CS 3205 - HCI in Software Development
Assignment 3: Prototyping
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SUMMARY:
For this assignment, you will be building approximately a few (minimum of one per team member) prototypes for your system. The number of prototypes might change depending on the fidelity of the prototypes (I would expect more prototypes if they are all paper / low-fidelity, but less if you are coding up your prototypes). These prototypes can be similar to one another, but must represent competing and distinct designs. Additionally, the prototypes must be "functional", in the sense that a user can interact with your design (even if the interaction is simulated to some degree). In the upcoming assignments, you will be performing an evaluation that compares the quality of your prototypes. Thus, they must be distinct enough to warrant a useful and interesting comparison when given to users. You will argue that this is the case in your report.

REQUIREMENTS / DELIVERABLES:
You will be required to build the prototypes in question AND turn in a short write-up describing each. Your write-up will probably end up being around 4-6 pages (not including screenshots). Your write-up should contain a description of your prototypes along with photographs (or other proof) of each. You should highlight the differences and potential advantages / disadvantages of each. You may use any prototyping strategy discussed in class (paper, video, etc). You do not need to turn in the actual prototypes, but you will need them for later assignments. I highly recommend that all of your prototypes be the same "type" (paper, digital, etc.).

Your write-up may contain the following sections:

- ***Abstract:*** *As always, provide an overview of the document. Describe the prototypes you built and the differences between them.*

- ***Usability Requirements of Interest:*** *You don't necessarily need this in its own section, but please clarify which usability requirements you intend to test with these prototypes. This decision should influence your design decisions, and your experiment for the next homework will be used to investigate which prototypes best achieve your usability goals.*

- ***Description of Prototypes:*** *List your prototypes and describe each. Why did you choose that design? Why did you choose the prototyping strategy that you did? Relate these choices back to your user analysis. What aspects of your user base motivated these design decisions? How did you account for the variety of users?*

- ***Design Details:*** *What is the conceptual model you have adopted for your designs? What design principles from class did you apply?*

- ***Design Questions / Important Differences:*** *Highlight the differences in your prototypes. Why are these differences important? What design questions are you trying to answer by making these prototypes? If you give these prototypes to different users, how what might you learn by comparing how each prototypes is used? Essentially, I want you to convince me that the differences between your prototypes are interesting (meaning that you are unsure which prototype users are going to prefer).*

- ***Conclusions:*** *Wrap up the document by summarizing the information presented.*

GRADING:
Grading will be similar to homework 2. All members of each group will receive the same grade. Below is an approximate description of each grading interval:

- ***10:*** *Paper is well thought out and robust. The prototypes are substantial enough to obtain useful information from users if given to users. Group has provided images or other relevant media to show the prototypes. The differences between the prototypes are discussed in detail, and the content of these differences is substantial and interesting.*

- ***9:*** *Paper fulfills the qualifications outlined for a '10' but contains some minor, but very noticeable flaws. Perhaps the prototypes don't have substantial enough differences to lead to an interesting evaluation for later assignments.*

- ***8:*** *Paper fulfills the qualifications in the assignment but has more than a few noticeable flaws. Paper could have received a '9' but contained enough flaws that should have been noticed.*

- ***7:*** *Paper has at least one MAJOR flaw. The paper makes a strong effort at fulfilling the requirements but demonstrates a major misunderstanding of at least one concept from class. For example, perhaps the group shows a gross misunderstanding of how to implement a specific form of prototype.*

- ***6:*** *Paper demonstrates more than one major misunderstanding of the concepts and/or displays a lack of effort in understanding and applying the concepts from the course. Paper still contains a modicum of useful content.*

- ***5 or below:*** *Paper is poorly written and organized, demonstrates multiple misunderstandings of the material, and displays a lack of effort on the part of the group.*