Module C – Implementing the Mobile-Optimised User Interface

Competition Time: 4 hours

The competitor's task is to build a mobile-optimised web application that fetches and displays hobby and activity announcements from a REST API.

The user interface must be clear and easy to use, following the client's brand guidelines and provided wireframes. The application should also be mobile-first, meaning it must work primarily on mobile devices.

The web application has three main pages:

- Announcements (Home)
- Search
- Map

This module focuses on the announcements list and the search feature, which are the most important views for the user. The UI must include a bottom navigation bar that enables smooth page transitions and mimics a native mobile app experience.

Using the API

All data must be fetched from the REST API: https://taitaja2025.hobbly.app/api/v1/

The API documentation, which is in Openapi format, includes details for all available endpoints. Competitors must be able to interpret the documentation and use it to retrieve and display the correct data.

Docs: https://taitaja2025-hobbly-api.apidocumentation.com/

Displaying and Fetching Announcements

You must implement an announcements list that fetches data from a paginated API endpoint. Since there may be many announcements, they must not be loaded simultaneously. New items should be fetched automatically as the user scrolls down.

This must be implemented using an infinite scroll mechanism to improve performance and the user experience.

Announcements must be sorted alphabetically or by creation date (newest first). By default, they should appear alphabetically to make them easy to find.

Each announcement must show:

- Title
- Image
- Short description (first 100 characters followed by ellipsis "…")
- Organisation name

When an announcement is opened, all the same content must be shown again, along with the organisation's full contact details.

Search Functionality

Users must be able to search announcements using a keyword. The search must match the following fields:

- Title
- Description
- Organisation name
- Tags

The search feature must use the REST API and be implemented with the correct query parameter (check the API documentation for details).

Search results are displayed on a separate page, using the same layout as the announcement list.

Appearance and Usability

The user interface design must follow the brand guidelines and the provided wireframes. These define the app's colours, fonts, and layout.

Mobile usability is one of the key evaluation criteria.
The app must be fully functional on a 375px-wide mobile screen.

Technical Requirements and Evaluation

Competitors must ensure that their HTML and CSS are written semantically and meet accessibility standards. Use the following tools for code validation and improvement:

- Chrome Lighthouse
- axe DevTools (for accessibility auditing)

The UI must remain smooth and responsive even when handling large amounts of data. The infinite scroll must not cause delays or performance issues. Data loading must be controlled, and the user experience must stay fluid.

At the end of this module, you must submit:

- A working mobile-optimised web application, hosted on a server
- An updated GitHub repository containing:
  - All code files
  - Complete documentation