

## KINEMATIC LOAD

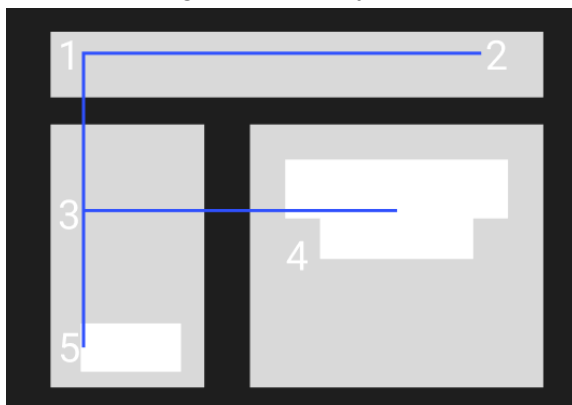
Kinematic load of the website was reviewed by considering proximity of objects, positioning, ease of access through layers, and size.

Although a public navigation bar on top and a side panel for managers were designed but with the consideration

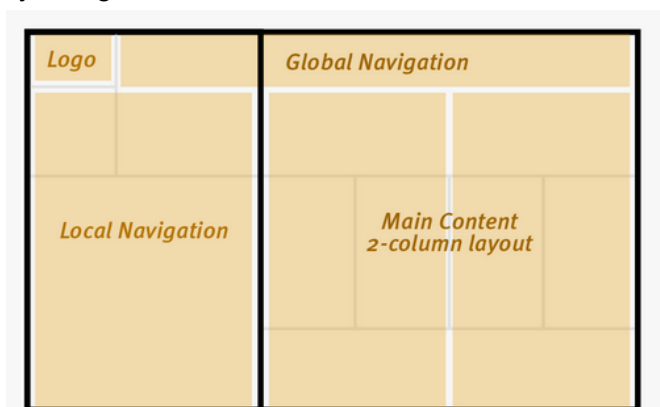
Fitts law consideration:

Since users navigate from the left hand menu, forms and buttons on the further left side of the page were designed horizontally to place under cursor more easily while moving the mouse from end to end. Also using small icons and buttons were prevented to ease the operation and selection by users. Related objects in certain actions such as navigation, creating events,

Use of the F pattern in placing primary elements of the screen allows users to find important info on the page more easily.



Designing pages based on the golden ratio to have a more eye appealing view and reduce eye fatigue.



source: nngroup.com

Responsive design:

Elements in the page minimise in width or stack on top of each other, if there are related but separated elements, when a browser window is restored down or opened in a smaller display like a phone or tablet.

Edits:

Some functions of the webapp such as admin controls were separated into different pages, whereas it could make navigation uncomfortable for users. In the second go all primary features gathered into a management panel and shortcuts to the primary features such as events and news were placed in the first page after signing in. In some cases that require small interaction, pop-up windows were used to keep navigation smoothly and reduce unnecessary movement.

Scrolling on the page between related elements of the screen was adjusted to jump the view port from one group of related elements to the next in order to minimise the effort of reaching shortcuts on the menu.

Few lists and forms were adjusted in size to have a closer range of access.

## COGNITIVE LOAD

### Affordance

Actions are listed in short concise words at the navigation bars, making them easily accessible and readily perceivable.

Meaningful icons are used, e.g. a 'House' represents the 'Home page' and a 'Loud speaker' represents 'Updates'.

### Consistency

Every interface uses a consistent font style and color palette.

You may notice that the volunteer interface is consistent with the landing page, while the system admin interface is consistent with the branch manager interface. We have three justifications for this decision:

#### 1. Primary Goal

- **Public Landing Page & Volunteer Interface:** Attract and inform users, encouraging them to explore and engage with the web app. Focus on accessibility and ease of use.
- **System Admin & Branch Manager Interface:** Ensure the smooth operation of the entire system and branch-specific management. Focus on efficiency and security.

#### 2. Design Elements

- **Public Landing Page & Volunteer Interface:** Should be visually appealing to maintain interest. They share branding elements such as logos, color schemes, and typography to create a cohesive look.
- **System Admin & Branch Manage Interface:** Require more advanced navigation and management tools and fewer visually appealing content compared to the public landing page and volunteer interface.

#### 3. Content and Features

- **Public Landing Page & Volunteer Interface:** Contains information about the branches, events, volunteer opportunities, and news updates.

- **System Admin & Branch Manage Interface:** Includes system-wide settings, user management tools, analytics, security features and event planning modules.

### Simplicity

Avoid long paragraphs in any of the four interfaces. Important headlines are large and coloured differently from body texts. Dark words against a white background for accessibility. Clickable buttons change style when cursor moves over, allowing easy tracking of location on page.

**What would you like to do?**

Manage Events  
Post Updates  
Manage Members

### Choice of Words

Use words that match the user's goals, e.g. 'Join' means sign-up for volunteers and 'Manage events' means updating the details/status of events for branch managers. Use common language; avoid jargon - no technical words are used through the website.

## **ACCESSIBILITY**

### Principles for Accessibility Guidelines

#### 1. Perceivable

- Text alternatives: Use of icons for features such as a user icon which the user can use to view user profile and login etc. Use of alt attributes on images.
- Distinguishable: Text is enlarged for headers to improve accessibility and ensure that users do not miss out on important sections and information. Colours tested against contrast checkers and changed where necessary (when the colour did not pass the contrast test and did not have a minimum ratio of 4.5:1).

#### 2. Operable

- Avoidance of high-contrast flashing content so that it does not induce physical reactions or seizures.
- Input Assistance: Where forms are used and a standard format is expected, feedback is provided when the user does not follow the format. For example, when an admin adds a branch and keys in a contact number that does not follow the default format (04xxxxxxx), an error will be shown. Form before where the placeholder displayed is the expected format of the contact number.

Contact number:

If incorrect number format keyed in:

Contact number:

Unit:

Street address:

City:

Postcode:

Please match the requested format.

- Enough time: Avoidance of time interactions to ensure that users have sufficient time to perform the actions they want.
- Navigable: Navigation tools provided for all interfaces to assist users in navigating the websites. For instance, for the organisation manager and admin interface, there is a sidebar on each webpage that helps users navigate to the webpage they want to go to. There are also icons at the top of the page to help users with navigation as well.

### 3. Understandable

- Clear language: Use plain and straightforward language to enhance comprehension, no jargon or complex terminology is used
- Predictability: Maintain consistent navigation throughout the website, elements are to be put in place that is expected for the user, eg: login/sign up button is on the top right corner, making it easy for users to predict where they can find information and how to navigate different sections
- Error handling: Help users avoid and correct mistakes and provide feedback to the user when they make a mistake.

Contact number:

Unit:

Street address:

City:

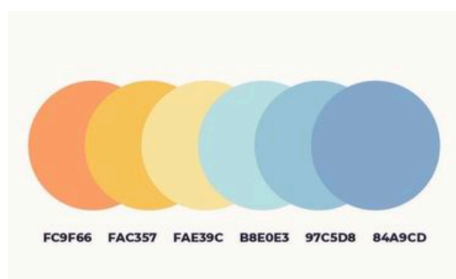
Postcode:

Please match the requested format.

### 4. Robust

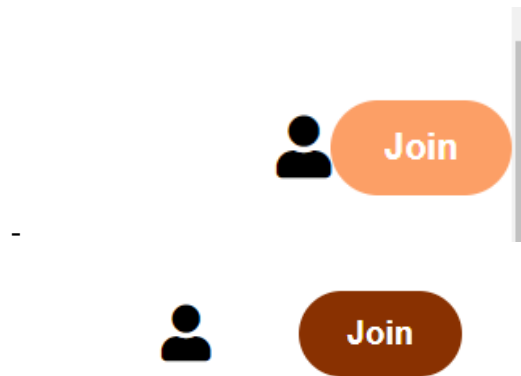
- Semantic Markup: Use of HTML Validate tool to ensure that code complies with standards. Ensure that the structure and content of the website are accurately interpreted by users.
- Compatibility: Ensure websites function correctly across different devices, browsers, enhancing its reliability and accessibility for all users.
- Future Compatibility: Stay updated with evolving web standards to ensure the website remains accessible and functional for future generations of users.

Colours:



- Contrast check

- The old colour scheme did not pass contrast checks. As such, we made adjustments to the colours used for the various interfaces.
- For example, originally the orange in the above colour scheme, #FC9F66 was used across interfaces. However, after checking for contrast, we realised that the orange colour had a bad colour ratio of **2.04:1** with the white background. As such, we changed it to a better orange colour #893101 that has a contrast ratio of **8.38:1**.



- Fonts
  - The default body font-family is set to be Arial, sans-serif as it is easier to read on device screen thanks to its clean and simple design. Sans-serif is suitable for everyone regardless of age or disabilities because they have a slightly higher readability than serif fonts.

## PEER REVIEW

Here is the feedback from another group:

1. FEEDBACK:  
having 2 user tables (one for the system and another for Google) feels a bit strange  
SOLUTION:  
Have one main user table that authenticates via two different methods - email/password and Google
2. FEEDBACK:  
Would be good to send out status updates about the events, like for example location announcements etc.  
SOLUTION:  
When finished updating events, branch managers would be redirected to the 'Post updates' page to make an announcement to members, publicly and privately.