Name: **Kovid Sharma**

zID: **z5240067**

Tutor: **Ali Darejeh**

Tutorial time: **Wed & Thursday,**

4-6pm

<u>Individual Submission</u>

Paper Prototyping and Electric Prototyping

COMP9511 Human Computer Interaction

Assignment 2

T0, 2020

Reflect on the role you filled:

My role in the assignment was Media/marketing – branding: co-ordinating and **creating paper prototypes** based on group findings. In my opinion it is a crucial part of the user-centred design process since it allows all members of a team to make a sincere effort, including those with limited software skills, to take part in the design process. Because of the 5-week limitation of this course, ideas need to be generated fast and evaluated in a short period of time for which paper prototyping is best known for, and to be honest, it's quite exciting.

User Centred design process:

The UCD is divided into 3 categories, Analysis, Design and Evaluation. UCD is an iterative process which is continuously implemented throughout the lifecycle. For the Analysis part, we defined the vision and objectives of our application, developed a Product Description Statement and created context scenarios with key personas to identify goal and potential interactions with the application. Then we outlined functional and non-functional requirements, interviewed farmers and refined our PDS. For the Design, we created paper prototypes and later, after some brainstorming sessions, electronic prototypes. Evaluation was performed through usability tests of the key workflows of the application. We then reviewed these results and developed higher fidelity (electronic) prototype.

Why is your position critical in the lifecycle?

With the time limitation of summer term, paper prototypes are essential in figuring out the layout of the app. Paper prototypes are fast to create, can a give a good sense of the final design. They are fun to draw, low cost, help with rapid iteration, make it a great team building exercise, and most importantly help elicit honest feedback from the users.

Most important lessons learnt:

One of them few things I learned from making paper prototypes was that though they are very easy to make, they don't capture the full depth of even the basic functions, like for example it's hard to depict which icons are clickable. Users have a hard time finding the connection between system and real-world icons since it's hard to draw icons with hand with utmost precision.

Though low-fidelity paper prototyping is unsophisticated, this method is very successful at discovering usability issues early in the design process. It's best if we use colouring in the

paper prototype as to clearly justify to the user what works how. Since it's paper based, we can conduct usability testing only in person, which is a huge drawback.

Since I also made an improved version with electronic prototypes on Balsamiq, the lesson I learned was it's fairly easy to duplicate the paper prototype, but the buttons and icons are more clearly understood, mostly since they have a 3-D appearance using shadows. Even then, it's best to leave the electronic prototype towards then end and first let lots of users test the paper prototypes. It's only after many iterations of the high-fidelity prototype, we arrive at a really good product.

How could you have done it if you had more time:

If we had more time, we'd go for more data collection – conduct more interviews and usability tests. With this data we'd add more features to our application, make it even more helpful to the farmers. Lastly, with more time, we'd make better electronic prototypes with multiple iterations so as to further refine our design and deliver a worthy application.

References

1. Interaction Design: beyond human-computer interaction, Fifth Edition, Sharp Rogers Preece 2019, *John Wiley & Sons, Inc., Indianapolis*.
2. Web Accessibility Initiative website : https://www.w3.org/WAI/changedesign
3. Wikipedia – Paper Prototype https://en.wikipedia.org/wiki/Paper_prototyping
4. The Magic of Paper Prototyping https://uxplanet.org/the-magic-of-paper-prototyping-51693eac6bc3