

MOOCathon: Crowdsourced Planning and Development of a MOOC Platform

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ABSTRACT

Massive Open Online Courses or MOOC is a recent phenomenon in distance education in which a course can cater to a very large number of learners. To support the massive nature of MOOC, it needs a platform that is flexible and scalable both in the technological and pedagogical sense. In order to solicit as many ideas as possible for an ideal MOOC platform, crowdsourcing was applied both offline and online.

Crowdsourcing utilizes the wisdom of the crowd as opposed to that of a single expert. A design-thinking workshop was conducted to identify the needs and features of the MOOC platform based on the combined experiences and ideas of the participants. MOOC students, teachers and enthusiasts participated in the said event. The development of the platform was achieved through a hackathon, in which several teams created different prototypes addressing the said needs. The output from the hackathon was evaluated in comparison to the existing University MOOC platform developed by a lone team.

INTRODUCTION

The reach of university educators has been magnified by recent developments in eLearning. One of the most phenomenal and disruptive of these developments is the proliferation of MOOCs. The massive and open nature of MOOCs was able to open opportunities to people from different walks of life. Various public and private institutions have joined together to offer their MOOCs in their own platforms. Some of them have subscribed to commercial platforms aiming to earn from

signature tracks. The leading platforms known among MOOC learners are EDx, Canvas, and Udacity.

The University of the Philippines Open University (UPOU) has just joined these institutions by offering a MOOC on Android through a Moodle-powered platform called *Aral*. Completion and retention rates however were low, which is a usual case among MOOCs and MOOC platforms. A team was formed to look into how to improve the offering of MOOCs by doing consultative workshops for ideation and requirements/feature specification, as well as in the actual development by opening an invitation for people to participate and attempt crowd-sourcing.

Crowd Sourcing and Design-Thinking

Crowdsourcing is defined as “the practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people and especially from the online community rather than from traditional employees or suppliers” (Merriam-Webster.com, 2012). Crowdsourcing has been instrumental at making large projects, which are facilitated by small teams, possible. With the aid of internet technologies, participants who are interested and passionate about the project can help out either by submitting their contributions online or by expressing their personal attendance through online invitations in social media.

Crowdsourcing has been used in many popular creative projects, such as the Virtual Choir by Eric Whitacre (Whitacre, 2014). This is a project by a conductor and composer where he invited participants online to sing a part in his piece through Youtube. Youtube videos were collected and screened. They were then mixed together to form choirs that are composed of thousands of singers from almost 100 countries. Hackathons are another form of crowdsourcing where interested developers from different walks of life are invited to participate in a game-based event where problems of an organization are presented and solutions presented. Mobile Crowdsourcing is also a popular concept with the proliferation of users of an app called *Waze*. This app is used by drivers in cities that are plagued by heavy traffic and utilizes the wisdom of the crowd. It collects car speed data through GPS from its users and interpolates the traffic situation in an area to suggest better routes to other users.

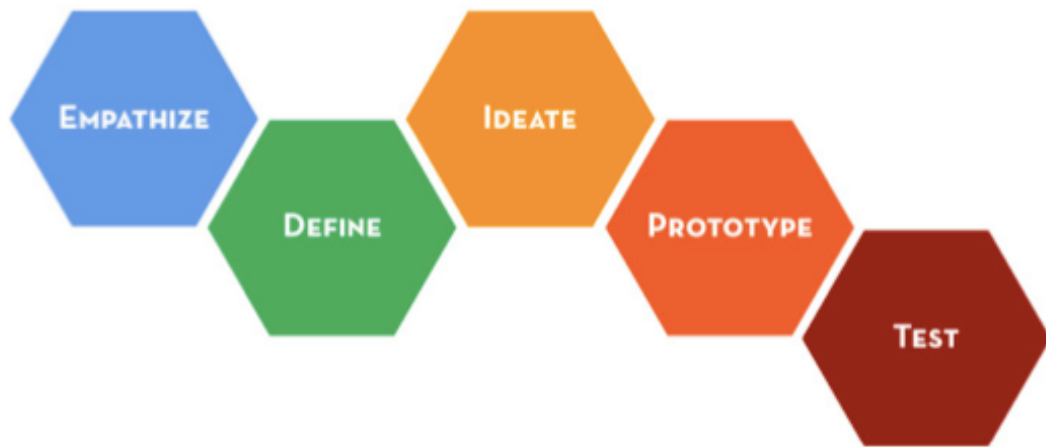


Figure 1. The five steps in Design Thinking

Design Thinking, on the other hand, is a solutions-based or solution oriented thinking, which starts with an ideal situation or a goal instead of a problem (Cross, 1982). It involves creative activities related to five verbs related to processes: Empathize, Define, Ideate, Prototype, and Test.

METHODOLOGY

The UPOU's planning and development of their new MOOC Platform, which involves an iterative process was dubbed as a MOOCathon. One cycle involved three phases: (1) Requirements Elicitation and Prototyping, (2) Preliminary Implementation, and (3) Implementation of add-ons and debugging.

Crowdsourcing was utilized by inviting people from the academe and those who have taken MOOCs via social media to participate in a Design Thinking Workshop that took place at the UPOU Headquarters. Creative activities that allowed the participants to move around and interact with each other produced a list of features and prototypes that were suggested by the learners and teachers of the group for UPOU's next platform.

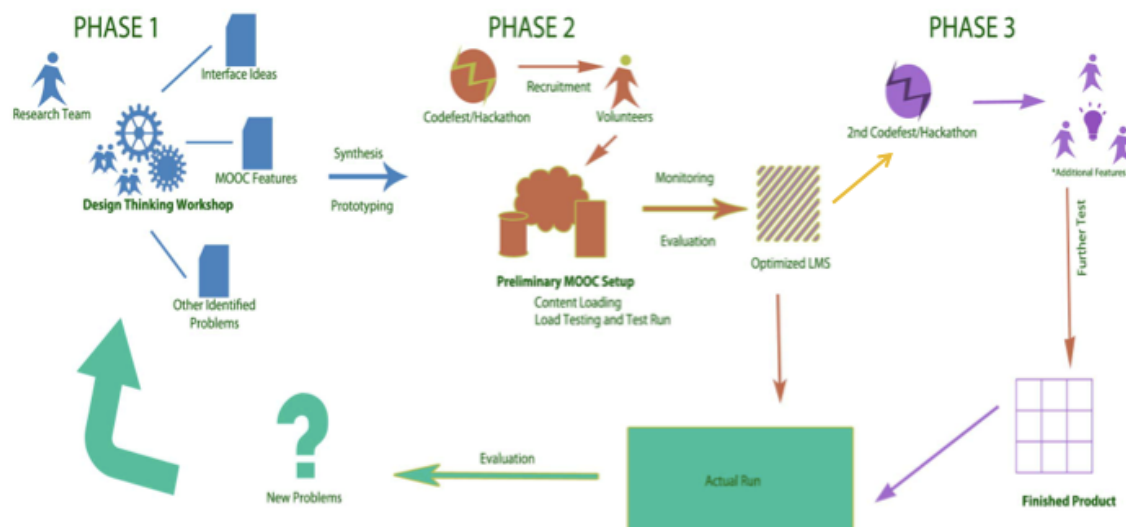


Figure 2. MOOCathon Process

The customization of learning management systems and open source platforms were delegated to Hackathon participants who initially participated online. These platforms are Moodle, EdX, Canvas, and OpenMOOC. This activity allowed the small team to eventually recruit new members as well as volunteers in how to improve the next offering of MOOCs by testing the four platforms in the list.

RESULTS and CONCLUSION

The Design-Thinking workshop was able to produce many ideas and features that the team needed to start their investigation. Different user interface prototypes were presented based on the learning styles of the participants. One particular interface which was later coined as *The Cube* was chosen to be a feature of UPOU's new MOOC Platform: Model. The hackathons were able to recruit new passionate members, even though they had problems initially because of the absence of a crontab script for emailing participants through the message boards. Because of this, the next hackathons would ensure emails to reach the participants every week so that participants will not eventually lose interest.

REFERENCES

- Treffinger, D. J., Isaken, S. G., & Dorval, K. B. (2000). *Creative Problem Solving: An Introduction* (3rded.). Waco, TX: Prufrock Press.
- Cross, Nigel. (1982). *Designersly Ways of Knowing*. Design Studies.
- Crowdsourcing- Deinition and More*. (2012). Merriam-Webster. August 31, 2012
- Whitacre, Eric. (2014). *Eric Whitacre's Virtual Choir*. <http://ericwhitacre.com/the-virtual-choir>