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| <p>Computer Science 321.002 Human-Computer Interaction Design Fall 2018</p> | <p><u>Design Project – Phase Two</u> (100 points)</p> <p>Due on your team's USB drive and turned in by 3:00 PM on Wednesday, September 26, 2018</p> |  | <p><u>Team Thor</u> Tyler J. Cronister (tcronis@sive.edu) John T. Elik (jelic@sive.edu) Jacob C. Grubb (jagrubb@sive.edu) Tyler A. Tichler (ttichle@sive.edu)</p> |
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This phase of your team's design project is intended to clarify the manner in which potential users of your project application are currently performing their tasks. In addition, your team will begin to develop a design for a software application that might be able to address any problems that these users are currently encountering.



For Phase Two of the project, your team should perform the following sequence of steps:

1. While meeting to thoroughly discuss the planned functionality of your project, your team should identify the potential users of the planned software, discuss how those users currently perform the tasks associated with the project, and suggest possible features of the planned software application that will improve the performance of those tasks. During this phase of the project, the emphasis should **not** be on minimizing the number of features in order to produce the smallest application that barely satisfies the least number of users. Instead, you should be trying to imagine **every possible feature** that users of this type of application might desire, no matter how problematic those features might be to ultimately implement. Feel free to contact the instructor for any clarifications.
2. Once your team has imagined the possible scope of the project, formulate a brief overview of the planned project and a well-organized set of questions that you will be able to use to ask a potential user of the application. The overview should clearly introduce the intended nature of your team's project to a new interview subject. The questions should be reasonably open-ended, affording the interview subject the ability to provide detailed responses rather than simple one-word answers. The goal is to place the interview subject in the position of an actual user of the intended software, to ascertain how such a user currently performs the tasks associated with the planned application, and to determine exactly what features such a user would actually want or need in the software. If there are multiple types of users for the intended software, you should ask the interview subject to consider the application from the vantage point of each type of user. Also, be sure to give the interview subject the opportunity to suggest desired features that your team did not specifically address in your set of questions.
3. Another CS 321 team has been assigned to be your interview subjects for this phase of the project. Contact information has been listed for those interview subjects below. At least two members of your team must be present for each interview, one to conduct the interview in the Interaction Room of the HCI Lab using Morae Recorder and the USB camera attached to the iMac, and the other to observe and annotate the session in the Design Room using Morae Observer. Prior to each session, the team member serving as the interviewer should set up markers in Morae Recorder, specifying the primary sequence of topics that shall be discussed. The team member serving as the observer will use those markers in Morae Observer to categorize any pertinent observations from the interview subject regarding that issue, as well as any relevant notions that occur to the observer during that part of the session. **Each of your team members must serve as the interviewer for one Phase Two session and as the observer for another Phase Two session.** It is recommended that all team members attend all Phase Two sessions. **Note: your team members must also serve as the interview subjects for another team for this phase of the project.**

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| <p>For this phase, your team will interview the members of:</p>  <p><u>Team Black Panther</u> Daniel P. Benke (dbenke@sive.edu) Kolby L. Espenschied (kespens@sive.edu) Christopher A. Krozel (ckrozel@sive.edu)</p> | <p>For this phase, three of your team members will be interviewed by the members of:</p>  <p><u>Team She-Hulk</u> Andrew M. Elder (anelder@sive.edu) Jacob C. Harris (jharraf@sive.edu) Andrew M. Taphorn (ataphor@sive.edu)</p> |
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Team Thor: As a four-person team, only three of your team members will be interviewed by Team She-Hulk. Make sure that the team member who is not interviewed, the team member who does not conduct a Team Black Panther interview, and the team member who does not serve as a Team Black Panther observer are three separate team members.

4. When all interview sessions are complete, your team must use Morae Manager to produce a single .wmv file that contains all of the sessions. At this point, your team will use Microsoft Visio to develop the following three work models, designed to illustrate the team's understanding of the way relevant tasks are currently performed (i.e., **without** the use of the software that you will be developing):



- Flow Model (in Microsoft Visio, using the "Simple" design theme)

This work model represents the coordination, communication, interaction, roles, and responsibilities of the people involved in the work practice for which your team is developing software. Each such person or group of people is represented with an annotated "bubble" specifying their relevant responsibilities; annotated arrows between bubbles signify communication and interactions between the associated people. Signify potential breakdowns with red lightning bolts (⚡) and explanatory comments.

- Cultural Model (in Microsoft Visio, using the "Simple" design theme)

This work model represents the policies, procedures, practices, traditions, and rules that constrain how the work is currently performed, with bubbles representing the entities that influence the work, bubble overlap indicating the extent of that influence, and annotated arrows explicitly describing the nature of the influence. Signify potential breakdowns with red lightning bolts (⚡) and explanatory comments.

- Sequence Model (in Microsoft Visio, using the "Simple" design theme)

This work model shows the detailed steps performed to accomplish each task important to the work, examining the triggers that kick off each task, the different strategies people use, the intents or goals that their task steps are trying to accomplish, and the problems getting in their way. Signify potential breakdowns with red lightning bolts (⚡) and explanatory comments.

5. Place the set of contextual inquiry questions and individual observer comments, along with the affinity diagram and a detailed list of all work items for this phase of the project (with indications of who performed each task) in a single Microsoft Word document. Explicitly state the identity of the interviewer, the observer, and the interview subject for each interview session, as well as the session's date, start time, and end time. Place that Word document, a Visio document containing your team's work models (a single Visio document with each model on a separate tabbed page), and the .wmv file containing the interview sessions on the instructor-provided USB drive, to be submitted in class on the due date.

It is recommended that your team consult with the instructor before submitting your final Phase Two document. If your planned contextual inquiry questions are insufficient or poorly phrased, the instructor may be able to assist before your interview sessions begin. If your work models lack adequate detail, the instructor may be able to assist your team in expanding them to an appropriate level.

Phase Two Deliverable:

1. Recorded .wmv file containing recordings of all of your contextual inquiry interview sessions.
2. One Microsoft Visio document containing the three work models (flow, cultural, and sequence) on separate tabbed pages, all using the "Simple" design theme.
3. One Microsoft Word document containing the following items, in order:
 - a. A complete list of the questions planned for your contextual inquiry interviews.
 - b. Session summaries written by each session's lead observer:
 - Identify the names of the interview subject, the interviewer, the lead observer, and any other observers.
 - Specify the date, time, and duration (in minutes) of the entire session.
 - Itemize all observations made by the interview subject regarding significant aspects of the way tasks are currently performed (without the availability of the planned software). Include design suggestions by both the interview subject and the observer.
 - c. A table containing your team's affinity diagram for this project.
 - d. Specifications of each Visio diagram and Word document section, including a detailed breakdown of who performed each task.

Place these deliverables on your team's instructor-provided USB drive (in the "Phase1" folder) and submit it to the instructor at the beginning of class (at 3:00 PM) on Wednesday, September 26, 2018.