Implementation

The objective of this assignment is for you to gain the experience of implementing a prototype of an interface. This includes the experience of using an interface software development system.

Assignment Steps

There are three steps involved in this project: developing the interaction you are going to implement, coding the interface, and present the interface to either to Tara or me.

1. Interaction

   Develop an interaction where the user performs either a medium or hard task

   a. Describe exactly what the user wants to accomplish.
      It is critical that you are explicit in your description of what the user wants to accomplish. Since, either Tara or I will be attempting to perform the task; we need to know exactly what we are trying to do.

   b. Describe each step you expect the user to follow to accomplish the task.
      This description should reflect how you expect the user to attempt to perform the task. It will be used twice. First, it will be the basis for determining what specific parts of the interface will need to be implemented. Second, it will include the steps Tara or I will try to perform when testing your interface.

   c. Describe how the user determines if the task has been completed and if he/she was successful.
      Again, this description needs to be explicit. Tara or I will use this description to determine when to stop and if we have been successful at completing the task.

2. Coding

   In a system/language of your choice, code enough of the interface to support the interaction that you have chosen above. Also, code enough of the interface to react to expected errors in attempting to perform the task.

3. Presentation

   a. Preparation for execution.
      Present the interaction to Tara or me. In this presentation, you will present exactly what the user wants to accomplish, steps you expect the user to follow to accomplish the task, and how to determine if the task has been completed
successfully. Also, provide a write-up of the presentation that we can use in the execution step (see below).

b. Execution.
Tara or I will attempt to execute the interaction you have presented. We may make mistakes (intentionally or not) in the process of executing the interaction.

**Deliverables**
There are three deliverables for this project: the interaction, the code, and the presentation.

The interaction and code deliverables are due on the scheduled due date for this assignment (see course website).

The presentation is to be scheduled with Tara and me sometime after the due date and before the end of classes. On the interaction/code deliverables handed in during class, include the name and email address of the person in your team who should be contacted for scheduling this.

**Interaction**
This section of the assignment should be written to support Tara or me in the process of executing the interaction. Make it clear, easy to read, and well organized. The steps should be a set of directions that Tara or I will be able to follow. Number the steps.

**Code**
Print out a copy of the code you used to implement the interface. Follow good coding practices such as commenting. If it is difficult to print out the code because the interface development environment does not support printing code well, print out pictures of key screens and the code segments for the objects in that screen.

**Presentation**
At the scheduled time and place, meet with Tara or me. We will ask you to present the interaction section of this assignment. Then we will attempt to execute that interaction. If we have questions or run into problems, we will ask you to assist us.

The whole process of presentation and execution should take less than 15 minutes. I recommend that you perform a dry run. In this dry run, have one member of the team take the role of the instructor. Make the presentation to this team member, and have the team member perform the interaction. Time this process. Make modifications to address any problems, including running too long.