**Review**

UG Group 44

**Design Review**

**How does it minimise kinematic and cognitive load？**

Based on the experience and screening of multiple websites, several types of design solutions suitable for the website were selected. By reducing the cognitive load and the kinematic load of users, users can access the website in a better way and we tried to minimalize these loads.

Firstly, by eliminating some unnecessary sliding behaviour of users, the user's kinematic load can be reduced. What we did is we put the map on the website that can directly display the location of the hot spot and we will link the function which can show the approximate range of the hot spot and necessary information on the map later on to reduce the kinematic load. We put the search engine at the top of the map and it will provide not only an easy and quick search method, but also will save some unnecessary time of looking on every part which is not needed to see. Through this way, users can quickly get the information about the location they want to know with minimal interactive actions. It reduces the kinematic load. In addition, in our design we want to ensure that the interaction distance complies with Fitts's law, which can also effectively reduce the user's basic sliding or finger kinematic load.

Secondly, we effectively reduce the cognitive load of users through the study of the website layout and design. One of the main ways to effectively reduce the cognitive load of users is to put important information in a conspicuous place for easy searching. We placed the hot spot map in the middle of the website, which user can see it directly. We placed the main information prominently to attract the users’ attention more. In the same way, we put a navigation bar under the title of each page, and the buttons of necessary functions are in this bar, so that users can easily find the interactive functions they want to use.

In addition, by using the same page layout and similar colour background, users can effectively reduce cognitive fatigue during the interaction process. We matched the website structure and layout to reduce the cognitive burden of users. In every page, we have the same header and footer, which helps user find similar or same functions’ button from same position of the webpage with less thinking. We also put the logo, navigation bar and buttons in the same position to minimalize the cognitive load so that users can understand the website easily and make interaction efficiently.

**Does it meet standards and heuristics?**

5 Usability Heuristics for User Interface Design is a measure of website effectiveness and user experience. The guidelines have high usability, although not necessarily applicable to all users. Here are 5 heuristics for user interface design usability. Although not all usability heuristics are applicable to the site, they are implemented within the allowed time frame.

#1: Visibility of system status

Our design always keeps the users informed about what is going on, and supply appropriate feedback and information within a reasonable amount of time.

#2: User control and freedom

Users often perform actions by mistake. Therefore, we separate normal user and official account by user ID which they have different permissions and rights to operate the web side.

#3: Consistency and standards

Users should not be confused as to whether different words, incidents, or actions mean different or the same thing. We followed standard platform and industry conventions and imitated some design form google.

#4: Error prevention

Good error messages are important, but the best designs carefully prevent problems from occurring in the first place. In sign in and sign part if user didn’t text anything or the input is not meet specifications will display an alert.

#5: Aesthetic and minimalist design

Our interface does not contain information which is irrelevant or rarely needed. Information is kept simple and relevant which easy for user to find.

**Group review**

The sketch of the site design and our basic webpage have been handed over to another group for review. We asked other group members to have a look on how our webpages look like and asked some suggestion to minimise kinematic and cognitive loads. We review them and change the style, feature, functionality of each page based on the comments. The changes made to each page will be listed below.

**1. Home page**

*“There are too many white spaces in the homepage, which can make webpage look like too plain. Why don’t you add more stuff in main page? and maybe the button position and the background design can be improved, but I like the different colours of buttons, which can make user use the button conveniently. Furthermore, it would be great to have logo in your main page. Logo part can let users remember your company and it is significant. The size of map in the middle of webpage is so big so it is bit hard to control. A suitable size of map is more good looking and efficient. Your webpage has copyright at the bottom, which is good. Copyright part can increase the credibility of information and prevent others from directly stealing your website data. Your footer has fundamental information about your company! good! but I think the height of footer is a bit lower than your webpage size.*

Changes made:

* Made a navigation bar so that everyone can access main page again and access about us, contact us page easily.
* Changed the color of background.
* Changed the map size and placed it into the center.
* Adjusted the layout.
* added our logo on the top right side of webpage.
* changed the footer percentage of height.

**2. Log in**

*“login page doesn’t have header you have in the main, so it would be great to add same colour of header and stick to same style of header in log in page. The good part is you added three buttons to let user can login with Facebook, twitter and google, but the buttons are small and the texts are so small. It is not easy to read what the buttons are. It seems that you will link users’ Facebook and google account to User id, but still not working now, expect to see the progress. Out of the login box, there is a logo at right-top side of this page, a good symbol to represent this web page. But! how can I go back to the main page? I can go to the venue sign up page but can’t go back to main page. In addition, still the color problem, I do not like the color of this page maybe you can change a color or change a design of this page.”*

Changes made:

* Changed the background color and the layout of the login box
* Changed the input boxes’ size and buttons’ size
* Changed the text size in buttons
* Small change on font-family to make the feature more good looking
* added BACK button to go to the main page
* matched the header with the main page header for sense of unity

**3. Sign up for user**

*‘Sign up user page is similar to the login page so it doesn’t have header again. In my opinion, you can match the style of main with other pages. I think there is no way to go back to the main page, if I don’t click on the cancel button. Why don’t you provide some way to go back to main page? On top of that, still the background color problem, having no background color can make webpage boring maybe you can change a better background color.”*

Changes made:

* Changed the background color
* added BACK button on the top right of webpage to go back to the main page
* separate the “create your account” part into the box
* added header which is same as the main page to match the style of whole web page

**4. User page**

*“The user page looks nice and simple. User can easily access the check in page, which is good. But I think three buttons on top for check-in, Account and Logout are too close to each other and a little bit inefficient. But I like your way of combining check-in part and history part together. For user Account page, it looks simple but it is too simple. It’s better to put some colour in it or separate the box. The button for log out can be bigger than now. It also seems like you don’t have footer in user page. Why don’t you add footer to match the style and provide more links to go to the other pages?”*

Changes made:

* added a navigation bar and added functionality with two buttons for check-in and Account so that user can easily access check-in page and account page.
* added separate box in the middle of webpage and separated userID part and Name, Phone number, and email parts.
* added small icons in front of name, phone number and email
* changed Log out button size and match the button colour with other webpages.
* put the footer which contains the links of About us and Contact us

**5. Venue**

*“In the venue account page, it is bit hard to see which one is showing venue’s information and which part is for managing venue’s information. I think you can separate the showing information part and the managing information part. Also, put some colours into the information box.”*

Changes made:

* Changed the background color
* Changed the layout and separate the manage part and information part.
* Modified the size of the box which shows users information

**6. Official**

*“Official page is similar to the venue page. But! official has more extra function then venue. The buttons for each function are little bit messy. In my personal opinion, your navigation bar in main page is good. Why don’t you use the same design of navigation bar and put the functions in the bar?”*

*Changes made:*

* Changed the background color
* made a navigation bar under the header and put the links of each function, such as user history, venue history, hotspot, account and sign-up in the bar in order.

**7. About Us**

*“About Us has the same structure with the other pages, which is good. However, sometimes, matching the style in every page is bit boring. At least one page can have different structure to the other webpages and I think that page is About Us page.”*

*Changes made:*

* Changed the structure of webpage.
* made three sperate div boxes to separate information about the company, such as our history, location and join us.
* put some images which can represent our company.