Human Computer Interaction

Lab class **#3**

The Interaction

1. An information booth has been designed for a busy rail station. This is a premium service only available for passengers with a special 'Gold Card" that they insert when they start to use the booth. The booth allows you to find out information about a journey and to print tickets. The booth has four buttons beside the screen: Up/Down scroll buttons for selecting from on-screen list, an OK button mainly used for selection and a Cancel button. The main screen has various options (such as holiday offers), but we will focus on journey planning. To do this the user selects 'new journey' from the main screen list (using up/down buttons and OK), then gets a 'Choose destination' screen with letters A-Z on it (initial letter of destination). The user selects the letter (again Up/Down buttons and OK)

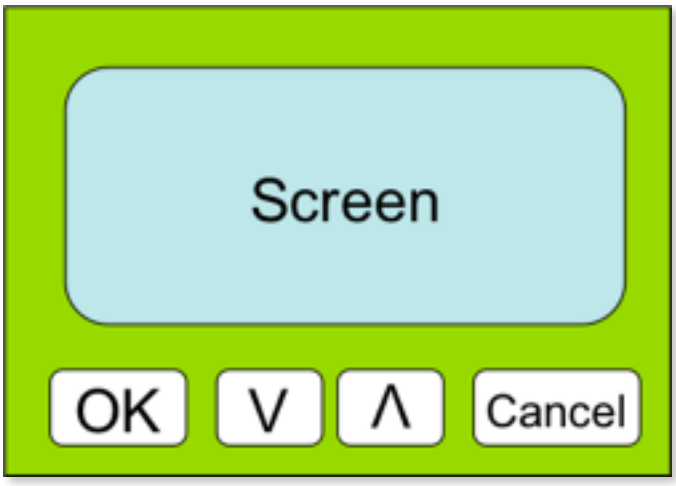

Figure TB1- Train Booth Main Screen

and then gets to a list of stations starting with the chosen letter from which the destination can be chosen. Cancel in any of these stages takes you back to the main screen. Having chosen a destination you then choose a train time (again Up/Down and OK from a list). You are then shown an itinerary of the journey (showing intermediate stations) from where you can press Cancel to return to the main menu to look at other journey options, or press 'OK' for 'one click' buy and print a ticket (Gold Card holders are always

First Class so you don't get to choose a ticket type!).

a. Define slips and mistakes and provide an example of each while interacting with the train booth.

2. *Choose two of the interface styles (described in Section 3.5) that you have experience of using. Use the interaction framework to analyze the interaction involved in using these interface styles for a database selection task (ex: selecting records from an online library database). Which of the distances is greatest in each case?*

3. Group the following functions under appropriate headings, assuming that they are to form the basis for a menu-driven word-processing system - the headings you choose will become the menu titles, with the functions appearing under the appropriate one. You can choose as many or as few menu headings as you wish. You may also alter the wordings of the functions slightly if you wish.

   save, save as, new, delete, open mail, send mail, quit, undo, table, glossary, preferences, character style, format paragraph, lay out document, position on page, plain text, bold text, italic text, underline, open file, close file, open copy of file, increase point size, decrease point size, change font, add footnote, cut, copy, paste, clear, repaginate, add page break, insert graphic, insert index entry, print, print preview, page setup, view page, find word, change word, go to, go back, check spelling, view index, see table of contents, count words, renumber pages, repeat edit, show alternative document, help.

   a. If possible, show someone else your headings, and ask them to group the functions under your headings. Compare their groupings with yours. You should find that there are areas of great similarity, and some differences. Discuss the similarities and discrepancies.

      - Why do some functions always seem to be grouped together?

- Why do some groups of functions always get categorised correctly?
- Why are some less easy to place under the 'correct' heading?
- Why is this important?

4. Using your function groupings from Exercise 4, count the number of items in your menus.
   a. What is the average?

   What is the disadvantage of putting all the functions on the screen at once?

   What is the problem with using lots of menu headings?

   What is the problem of using very few menu headings

   Consider the following: I can group my functions either into 3 menus, with lots of functions in each one, or into 8 menus with fewer in each. Which will be easier to use? Why?