

# Design Review

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

According to Website Review, to make a successful website, the user's kinematic and cognitive load must be minimized, so that users can get a more positive experience.

Therefore, some design components that improve user experience have been applied to web design solutions.

Optimizing the amount of user operations is an effective way to minimize the kinematic load. For example, reducing the mouse wheel, moving, clicking, and keyboard typing actions can well reduce the complexity of human-computer interaction. The drop-down lists on the personal information page, manager page, manage venue account page, and manage user account page provide shortcuts for users to simplify input. Users do not need to use the keyboard to type, just select options in the bar box. In addition, there are shortcut icons on the login page and the registration page. Click the icon to switch directly between the login and registration pages, which is convenient for users to log in directly after registering an account.

Additionally, shortening the distance between several commonly used icons can also reduce the moving of the mouse and optimize the user experience, as well as the input box of certain text information. Because there are many pages, some recurring icons are designed in conspicuous and fixed positions, and users do not need to spend extra time and revenue

to find them. For example, the registration icon is designed at the bottom of each page, and the editing icon is designed at the bottom left of each page.

When designing a webpage, the design and layout of the webpage are also worthy of in-depth consideration. Good design and layout can reduce the mental investment of users when using webpages, thereby minimizing the cognitive load.

Highlighting important information is a good way to help minimize the cognitive load. For example, the icon that jumps to the next webpage is designed to be larger than other icons, the input box that needs to be interacted with the user is designed in the middle of the webpage, and the hotspot area is marked with a different colour from the main page.

In web design, it is also a good way to use common icons similar to other websites. The profile icon is most circular, and the logout icon is often below the profile icon. And the profile box is often designed on the left side of the page. In this way users can adapt to their habits quickly. These are points worth considering. And, it's best to use the same layout on different pages of the same website. These designs can also reduce the cognitive load.

In addition, limiting page clutter through spacing and image placement prevents too much information and ensures that users will not encounter difficulties when trying to create a reservation.

Furthermore, combine the design experience of other websites to imitate the characteristics of successful websites. For example, colours and layout are more concise, and icons are

often used instead of text, because icons are easier to recognize than text. These features all contribute to the success of the website.

**There are four principles for meeting the standards and heuristic of the website.**

Perceivable, operable, understandable and robust.

## Group review

The project has met the requirements of Milestone 1. The website design has been handed over to another team for review. The heuristics and kinematic and cognitive load we designed have been tested and reviewed, and the design has been changed and updated. Below is a detailed review from the basic sketch of the website design.

### ***Home Page (p1.)***

There are 3 large icons in the middle of the screen, representing different types of users. The icons are used to replace text, which is more conducive to user understanding, and the very clear images can effectively reduce the cognitive burden of users. I think that in the implementation, large icons representing various users should replace pictures with obvious

characteristics of various users. Similar to other websites, the logo icon is designed in the upper left corner, and the login icon is designed in the upper right corner. These layouts are very good. I think that when implemented, the icon used to click should be able to change the colour when clicked. The name of the website is located directly below the logo icon, and the main information provided is very clear and easy to understand.

Changes made:

1. The edges between the user icons are appropriately enlarged to make the web page less crowded.
2. The size of the login icon is further enlarged.

### ***Login / register (p2-4.)***

I think the login and register pages should be the most concise, the current page is in line with my idea. The login and registration text are at the top of the page, which is very eye-catching and simple. This design minimizes the cognitive load of users. The input box that needs to be filled in by the user is located in the middle of the page and is not far apart. The input box is divided from top to bottom. After entering the information, you can find the login or register button at the bottom. This design minimizes the user's kinematic load.

There is a register icon at the bottom right of the login interface, which can be replaced with the register page.

Changes made:

1. Enlarged the user's input box.

2. Removed the login and registration icons, leaving only the text.
3. Add an underline below each input box to better distinguish each input box.

### ***Personal Information (p5.)***

On the left side of the page is a large icon, which represents the user, and makes it clear that this is a page about the user's personal information. With the text directly above it, it effectively minimizes the user's cognitive load. The input box is the same as the login and registration page, which is designed in the middle of the page to reduce the burden of user learning and understanding. There is venue information on the right side of the page, and a drop down list is designed when entering the venue type, which effectively reduces the user's kinematic load.

Changes made:

1. Add an underline below each input box to better distinguish each input box.
2. Enlarged the venue information on the right side of the page
3. The save button in the lower right corner is designed with different colour.

### ***Map page (p6.)***

A map of Australia is in the centre of the page. The hot spots marked in red on the map are very conspicuous and easy to understand. There are buttons to interact with the map on the

right. When the user clicks on a hot spot on the map, the current information of the hot spot will be displayed, which is convenient for the user to operate. In the upper right corner of the page, buttons for zooming in and out are designed to facilitate users to check the map accurately.

Changes made:

1. Widen the padding between the buttons on the right side.
2. Change the colour of the map to green to further highlight the red hot pots.

### ***Health officials (p9.)***

6 buttons to jump to other pages are designed on the page, which is convenient for users to browse the website quickly. Conducive to minimize the user's kinematic load. I think the text on these 6 buttons can be made more concise, and it is best to use 3 words or less to express. And these buttons should be designed in a different colour from the background. On the right is the profile box, and the logout button is below the profile box. This, like many other websites, helps minimize the user's cognitive load. The space occupied by the profile box on the left seems to be a bit large, and the information inside seems to be very sparse. I think the space should be reduced or the border should be thickened.

Changes made:

1. Reduce the text description in the buttons to make them more concise.
2. Optimized the size and content of the profile box on the right.

### ***Venue page (p12.)***

I think that in order to better reduce the burden of user operations, you should add a drop down list or some optional dates and months to the year, month, and day input boxes at the top of the page. The application button on the right should be further enlarged. The table in the centre of the page is about the user's personal information. The input box of the mobile phone number looks too small, and the complete mobile phone number may not be displayed. The main area of the entire page is very obvious, and the main input area is in the centre, effectively minimizing the kinematic and cognitive load on users.

Changes made:

1. Optimized the input method of date.
2. Enlarged the application button on the right.
3. Adjusted the size of the user information box.
4. A scroll wheel is set on the right side of the information box.