28 August - 3 September

(Week 11) Focus on your final project

This week is all about working on your final project. There are no more general course activities for you to do.

You will also take the first step in doing the peer evaluation for your final project teammates using a special Moodle activity called Workshop.

Not available unless: You belong to a group in **Final Project Team** ...

Show more



★ [W11.FP1] Final Project Part 1: Rate yourself and your groupmates



Completion

How would you rate your contributions to the success of the project? How would you rate your groupmates' contributions to the success of the project? This time-sensitive activity requires you to do two things:

1. Submit a reminder to your groupmates about your contributions to the project. You can do this **until Thursday, September 14, 2023, 11:59 pm.**
2. Rate yourself and your teammates. Submit your ratings **starting from Friday, September 15, 2023 until Monday, September 19, 2023, 11:59 pm.**

Be as honest and fair as possible in your assessment. Give credit where it is due and withhold it when it is justified.

Important note: To complete this activity, you must use a desktop or laptop computer, or request the desktop version of a page if you are using a mobile phone (here's how you would do it for mobile versions of [Chrome](#), [Opera](#), and [Safari](#)).

Not available unless: The activity [W5.FP.N3] **Learn about the requirements of your final p...** Show more

4 September - 10 September

(Week 12) Feedback Session Round 2

Not available unless: The activity [W5.FP.N3] **Learn about the requirements of your final project** is m... Show more



[W11.A24] Course feedback + tell us which DFs you think should be used for your final grade



Completion

Not available unless: The activity [W8.A19] **User-based evaluation (from Activity 7.2.)** is m... Show more



[W11.A25] Have you finished rating your groupmates' discussion forum posts?



Completion

Before you can submit your final project, make sure that you've contributed to the discussion forums and have submitted ratings for your classmates' posts when you can. (See note below.) Use the peer assessment guidelines presented in note [N01] and be ready to change the ratings you might have initially given your classmates. You are allowed (but not required) to use punctuality as a determinant in your rating of a post. Indicate in this checklist whether you've reviewed and finished rating your groupmates' posts.

Note: If you have been tardy with participating in and/or providing ratings for discussion forum posts, and the DFs have closed, then you have missed your chance to do so. However, you can still participate in the Final Project peer assessment process.

Select one of the options in this checklist.



[FP.A26] Present your work and watch others' presentations during the Open Crits week

Completion

It's time to present your project and (optionally) attend the presentations of other Teams during the Open Crits week! Other members of UPOU Faculty will also be invited to attend to watch your presentations, if they are available. Using the dropdown menu for the date, select the correct week in the calendar below to view the schedule of crits sessions for MMS 150 teams. All MMS 150 students are welcome and encouraged to attend the crits. If you cannot see the calendar below, you can also click this link. (You will need to sign in using your UP email address to view the calendar.) Once you have presented your Team's project, tick the checkbox associated with this activity.

Today < > May 2025 - May 2026

3 MAY, SAT

Showing events until May 2, 2026. [Look for more](#)

Team Project Consultations and Presentations GMT+08

Not available unless: The activity [W11.A25] **Have you finished rating your groupmates' di...** Show more

11 September - 17 September

(Week 13) Wrapping Up

Remember that this week is the deadline for submitting a brief reminder to your team about your contributions to the project and then doing your peer ratings in the activity **[FP1] Final Project Part 1: Rate yourself and your groupmates**, which was posted in Week 10.

Not available unless: You belong to a group in **Final Project Team**

★ [FP2] Final Project Part 2: Submit your presentation

Completion ▾

1. Use the feedback you received from the crit session to refine your presentation.
2. Remember that what you submit here will be assessed using the criteria described in **[W5.FP.N3] Learn about the requirements of your final project**. Therefore, it has to **contain all the required outputs listed in [W5.FP.N3]**. (Imagine that someone is viewing and assessing your project for the first time, and the only source of information they have is your submitted PDF file; this is how comprehensive and detailed your submission needs to be.)
3. You will be asked to submit your PDF file first in chunks, then as a whole. Do this using the following submission page: <https://airtable.com/shrbnPNGQ4kq2F4cv>
4. When you have completed your submission, you will be given instructions on how to get your Assignment Submission Unique ID.
5. Copy your Assignment Submission Unique ID and submit it in this assignment bin.

Only one person from your Team needs to make a submission. We recommend that the coordinator for the Team make the submission. **Submit the URL on or before Wednesday, September 14, 2022.**

And with that... you're done! Congratulations for completing the course!

Not available unless: The activity **[FP.A26] Present your work and watch others' presentat...** [Show more ▾](#)

TODO: Move all the tasks involving different definitions of design processes towards the very end. The different ways of understanding design processes could go in Week 10

Completion ▾

Hidden from students



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