## **Stage Four: Human Computer Interaction I**

Students: Elliot Evans, Favian Silva, Neera Patadia,

Rumika Mascarenhas, Panagiota Fytopoulou

Link to Portfolio: <a href="https://vezwork.github.io/CPSC-481-Portfolio/">https://vezwork.github.io/CPSC-481-Portfolio/</a>

Link to Repository: <a href="https://github.com/FavSil/481HCI">https://github.com/FavSil/481HCI</a>

## **Heuristic Evaluation Summary Table:**

Heuristic Violated	Description	Suggested Fix
1. Visibility of the system	Unclear what is meant by "Top reviewed restaurant" on the main page	Changed section to be
1. Visibility of the system	Users cannot see what their dietary restrictions are currently set to	Added a user profile page where the user can view this information.
2. Match between system and the real world	Next buttons when a process has been completed is not intuitive to the user	
3. User control and freedom	Users are unable to edit their own profile after creating it	
5. Error prevention	No error messages in the application when user makes a mistake	Added error messages to the application
7. Flexibility and efficiency of use	It is difficult for users to manipulate their dietary restrictions or	

	search based on a dietary restriction that they may not have	
7. Flexibility and efficiency of use	Users are only able to search for "gluten free" restaurants on the map page	
7. Flexibility and efficiency of use	Difficult to get back to the map page after looking reviews for another restaurant selected on the map	Added a page button to all pages so user will be sent back to the page that they were previously on.
9.	There is no back button present on the majority of the screens.	Implement a back button to prevent errors when navigating through the different pages
10. Help and documentation	There is no help/documentation section for the application	Added a help page to the application

# **Summary of Heuristic Evaluation:**

- Need to mention key issues test group found with the prototype
  - Buttons
  - Navigation with the map
  - Being able to manipulate dietary restrictions
- Need to talk about how we addressed the issues brought forward in our modified hi-fi prototype
  - Adding additional pages (help page and user profile page)
  - Adding error messages (help prevent users from making invalid entries)

- Adding back buttons to all pages (user get a better flow of the application, and have a greater ability to navigate between pages.)
- Talk about positive aspects of the prototype that all evaluators agreed on
  - Icons on the map and throughout the application are easy to understand for users
  - Minimalistic design helps with ease of use of the application

The following sections will give a detailed summary of the heuristic evaluation on UnRestricted. Some critiques will be illustrated using screen shots:

## **Visibility of the System**

- Highligting the navigation bar to illustrate what menu the user is on x2
  - No two pages that are similar (positive comment)
- Titles on each page **x2**
- Top reviews: how are these differentiated from each other
- Cannot click on the restaurants or scrolls on the Discover page
- Cannot scroll to look at the top reviews or click on them on the menu for a chosen restaurant
- Smiley face shows nutter butter bt takes to the Sarah's cafe page
- Restaurant feed page: blank space next to the restaurant, description of what food they offer **x2**

"I think that there should be a way to use your restrictions to filter out restaurants that cannot accommodate that restriction,.....it might be a good idea to showcase the foods that that specific restaurant has that fits within the user's restriction."

## Screen shots

Match between system and the real world

- No issues in terms of DRs choice
- No issues with symbols
  - Mention critiques that we got during the presentation and how we changes this
- Map: Where is the user (indicate this)x2, need to scroll down to navigate to a new page
- Logical order was followed throughout the app x2
- Buttons that say "save" or "finish" at the end of DR choosing. Use of "next" when there is step following
- Display top review on the main page of the restaurant and not the menu page
- Add basic info about the restaurant
  - Our app should have this to avoid the user to access different apps and sites for this info

## About the use of smiley faces: x3

"The happy, neutral and sad faces on the map page is a smart way to symbolize the public's general opinion on restaurants in that area because emotion is usually associated with people's opinion on things"

### **User control and freedom**

- User can unselect a choice made in the DR selection page
- Search bars improves usage time on food and map page
- No way to edit the profile aside for dietary restrictions
- Back buttons **x2**
- No way for the person to search specific restaurants based on the location they want
- No titles on the smiley faces to tell what restaurant they are clicking on
- No way for user to edit/delete a review they wrote
- Writing review: they have to add the restrictions again, it should be automatic
- Rework the flow
  - When on Map we cannot go to the food menu

- Map  $\rightarrow$  green face  $\rightarrow$  profile : leads the user to the map again
- Back button instead of next on the "change dietary restriction" page to go back. Need Back buttons on every page to increase usability **x5**
- Cancel button to undo changes in teh changing dietary restriction page

"I would recommend reworking the flow so that the user can navigate more freely"

### **Consistency and Standard**

- Navigation and language was consistent **x3**
- Search bar on both food and ma pages is good
- Consistent use of Next and back, only one button which limits confusion

#### **Error Prevention**

- Back buttons to address most issues **x2** 
  - Its simplistic but needs back buttons
- User input is generated automatically
  - The prototype does now sufficiently show error prevention
- No way for the user to select restaurants that do not exist or are closed
  - Which is good?
- No error message when user presses back after writing review
  - Error message should say "Unsaved changes? Do you still want to exit?"
- Summary page with the selection made for DRs is good and back button exists to make sure changes can be made
- Back and "x" for the search bar dealt with errors

"adding "back" navigations at each page will eliminate most problems I encountered."

# **Recognition rather than recall**

- No help section → help and documentation
- Button on bottom of screen are made clear to the user  $\rightarrow$  not a limitation
- Overall, in this section, there weren't any significant issues that came up in the heuristic evaluation.
  - The evaluators mainly talked about how the icons used throughout the system are intuitive in their meaning to the user

## Flexibility and efficiency of use

In this section there were a few issues that were brought to our attention by the evaluators. First,

- Unclear that map icon displays reviews when they are clicked on
  - We addressed this issue by including a help page in our application so new users can understand the different ways the application can be used.
- Our initial prototype sent to the evaluators had some missing functionality
  - We addressed this issue by adding additional functionality to the application, in terms of search options and review, etc...
- Only specific functions implemented → limits functionality
- Can't see popular items for restaurant
- User cannot easily remove dietary restrictions
- Search bar always defaults for looking at gluten free options.

## Aesthetic and mininalist design

The evaluators did not bring up any major issues in regards to this section. They also appreciated that the design of our application was very minimalistic and did not have a cluttered interface.

- Overall design is very minimalistic X4
- Screen does not look cluttered
- Delivery of dialogue to user only occurs when necessary
- Add additional information to user profile

- We addressed this issue by adding a user profile section to the application.

"One of my favorite things about the application is the minimalist design. Having only the necessary information per page improved my navigation and overall experience while using the app"

## Help users recognize, diagnose and recover from errors

- No back button x3
  - We addressed this issue by adding back buttons to the application
- No checking for conflicting restrictions
- Cannot edit or make changes to user profile x2
  - We addressed this issue by implementing an editable user profile page so users can easily update their restrictions and other elements of their profile.

"One of my favorite things about the application is the minimalist design. Having only the necessary information per page improved my navigation and overall experience while using the app"

# Help and documentation

The main issue brought up by the evaluators in this section was that there was no help page available in the application to give new users an understanding of the application. To address this issue, we added a help page on our application to guide users on how to implement our listed functionalities.

" I did not experience a "set up" page, but a brief overview of tips and usage information for when a new user signs up is always a great feature."

#### **Heuristic Evaluations:**

The heuristic evaluations done by the members on this team were done for the application Barkopedia. The individual evaluations have been included separately in our submission to the d2l dropbox..