CIS 443/543 User Interfaces Exercise #2 Bus Kiosk

Due: Thursday October 29 10am (STUDIO)

Goals: To learn the following with a small real-life problem:

- (1) How to conduct a requirements analysis for an interactive system.
- (2) How to develop functional and usability requirements for a system.
- (3) How to derive design from requirements analysis.
- (4) How to iterate a design.
- (5) How to use the studio method for design proposals.

Problem Statement

You are asked to design a kiosk at pickup locations for the Eugene bus. It will provide riders with the ability to buy their ticket(s) before boarding the bus. During this design, think hard about the wide variety of people that will use your kiosk and what their differing needs will be. Pay particular attention to designing a system that will support occasional users as well as frequent users, and people with a variety of physical and cognitive capabilities. Think about issues you must support with the kiosk for it to be useful, as well as things that might be good to have. Feel free to be wild and creative!

Using the methods we have discussed in class for user requirements analysis,

- (1) Develop a specification of user functional requirements, usability requirements and any known constraints.
- (2) Design an initial kiosk including the user interface that meets the specifications you developed.

Studio Design Presentation (Design Crit) and Report

Your team should prepare a 10 minute presentation of your interactive artifact for the class. One person will give the presentation. All members of the group will engage in a lively class discussion about your design after the presentation.

Your 10 minute presentation should cover:

- 1. How you went about gathering the requirements (1 minute)
- 2. The functional and usability requirements you developed (1 minute)
- 3. The initial design *sketches*, demonstrating with a few common tasks how they meet the requirements and any problems that you have encountered in the design. (8 minutes)

You can prepare either overhead slides (scan the sketches), large poster-size sheets of paper, or sketch on the whiteboard to show aspects of your system. In addition to what you present in class, prepare a hardcopy to hand in to the instructor for grading purposes.

Groups for Exercise #2:

Graduates:

Group #1: Sohan, Megen, David, Daniel

Group #2: Charles, Peter, Parker, Kals, Karen

Undergraduates: Group #3: Stephen, David, Daniel,

Group #4: Eric, Josh B., Nate, Joshua Y.

Group #5: Thomas, Valeria, Kyle