
Design Review

How does it minimise kinematic and cognitive load?

Several feature alternatives were selected as design components based on the associated improvements to the user experience, as explored in the Website Review. More specifically, by reducing the necessary physical and mental exertion of the user, the site's kinematic and cognitive loads are lessened. Consequently, the minimisation of kinematic and cognitive load, which correlates with positive user experiences, is necessary for website success.

Kinematic load can be reduced through the elimination of unnecessary user hand motion. For example, the logo situated at the top left of the site, as well as the listed featured restaurants on the main page, provide shortcuts to various site navigation depths. Whilst the logo returns the user to the initial page, selecting an entry from the featured restaurants section produces the corresponding restaurant detail page. Resultantly, the user can rapidly navigate to desired content with minimal interactive complexity, eliminating several individual navigation steps to adjacent depth layers. This feature, in conjunction with the comparable functionality of bread crumb navigation, decreases successive clicking input requirements.

Additionally, prompting the user for reservation details during the initial search is likely to reduce kinematic load. Whilst selecting these options requires additional time and effort, the elimination of undesirable restaurants from the resultant list prevents superfluous navigation and scrolling. Moreover, by ensuring that input buttons are sufficiently sizable in accordance with Fitt's Law, the degree of essential mouse or finger tracking is diminished. Kinematic load is further decreased through reductions in distances between consecutive interactive elements.

Conversely, cognitive load can be minimised through reductions in mental involvement throughout website use. In the site design, this was primarily accomplished through thorough considerations of design and layout based on research findings.

One of the primary methods of cognitive load minimisation involved the emphasis of important information. For example, primary features, such as search bars, are positioned prominently to readily attract user attention. Similarly, by highlighting interaction features through distinct buttons, users are easily able to locate input fields. Furthermore, limiting page clutter through spacing and image placement prevents excessive information overload, ensuring that users do not encounter difficulty when attempting to create reservations. Similarly, by using maintaining a consistent page layout and colour theme, users will not have to examine and deconstruct the site functionality when navigating the site.

The adoption of familiar features, such as common navigation structures, widespread positioning trends, and instantly recognisable icons, also results in cognitive load reduction.

The presence of search bars, logos, and links in common positions with predictable behaviours exploits the user's knowledge of other commonly used websites to allow ease of use. More specifically, users will intuitively understand how to obtain desired results from the site due to experience from other websites. This effect is reinforced through content layouts which are equally similar to existing services. Icons, which are easily identified and are simpler to distinguish than text, are also used to attract attention and provide context and instructions. The inclusion of these attributes reduces the mental involvement associated with creating a reservation as desired.

Does it meet standards and heuristics?

The Web Content Accessibility Guidelines was the primary selected measure of the site's effectiveness and quality of user experience. This guidelines act to improve content availability, though not necessarily compensating for all user issues. In particular, the guidelines attempt to alleviate the usage difficulties associated with several disabilities, including visual, auditory, physical, speech, cognitive, learning, and neurological impairments. This is achieved through the division of four principles into 13 guidelines. Whilst not all of the guidelines apply to the website, Level A compliance was implemented where time permitted. As site content and functionality it is planned that full Level A adherence is achieved.

Principle 1 - Perceivable

This guideline attempts to assist users who might not possess the full range of sensory or comprehension abilities necessary for unregulated websites. Non-text content should use alternate text, and semantics should be used to properly denote and emphasise content. Users should not be expected to follow described actions, and information should not be conveyed purely visually.

Principle 2 - Operable

Operable websites should be usable for individuals who may have limited input and reaction capabilities. The site should be keyboard accessible and should not require timed inputs except where necessary. Content should be titled appropriately, and the purpose of links and interactions should be derivable through context provided from adjacent information.

Principle 3 - Understandable

Relevant concepts that are governed by this principle include ensuring that the page language is readily determined, and that changes in content due to interactions are predictable.

Principle 4 - Robust

This principle involves ensuring that tags and nesting are used appropriately, and IDs are unique. This is achieved through validation.

Group review

A detailed review from the basic sketch of the site design was provided to another group for review. Below are the respective pages / functions that were reviewed using basic usability and testing. The changes made for each category are listed below in dot points.

Mobile (#1 & #2)

"Very clean and simple design. Good clear sized image in the centre of the screen makes the cognitive load on the user quite minimal. Graphic User Interfaces seem to be really popular for these kinds of applications, and the main layout of this page is seemingly quite easy to understand and use. The layout of the pictures underneath are quite intuitive, and are similar to other websites which would reduce the learning curve for the user. The primary information is present and in clear view, with the cuisine, price and rating all clearly evident. The book and review buttons are also quite obvious. I think that in the actual implementation, it might be better to make sure that these buttons are clearly distinguishable by colour or size, as having them be so similar looking and close might be confusing. It's a bit hard to tell in this case as it's only a rough sketch with no colour, but it's looking good. The other mobile page should absolutely have a GUI for making the bookings. Picking a date shouldn't be a typed option I don't think. Or even if it is, having a clickable calendar pop up would make it easier. I definitely like the "near me" section."

Changes made:

- Provided enough sufficient padding / centered the restaurants so that it is no longer connected to the border.
- Order of search options from booking size, time, date search changed to date, time booking size, search and added a separate search button that is large.

Restaurant Booking

"The restaurant booking page seems again to be very simplistic and minimal (in a good way). The logo and sign in pages in the top left and right corners respectively is a good choice, as it mimics many other websites and makes the page more intuitive to navigate. I'm not sure what the person icon is in the tabs at the top, or the time, dd/mm/yy, or 'Enter Restaurant' tags are though? I would suggest either renaming them or moving them to a less prevalent spot on the page, as users might be a bit confused. I don't think the stick figure icon is overly prevalent in modern websites, so it might cause a bit of confusion to users. The restaurant card/div in the page is a great idea! It's very clearly laid out and the image slideshow is similar to others so it can be used easily without much thinking. Again, all the information needed is laid out clearly, and the Book and Review buttons are more separated (as opposed to the mobile site), so that looks much better!"

Changes made:

- Moving the images to the bottom right with a map of location above.
- Removed the overall search icon of a "person" to "enter a booking size"
- Changed from a card / div to a new page for restaurant booking for more information being provided with less scrolling required.

- Booking and reviews are no longer separate buttons, booking can be done through a button however reviews are now separated with a horizontal line with text input and previous reviews from other users.
- Decreased the size of the description box to be more compact and in line with additional address and menu of the restaurant.

Search

"The search page is very sparse near the top. I think you may need to shrink the white space a little bit, as users might be a bit opposed to having to actually start looking for their content halfway down the page. But, if you were to put a nice banner in behind the search bar then I think that would help a lot (especially if it was a rolling or dynamic display, and the images were toned down so that the text could pop and be easy to read). The filter bar in the search space on the left-hand side, and seems to be easy to use. I would add some more buttons or sliders in there though rather than leaving space for user input. I think that would make it much better and more professional. Also I would put a background around each div for the restaurant cards, because it looks a little bit difficult to tell where one restaurant starts and another ends. If you don't, at least make sure there's some extra padding/whitespace or bolded titles."

Changes made:

- Reduced the search bar to be more minimal, covers less of the screen and shows more search results by removing the background image.
- Added a vast range of filters in more detail included cuisines and filters that cover "all".
- Instead of having divs around each restaurant cards, made a horizontal line to cut under each restaurant to tell which one starts and ends. Also added a bit of padding around these lines to ensure separation.
- Removed the book and review buttons straight from the search results and integrated into restaurant booking page.

Home page

"The home page looks super similar to the search page, which is not a bad thing. Again, the banner section is quite big but would be cool with a dynamic slideshow of pictures. The featured restaurant idea is also cool (reminds my of resy). I like that only the barebones information is on the cards. The only thing I would change about that section is to remove the review option for a featured restaurant. It just seems a bit weird that a customer would be reviewing it off the main/search page. I think absolutely prompt the user for a review after they have finished their booking. This would be especially useful on the mobile site (maybe even as a pop up / push notification), but that might be going beyond the scope of the assignment. I really like the "restaurants near you" section. That is actually a really handy feature, and it would be cool to have the actual distance from the users live location available if they wished. This would be especially important, as there doesn't appear to be a map on this page, so people might be a little bit hesitant to book a restaurant before knowing how far away it is. Even just putting in the suburb as a tag would be enough to give some piece of mind. The footer of the page is great too. I would maybe make it a bit smaller and less invasive, and not make it static. If you can, make sure that you have to actually scroll all

the way to the bottom of the page to reach it, because otherwise it takes up pretty valuable real estate on the landing page.”

Changes made:

- Removed the utilisation of book and review buttons for the featured restaurants on the front page, user now needs to click into it to explore more information.
- Removed the static footer and will implement to be at the bottom of the page.

Sign In / Register

“I’m a big fan of the large Facebook and google (?) icons. I think what a bit could be more useful is prompting the user to login, but instead of already having the account registration section open make them click a button. This means you could shrink the entire div to take up less real estate, and if they wanted to make an account they could fill out all of the information on a less crowded page. I like the option to sign in as a restaurant, but would even make that option higher up (at the top)? I know there’s no colour options here, but making an alternative colour scheme for the restaurants seems like a good idea. Other than that, the page is looking really good.”

Changes made:

- Registration text changed so that it can be clicked to enlarge the div and prompt the user to fill in details to create an account.