Computer Science 321.001 Human-Computer Interaction Design Spring 2013	Team Design Project (350 points) Each Phase is Due on Your CS 321 Moodle Drop-Box by 1:00 PM on the Designated Due Date

Phase One: Contextual Inquiry (50 points) – Due 1:00 PM, Wednesday, February 20, 2013
Phase Two: Consolidated Models (50 points) – Due 1:00 PM, Monday, March 11, 2013
Phase Three: Low-Fidelity Prototype (50 points) – Due 1:00 PM, Wednesday, March 20, 2013
Phase Four: High-Fidelity Prototype (50 points) – Due 1:00 PM, Monday, April 1, 2013
Phase Five: Completed Implementation (100 points) – Due 1:00 PM, Monday, April 15, 2013
Phase Six: Team Presentation PowerPoint Slides (50 points) – Due 1:00 PM, Friday, April 19, 2013

Your final team design project is described on back of this sheet. Each team is developing a design for a different project, which is split into six parts, with each soft-copy deliverable to be placed on your entire team's Moodle drop-boxes (DVDs & paper-based assignments are due in class) by the specified date/time.

1. Contextual Inquiry (50 points) Due: 1:00 PM, 2/20/13 For this phase of the project, each team member must serve as the interviewer at least once.	Using the binder of student volunteer applications in the HCI Lab, you will make arrangements with students to meet with at least two of your team members in the HCI Lab to conduct video recorded contextual inquiry interviews concerning the particular project your team is designing. Deliverables: List of questions planned for interview (Use MS Word) Video recorded interviews on DVD - Due in class at 1:30 PM Team field notes of interview sessions (Use MS Word) Team member contribution specifications (Use MS Word)
2. Consolidated Models (50 points) Due: 1:00 PM, 3/11/13	From the results of your contextual inquiry, your team will develop an affinity diagram for your design project, followed by work models that consolidate your team's understanding of the project and concerns that your design must address. Deliverables: Affinity Diagram (Use Post-Its/Poster Board; Turn In MS Word Transcription) Flow, Sequence, Cultural Models (Use MS Word) Artifact, Physical Models (Use MS Visio; Copy Results Into MS Word Document) Team member contribution specifications (Use MS Word)
3. Low-Fidelity Prototype (50 points) Due: 1:00 PM, 3/20/13 For this phase of the project, each team member must serve as the interviewer at least once and as the "human computer" at least once.	Use Post-It Notes, poster board, etc., to devise low-fidelity paper prototypes for your proposed interfaces. Arrange with students from the binder in the HCI Lab to meet with at least three of your team members and conduct video-recorded prototype sessions to review your preliminary design. Deliverables: List of questions planned for interview (Use MS Word) Paper prototype material (Use Post-Its, poster board, etc.) – Due in class at 1:30 PM Video-recorded low-fidelity prototype sessions on DVD – Due in class at 1:30 PM Team field notes of paper prototype sessions (Use MS Word) Team member contribution specifications (Use MS Word)
4. High-Fidelity Prototype (50 points) Due: 1:00 PM, 4/1/13 For this phase of the project, each team member must serve as the interviewer at least once.	Use Visual Basic to devise a high-fidelity prototype for your project, similar to what you produced in your previous individual and team designs. Make arrangements with students from the binder in the HCI Lab to meet with at least two of your team members and conduct video-recorded prototype sessions to review your interface via specific walkthrough scenarios. Deliverables: Script of walkthrough instructions for users to follow (Use MS Word) Video-recorded walkthrough sessions on DVD – Due in class at 1:30 PM Team field notes of high-fidelity prototype sessions (Use MS Word) VB project containing your team's high-fidelity prototype Team member contribution specifications (Use MS Word)
5. Completed Implementation (100 points) Due: 1:00 PM, 4/15/13	Use Visual Basic to complete the implementation of your project, which will work correctly for all user interactions, not just the previous walkthrough scenarios. Deliverables: VB project containing full project implementation (including database, if needed) Team member contribution specifications (Use MS Word) Presentation slides summarizing project (Use MS PowerPoint)
6. Team Presentation (50 points) Due: 1:00 PM, 4/19/13	Use PowerPoint to develop a presentation of your team's project, including illustrations of your affinity diagram, work models, and prototypes, summaries of your interview sessions and the resulting changes to your interface, and a demonstration of your completed implementation. Deliverables: PowerPoint presentation (10-12 slides) 20-minute in-class presentation (scheduled for either 4/22/13 or 4/24/13)

Team Annex: Richard M. Blotevogel, Joshua D. Koehn, Brian Olsen

The SIUE School of Engineering's Dean's Office is your client for this project, in which your team will design and implement an interactive software application that will ultimately be installed on touch-screen kiosks at every entrance to the Engineering Building. The application will provide visitors with information regarding the locations in the building of each of the following:

- Office numbers for all faculty, staff, and administrators, including posted office hours for each individual (if applicable).
- Room numbers for all laboratory facilities, including the name of the department in charge of the lab and the location of that department's main office.
- Room numbers and meeting times for all classes being conducted in the building during the current semester, including instructor names and office room numbers.
- All restrooms and vending machines.

The application should also make a map of the Engineering Building available to the user, with information clearly displayed about how to get from the user's current location to the specified destination. While these routes do not have to be minimal, they should never be excessively circuitous. Images of the floor plans of the building, before and after the expansion, as well as images of the engineering faculty and a database containing building, room, and course information, have been provided on the course website.

The application must also enable the user to see the floor plans for the building after its current expansion is complete. Routing through the expanded building should not be implemented, since the room assignments are only tentative at this point. Similarly, finding room numbers for labs or classes in the expanded building should not be implemented.

Remember that the final application will be installed on a touch-screen kiosk, with no keyboard or mouse, so scrolling, text entry, pull-down menus, etc., are not practical here. Instead, on a PC, the only interaction should involve simple mouse clicks on reasonably large screen widgets, corresponding to the fingers that will press the touch-screen widgets on the final platform.

Your contextual inquiry should be an attempt to discover what features an actual user would want in an application like this. Your consolidated model should collate all of the ideas that your team has collected from the client, the interview subjects, and the team members themselves. Your low-fidelity prototype should attempt to cement the overall idea of your application's interface, while your high-fidelity prototype should endeavor to fine-tune its details. Finally, the completed implementation should be a fully functional version of the application, albeit with a database that is substantially smaller than a final release would require.