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Human-Computer interaction
ASSIGNMENT 2 - Final prototyping

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Part A
Requirement gathering and Low-fidelity prototyping

- FOTSHOP, software and electronic items selling shop is struggling to sell its products due to the corona situation. So they need a digital platform for selling their products online. For that, I'm developing a mobile app(MVP). This digital platform is not an e-commerce marketplace. It's a digital platform of FOTSHOP. FOTSHOP available form 2000 so it has a large customer base. They will start to buy products through a new digital platform.
- All explanations are in the image below (storyboard + user journey)
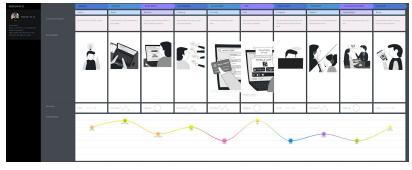

Image full view - [Click here](#)

- Low fidelity prototype(paper prototype)

Full video link - [Click here](#)

- Paper prototype testing
  - Test with Real user
    - Tested Main Areas
      - Concept validation
      - Navigation
      - The flow of specific features/ functionalities
      - Microcopy
      - Content

- Volume testing
    - Research questions I asked
        - At first glance
            - What do you think this APP is for?
            - What do you think you can do in this app?
            - When would you use it?
            - Who do you think this is this for?
        - Questions to be asked after each task the participant performed.
            - Was there anything you expected to find that was not there?
            - What was difficult or weird about this task?
            - What was easy about this task?
            - Did you find everything you were looking for?
            - What didn't look the way you expected?
            - What was missing, if anything?
            - What was unnecessary, if anything?
            - Was anything out of place?
        - At the end of the test
            - Do you feel this application is easy to use?
            - What would I change in this application?
            - How would I improve this Application?
    - Overall user experience after paper prototype testing
        - The user feels satisfied but he wants to change some icons as he used to work android(Material design). And he wants to add some new features (order tracking, Deliver place spotting).
        - I faced some problems when doing a paper prototype test. Because he tested the paper prototype for the first time so I need to give more instructions to him
        - When I first tested he made some mistakes (in clicking text instead of icons, directly move to the second screen without considering the first screen)
    - Video of a user interacting with paper prototype- [Click here](#)

- Paper prototype iteration(V2)
    - Make some changes in Icons, texts, and icons bar.
    - Changes give a clear and attractive view and more user friendly than before.

Part B
Digital prototype and testing

- For reach digital prototype - [Click here](#)

- Digital prototype testing
    - Digital Prototype tester
        Name - S Mathusha | SL
        Age - 18 years
        She has a little bit of experience in using e-commerce apps

    - Questions I asked when doing prototype testing
        - Was there anything that surprised you? If yes, what?
        - Was there anything you expected to find that was not there?
        - What was difficult or strange about this task, if anything?
        - What was easy about this task?
        - Did you find everything you were looking for?
        - Was there anything that didn't look the way you expected? If so, what was it?
        - What was missing, if anything?
        - What was unnecessary, if anything?
        - Was anything out of place? If so, what was it?
        - If you had a magic wand, what would you change about this experience/task?
        - How would you rate the difficulty level of this task?
        - Did it take you more or less time than you expected to complete this task? Would you normally spend this amount of time on doing this?

    - Testing Result
        - At the first time, she was facing issues related to finding some options in this design(she already used Amazon, Aliexpress)
        - She asked some questions about Icons selections, the menu bar place, frame movements, and then give some suggestions about the same things.
        - She didn't face any problem at the begging (in understanding the concept).

    - Digital prototype iteration (V2)
        - According to user suggestions make some changes in ions, text style, and background color usage.
        - Same time make some little change in content delivery (past data about specif product, total soled amounts)

Part C
Evaluation, Reflect

Evaluation of Fotshop prototypes

Evaluation criteria	Paper prototype 1	Paper prototype 2	D.prototype 1	D.prototype2
Functionality				
Aesthetics			Mathusha is attracted by the colors	Icons, Colors are ok
Usability	User think it's simple		Easy to understand	User think it's satisfied
Maintenance				Mathusha feel this is durable
Others	V1 with basic functionalities	V2 with iteration	V1 HI-FI	V2 HI-FI with iteration

- Conclusion
  Overall, the actual testing process and the results we have come upon have been very useful in helping to sculpt our design moving forward and to generally solidify our understanding of how users will interact with FOTSHOP. Strictly looking at the learning opportunity, it has been very valuable to receive direct feedback about certain features as well as the general flow of our design. Even looking completely aside from the information we gained relating to FOTSHOP, the experience of actually running through the tests has been insightful in and of itself. For example, it was very interesting to see how much facial expression, small sigh, or shift in body weight from one of us could redirect a test subject to a different path. I learned quite quickly that it was very important to not show any kind of emotion in response to the user's action as to not influence how she/he proceeded. Also, we found it both surprising and enlightening that the problem areas were not necessarily where we expected them to be. For example, despite the simplifications we were forced to make to the main screen to fit it into a paper model format, the users still struggled in navigating the window. I had all assumed that this step would be trivial to the users but learned quickly just how hard it is to step back and predict problems when you are so heavily tuned in to the design development.

Looking now more specifically to the feedback relating to our system, the results immediately influenced portions of our design as has been noted throughout this report. Specifically, the impact of the user testing has been discussed in the changes we have made to our feedback systems, the phone pairing windows, and some of our general terminology. My test subjects had very specific comments about each of these features and this provided both a note of what needed to be repaired as well as often a suggestion about what might be a better approach. Even just being able to watch test users think their way through each situation was a very useful tool in evaluating which steps might need additional explanation. This was exemplified well by the third test user re-selecting the "choose an event" tab a second time as a way of playing around with the interface rather than being sure where to go next. The slight surprise on her face made it readily apparent that she knew something wasn't right, and her thought process to backtrack was made clearly visible by her examination of the window before finding a way to go back. This observation directly led us to include a small line of instructional text directed at helping first time users understand the intended flow of our system. Also, to help these problems more broadly, I broke down several of our steps (including our phone pairing flow) into multiple windows so that each required step must be completed before moving onto the next. As part of this breakdown process, I also included new feedback popovers to signal to the user when they had successfully created a new connection and that it was now indeed active.

All of that being said I do feel that there were some shortcomings to the paper method that did not allow us to uncover all of the potential flaws with our system. For example, since we were using paper models to display all of our event and reaction choices, it was impossible to clearly present lists of choices to choose between. Instead, I was only able to display three events and four reactions and we believe that this may have been overtly leading to our test users. We often got the impression that a user would pick an option not because they felt it was right, but because everything else presented to them was obviously wrong. If their options were not so limited we feel like this may not have been such an easy task and some additional flaws with our terminology would have been pointed out. Regardless, the exercise as a whole has been very insightful both in helping me make design decisions about the interface for FOTSHOP and enlightening us in general about the testing process.

Reflect

	Pros	Cons
Paper prototype	- Potential usability problems can be detected at a very early stage in the design process before any code has been written. - Promote communication between developers and users - Paper prototypes are quick to build and refine - Fast iteration - Requires only little resources and materials - Possible to show UI pictures to a wide audience via projector	- Simple -> not possible to evaluate details - Not possible to measure e.g. object times - Requires quite much from the moderator.
Digital prototype	- Digital Prototyping involves users. - Digital Prototyping saves money.	- Users may think the prototype is the final version - Prototyping has an upfront cost.

- How Pros and cons affect my work
  - In the instant, I just involved users and technology, not the business so cost didn't affect this.
  - In the paper prototype, I was unable to show all the features to users but I was able to show the basic features.
  - When I test digital prototype users thought that, this is the final product. But I was able to fulfill her expectation about the final product

Why Can't I reached into the top projects

- My color selection was not attractive.
- My app bottom menu bar was less user friendly.
- Need to change the text styles and, fonts.
- There is a need to change some vector images because it was less compatible.

--Thanks--