|  |
| --- |
|  |
| HCI - COMP 171 |
| Assignment 6 |
|  |
| **Aswathy Dinesh** |
| **3/16/2012** |

**Task List**

The following were the tasks I had given to the users to test restaurant locator application. The tasks were printed on the index card and given to the user before testing along with the user manual.

**User 1**

***Task A***: *Search a restaurant and reserve a table*: Select one cuisine from homepage then search the restaurants in Boston. Then select one restaurant from search results list. Now reserve two seats for March 20, 2012. Exit out of the restaurant locator application.

***Task B***: *Search a restaurant and add review*: Select the same cuisine as Task A and search for restaurants in Boston as before. Now select restaurant reserved in Task A and click Review tab. Now write review on the restaurant review page. Scroll and check your review in the review list. Exit out of the application.

**User2**

***Task A***: *Search restaurant, reserve table and get directions*: Select a cuisine on homepage and search a restaurant in Boston. Select the second restaurant from the search results list. Check the restaurants reviews and menu. Now reserve a table and take the directions to the restaurant from Medford. Exit out when finished taking the directions.

**User3**

***Task A***: *Search a restaurant, check review/photos and reserve 5 seats*: Select a cuisine from homepage. Then search restaurants in Worcester and select one restaurant from search results list. Now check the reviews and photos. Now reserve five seats for March 17, 2012. Exit out of the application.

***Task B***: *Search Restaurant and Get directions*: Select a cuisine on homepage and search a restaurant in Boston. Select one restaurant and check the menu. Now take directions from Medford. Exit out of the application.

**User4**

***Task A***: *Add Review and check your review*: Select a cuisine from homepage. Then search restaurants in Worcester and select one restaurant from search results list. Now write and submit your review. Then check your review and exit out of the application.

**User 5**

***Task A***: *Search restaurant, reserve table and get direction*: Select one cuisine from homepage then search the restaurants in Boston. Then select one restaurant from search results list. Then reserve a table for today evening and then take directions from Medford by car. Exit out of the restaurant locator application.

**User 6**

**Task A:** *Search restaurant, check about us, check menu and photos, reserve seats and take directions*: Select one cuisine from homepage then search the restaurants in Boston. Then select one restaurant from search results list. Check about us, menu by categories and photos. Now reserve a table and then take the directions from Worcester. Exit out of the application.

**User demographics**

The usability testing was conducted at the Worcester State University with the help of one of my professors at WSU. The users came from a variety of backgrounds, professions and expertise. Majority of the users were from Worcester State University. Since this application is being developed for users of any age, users of different ages gave an excellent representation of the intended user population. Most of users mentioned that they use a variety of applications to search for a restaurant and had not used an application similar to Restaurant Locator.

Below is the demographic information:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **User #** | **Age** | **Computer Background** | **Area of study** | **Profession** |
| **User1** | **24** | **Frequent user** | **Biology** | **Student** |
| **User2** | **50** | **Expert** | **English** | **Professor** |
| **User3** | **22** | **Frequent user** | **Business Administration** | **Student** |
| **User4** | **37** | **Frequent user** | **Pharmacy** | **Pharmacist** |
| **User5** | **35** | **Frequent user** | **Psychology** | **Student** |
| **User6** | **31** | **Expert** | **Electrical & Computer** | **Engineer** |

**Post Questionnaire**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date & Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Computer Background** (Circle One)**:**  *Novice* *Frequent User* *Expert*

This questionnaire is designed to understand how you feel about the Restaurant Locator application based on the tasks you just performed. Please select checkbox that most clearly expresses how you feel about a particular topic.

1. Using the web site:

Easy Neither easy nor difficult

Difficult Very Difficult

1. Navigating through the website was:

Easy Neither easy nor difficult

Difficult Very Difficult

1. Finding desired menu choices was:

Easy Neither easy nor difficult

Difficult Very Difficult

1. The buttons were well organized and easy to find:

Easy Neither easy nor difficult

Difficult Very Difficult

1. The look and feel of the pages:

Excellent Neutral

Good Fair

1. What did you like most about the Restaurant Locator application?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Currently how do you search for a restaurant? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Other Comments/Suggestions: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**User Post Questionnaire**

****

**Analysis of Post-Questionnaires**

In the post-questionnaires I separated the questions into two sections multiple choice and descriptive questions. Multiple choice questions gave users the option to rate different components of my system on a scale of Easy, Neither Easy nor Difficult, Difficult, Very Difficult. In descriptive questions users had the option to write their comments and suggestions.

My users were either frequent computer users or experts in computer. Some of the good things that the users had to say about this application were that they liked the concept of Restaurant Locator. Users got more comfortable as they continued using the interface. The overall system got a very good feedback; some of the most highly rated features were single unified interface, ease of use, reservation facility and get directions option. On the other hand, the area where the system got low ratings was organization of buttons and finding desired menu items. One of the most interesting things I found in the questionnaire was almost all the users mentioned Google Search as the method they currently use to search a restaurant.

**Summary of Observations and Conclusions**

Below are the user actions for each individual task and an approximate time taken by the user.

**Participant 1**

**Task A:** Search a restaurant and reserve a table

|  |  |
| --- | --- |
| **Time taken** | 6minutes 30 seconds. |
| **User Action** | Selected cuisine🡪 Entered location🡪Clicked Search Button🡪Selected First restaurant from the list🡪Clicked reservation tab🡪 Filled all information🡪Clicked Reserve Button 🡪 Closed Application |

**Task B**: Search a restaurant and add review

|  |  |
| --- | --- |
| **Time taken** | 4 minute |
| **User Action** | Selected cuisine🡪Entered location🡪Clicked search Button🡪Selected first restaurant🡪Clicked review tab🡪 Clicked Add Review Button🡪Entered review🡪Clicked Post Button |

**Participant 2**

**Task A**: Search restaurant, check review/menu, reserve seats and get directions

|  |  |
| --- | --- |
| **Time taken** | 10minutes 50 seconds. |
| **User Action** | Selected cuisine🡪Entered location🡪Clicked Search Button🡪Selected the 1st restaurant🡪Clicked Back to Result Button🡪Selected 1st restaurant🡪Checked menu🡪 clicked reserve tab🡪Filled reserved form🡪Clicked Reserve Button🡪closed the window |

**Participant 3**

**Task A**: Search restaurant, check review/photo and reserve 5 seats

|  |  |
| --- | --- |
| **Time taken** | 7 minutes |
| **User Action** | Selected cuisine🡪Entered location🡪Clicked Search Button🡪Selected the 1st restaurant🡪Clicked Back to Result Button🡪Again Selected 1nd restaurant🡪Checked review🡪Clicked photos tab🡪 Clicked reserve tab🡪Filled reserved form🡪Clicked Reserve Button🡪Closed the window |

**Task B**: Search Restaurant and Get direction

|  |  |
| --- | --- |
| **Time taken** | 4 minutes |
| **User Action** | Selected cuisine🡪Entered location🡪Clicked Search Button🡪Selected the 1st restaurant🡪Clicked Direction tab🡪 Entered Address🡪Selected Medium🡪 Clicked Get Direction Button🡪closed window |

**Participant 4**

**Task A**: Add review and check your review

|  |  |
| --- | --- |
| **Time taken** | 3 minutes |
| **User Action** | Selected cuisine🡪Entered location🡪Clicked Search Button🡪Then withdrew from the test |

**Participant 5**

**Task A**: Search restaurant, reserve table and get direction

|  |  |
| --- | --- |
| **Time taken** | 12 minutes 30 seconds |
| **User Action** | Selected cuisine🡪Entered location🡪Clicked Search Button🡪Selected the 1st restaurant 🡪 Clicked reserve tab🡪Filled reserved form🡪Clicked Reserve Button🡪 Clicked Direction tab🡪 Entered Address🡪Selected Medium🡪 clicked Get Direction Button🡪Closed window |

**Participant 6**

**Task A**: Search restaurant, reserve table and get direction

|  |  |
| --- | --- |
| **Time taken** | 13 minutes |
| **User Action** | Selected cuisine🡪Entered location🡪Clicked Search Button🡪Selected the 2nd restaurant 🡪 Clicked Review tab🡪Clicked menu tab🡪Clicked reserve tab🡪Filled reserved form🡪Clicked Reserve Button🡪Closed reserve form🡪 Clicked Direction tab🡪 Entered Address🡪Selected Medium🡪 clicked Get Direction Button🡪Closed window |

The tasks performed by the participants brought into light many aspects which are important from a user’s perspective. Below are the problems found during usability testing and their solutions:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Issue No** | **Screen** | **Severity** | **Description** | **Response** |
| 1 | Home Screen | Minor | Some users suggested adding more cuisine types besides the ones currently listed | Will add more cuisine types in future design. |
| 2 | Review Screen | Major | Some users had difficulty finding their Review since the review was added at the end | Will try to implement it in future design so that the most recent review is displayed at the top. |
| 3 | Search Screen | Minor | Users had difficulty using the drop down menu. They were not sure how a drop down menu really works. | Drop down was a solution which was implemented as a part of Paper Prototype evaluation inorder to make it easier for the user to change his selection |
| 4 | Application | Minor | Some users had difficulty using the system | Either a help manual or a video tutorial can be implemented for the application |
| 5 | Home page | Cosmetic | Some users suggested that there should be more visual impact on few screens | Will update background images in future design |
| 6 | Menu Screen | Minor | One user did not understand the concept of ‘Category’ for food items. She did not realize that selecting a food category would show her menu items belonging only to that category. | Will implement Heading above the category of menu items |
| 7 | Dropdown Elements | Major | One User was able to enter text in fields which had dropdowns (Ex: Cuisine Type and Medium of Transport) | Will change the dropdown such that the field only allows dropdown elements |
| 8 | Menu Screen | Minor | Some users suggested increasing the font size of menu items | Will fix this in future design |
| 9 | Restaurant home page | Major | Some users missed Tabs (Reservation/Reviews) because of small size. | Will enlarge Tabs in future design |
| 10 | Restaurant home page | Major | Back to Result Button is confusing | Will look at other options but I feel this is the best option and was implemented as a part of paper prototype evaluation |
| 11 | Menu Screen | Minor | One user suggested adding heading above each category of menu items | Will add heading above each category |
| 12 | Home screen | Minor | One user asked as to Why there was a “>>” button Under the Cuisine images on home screen? | This button is added to navigate user to next page of the cuisine type |
| 13 | Menu Screen | Major | Some users mentioned about the no price displayed next to the menu item | Will add the item price along with menu item in the future design |
| 14 | Directions Screen | Major | One user was confused on how to print the directions | Will add a print page button on top of the directions screen |
| 15 | Review Screen | Major | One user was confused with the previous reviews | Will try to organize the review in a proper way |
| 16 | Reservation Screen | Major | One user suggested increasing the party size from the current 10 | Will increase the party size number from 10 to 20 |
| 17 | Home page | Minor | Some users were confused on how to navigate beyond the home screen | Will try to implement cuisine image in such a way that cuisine image will be highlighted when user moves cursor over image |
| 18 | Reservation Screen | Major | One user requested for an option to select the time of reservation | Will add time picker option to select time |
| 19 | Reservation Screen | Major | One user mentioned that there is no option to Update and cancel the reservation | Will add new forms to update and cancel the user reservation |
| 20 | Reservation Screen | Major | One user asked on how to know the availability at the restaurant? | Will try to implement a option to see the available seats and location in a 3D view |
| 21 | Directions Screen | Major | One user was confused on Where to fill the restaurant address? | Will auto display Store address on directions screen to indicate to the user that he need not enter restaurant address manually |

To conclude, I got many valuable suggestions from this usability testing. The entire testing exercise was very interesting and helped me to look at the system from both designer as well as user’s perspective. Users helped me to identify some areas which were missed during the implementation such as Print directions, updating/canceling reservations, view the seat availability at the restaurant. Users gave both positive and negative feedback for some of the features; I will try to incorporate user comments in the future design.