Agile UI Specification

The CS Mobile Companion Group: U Date: 4/28/10
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A. Description:

The user is a CS student at SIUC and needs a way to keep up with current events, school-work, and dining from a mobile Android phone. This is a software suite with four major programs. They are, a calendar, CS lab interface, textbook finder, and dining menus. These four "subprograms" work together to provide the student with everything they need to keep up with the day-to-day bustle of school. The Calendar and Dining menus are self-explanatory. The CS lab interface consists of an ssh shell and an ftp interface where the user can click-and-drag from the phone to the CS lab machine. The textbook finder uses a database with information on each textbook for the CS classes. Each book is paired with a student and another student can use our application to find a student who took the course the past semester and possibly arrange a textbook trade.

B. Must-have functionality:

1. Allow user to view events for a date.
   1.1. Supply all the correct data for event.
2. Allow user to search for events.
3. Allow user to manage events.
   3.1. Allow user to add events
   3.2. Allow user to only view event categories they are interested in
4. Allow user to SSH pc00 or pc01
5. Allow user to run commands on pc00 or pc01
6. Allow user to look up books
7. Allow user to browse a list of results
8. Supply user with contact information based on results
9. Alert user if books not found
10. Display Dining Halls
11. Display information about selected dining hall
   11.1. Location
   11.2. Times
   11.4. Menus
12. Quick Announcements on Welcome Screen

Guidance:

a. A way to remove added event through current interface.
b. A way to edit added events through current interface.
c. Way to remove calendars in Manage Calendar interface.
d. User preferences for viewing results based on searching.
d.a. Sorting by Category/Date/Time/Location/etc
d.b. Inclusion/Exclusion by Category, time-range, location, etc.
e. Easy-Search of whole suite.
ea. Advanced search options for Easy-Search.
f. Call Contact option for Text Book Finder.
g. Local Dining database/guide
ga. Menus, Times, Locations of local area businesses that serve food.
h. Support for FTP in Lab Interface.
C. What is expected of the Application Model? (Effectiveness/Usefulness):

1. Should be able to query specific current sports and musical events.
   a. display on the screen the time, place and admission fee
2. Should be able to query and display campus restaurant hours of operation and menus.
3. Should be able to query a student book store database for a text book used at SIU.
   a. performs correct functionality of SSH
   b. in the future this feature will also be FTP capable

D. Perceived Coding & Design Risks

Model:
Moderate risk. May need to establish reasonable tests and confirmations to determine if the user entered valid data and is a valid user. A few examples of the risk involved with invalid or fraudulent data entry would be:
   a. user inputs the wrong book into the database (incorrect name, version)
   b. user is unable to connect to SSH (incorrect user name or password)
   c. users personal information is used by an invalid/fraudulent user to access SSH and destroy personal files

GUI:
A simple navigation tool will drive the user through the interactive spaces and this requires a display screen.
Secondarily, an Input and display are needed for the text book finder as well as the SSH feature.
It is a very simplified GUI in general and doesn’t currently allow any customization outside creating a new event.

Misc:
Adding additional features to other systems may complicate both the GUI and the model.

E. Major Interaction Spaces:
A new user will be greeted by the **Welcome** screen. Here they will choose which software suite they would like to use. They will have four options; Calendar, CS Lab Interface, Textbook Finder, and Campus Dining. The extra space will have announcements from various feed from the calendar (ACM, CS, Campus announcements). The **Calendar** screen is the home screen for the Calendar program. This just shows a basic calendar that will have color coded entries depending on which type of event it is. Each day is clickable and the month arrows allow the user to see individual months. The **Add Event** screen allows the user to add their own event to the Calendar using criteria such as name, start time, end time, and the color they want associated with the event. The **Manage Calendar** screen allows the user to toggle on or off certain types of events, this also affects the announcements on the **Welcome** screen.
The **Date** Screen shows an individual date on the calendar and displays all events by starting time. The **CS Lab Interface** screen is the main and only interaction space for the CS Lab Interface program. The user inputs which PC from Faner 2101 they want to connect, then inputs their username and password, then clicks "connect". The interface will begin an SSH shell process with the computer and allow the user to input individual commands in the bottom. When an input is entered, the user clicks "Execute" and the terminal runs the command and displays the output. The next screen, **Textbook Finder**, is the main page for the Textbook Finder program. This allows the user to input data from any of 6 fields. These include School, Class, Professor Authority, Travel Distance, ISBN, and Store Buyback. When the user has input all of their data, they click "Submit". The **Book Result** screen shows the results of the search from **Textbook Finder**. This shows all of the matched owners of the desired textbook and their emails so the user can attempt to contact them.
The **Dining Halls** screen just gives a selectable list of the Dining Halls on campus. The **Dining Hall Info** screen gives a selected Dining Hall's information. This includes the name, hours, location and the menu for that day. There is also an option to go to the Calendar app from here.

**F. Interaction Flow/Statechart:**