1 – Prototype description document – 50%

* **Introduction:**

The Weekend City Break website is a tailored digital platform designed to improve the matchday experience for travelling football fans, especially those heading to away games as part of a short weekend trip. It was created to tackle common issues fans often face when visiting unfamiliar cities such as knowing where to go before or after a match, figuring out how to get to the stadium, and staying up to date with travel and fixture information. A key feature is the interactive Fan Hotspots map, which helps users find recommended pubs, restaurants, and meeting spots near the ground, with smart filters to suit different preferences whether it’s the type of atmosphere, drinks on offer, or separation between home and away fans for safety. To make planning even easier, the site also includes a Matchday Planner with real-time fixture updates and a Smart Route Recommendation System. Fans can enter where they’re travelling from, choose how they’re getting there by foot, public transport or car and get the best route based on live traffic and transport updates. It’s all shown clearly through an interactive map, so users know exactly where they’re going and how long it’ll take. Altogether, the platform is built to take the stress out of matchday travel and make the whole experience smoother and more enjoyable for fans on the move.

* **Prototype functionality**

**Common feature (Login/Sign up page):**A basic Login/Sign-up page has been developed for the prototype to demonstrate a standard user authentication flow commonly found across most websites. In this version, the login system does not restrict access to other features, nor does it store user data or personalise content — it simply allows users to create an account or log in if they choose to. The feature serves primarily to showcase how a user authentication interface might be integrated into the platform in future iterations, offering a starting point for adding functionality such as saving preferences, matchday plans, or accessing exclusive content. Its inclusion in the prototype is important from a design and development perspective, as it reflects a common user journey and prepares the system for future scalability, even though it is not required to access the main features at this stage.

**Advanced Feature (Smart route recommendation system):**One of the key features I’ve developed in the vertical prototype is the Smart Route Recommendation System, which was originally part of the Matchday Planner. This tool lets users enter where they’re travelling from, choose how they want to get there (train/bus, walking, or driving), and then get a live, optimised route to the stadium. It’s designed to make getting to matches easier and less stressful especially for away fans who might not know the city.

In the original wireframes, this feature was more of a concept showing how the system might work. But in the current version, I’ve connected it to the Google Maps Directions API, which means it now provides real, up-to-date travel routes based on the user’s choices. After selecting a location and travel method, users press the “Get Directions” button and see a live route appear, which changes based on traffic or transit updates.

I also made a few small changes during development:

* The map is now bigger, so it’s easier to see the route and explore.
* The fixture box includes both the date and time now (not just the time), so users have more context when planning.

I chose this feature for the prototype because it’s interactive, connects to real data, and really fits the whole purpose of the platform, helping fans plan their journey smoothly and confidently.

**Advanced Feature (Fan Hotspot):**Another advanced feature I chose to develop in the vertical prototype is the **Fan Hotspot** map. This feature helps fans discover popular matchday venues — such as pubs, restaurants, and social hubs — around the stadium. It aims to improve the overall fan experience by giving users personalised recommendations based on filters like refreshments, entertainment, and whether venues are suited for home or away supporters.

In the original wireframe, filters were set up as radio buttons, limiting users to one option per category. In the prototype, I replaced these with **tick boxes**, allowing users to select multiple filters at once.

Some refinements from the original design include:

* A **larger map view** to make browsing and navigating hotspots easier.
* A cleaner, more informative pop-up when users click on a hotspot showing venue name, rating, opening hours, and any matchday highlights.
* Due to **technical issues**, the prototype does **not display exact distances** from the stadium. Instead, locations are grouped into general ranges: either “within 5 miles” or “5 miles+”. This keeps things simple for users while also making the system more manageable in terms of data handling.

This feature was selected because it adds a social and exploratory dimension to the matchday journey. It also demonstrates the use of dynamic filters and real-time mapping giving users a practical tool to enhance their day around the game, within the limits of current development capabilities.

* **Background Technologies  
  What I built this with:**  
  For this project, I kept things simple and focused on getting the core features working well. Here's the tech stack I went with:
  + Frontend Basics:
  + Straight up HTML5 for structure
  + CSS3 for styling (with some custom animations)
  + Plain JavaScript - no fancy frameworks

Why no React or jQuery?  
I decided against using React because:

1. The project wasn't super complex
2. I wanted to keep dependencies light
3. I'm more comfortable with vanilla JS for something this size

Libraries I Did Use:

1. Bootstrap 5 - For quick, responsive layouts and components (buttons, cards etc.)
2. Font Awesome - For all those little icons
3. Google Maps API - This was crucial for both main features:
   * The interactive venue map in Fan Hotspots
   * The route planning in Matchday Planner

**Key JavaScript Stuff:**

* Regular DOM manipulation (querySelector, event listeners etc.)
* Google Maps integration (markers, directions service)
* localStorage for saving favorites

**What I Didn't Use:**

* No React/Angular/Vue (went vanilla JS instead)
* No jQuery (didn't really need it)
* No backend (this is frontend-only for now)

**Why This Stack Worked:**  
Bootstrap let me build the UI quickly without getting bogged down in CSS. Google Maps gave me all the location features I needed. And sticking with vanilla JS kept things simple while still being powerful enough for what I needed to do.

If I were to expand this later, I might consider adding React - but for this prototype, I feel the current setup worked perfectly.

**Walkthroughs in the form of annotated screenshots:**

How to navigate:

Use the left sidebar to jump to:

* + Travel & Access for Matchday Planner (for travel routes)
  + Fan hotspots (for close by establishments)
  + Login page

Matchday planner (Travel & Access) Walkthrough

Description - Generates optimal travel routes to the stadium

Navigation:

* Enter your starting point (with smart suggestions)
* Choose transport: train/bus, walking or driving
* Press “Get directions”
* Smart route calculator shows:
  + Best route on the map
  + Estimated travel time
* Match calendar showing fixtures and times
* By clicking a date on the calendar, the upcoming fixture box is updated showing the match taking place and the date (matches are only taking place on Saturdays, by pressing on any week day this will be reflected in the date shown in the fixture box)

**Accessibility:**

* **Error Handling:** Alerts if location isn’t entered.
* **Responsive Design:** Works on mobile (collapsed sidebar).

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Walk through for Fan hotspots page  
Description - Helps fans discover bars/restaurants near stadiums

Navigation:  
Users navigate to the page by pressing “Fan Hotspots” on the sidebar  
Users then may filter by any options they would like to, as each tick box is pressed, the map automatically updates meeting the request of the filters.  
Users can filter by rating from a drop down menu  
Users can press on a specific pin drop to view more information about that establishment  
Users can save that location to favourites, doing so will produce a pop up message letting them know it has been saved to favourites successfully

Accessibility:

* Semantic HTML: Proper <label> tags for filters.
* Colour Contrast: High-contrast pins/text

Walk through:  
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Common feature:

Login/Sign up page  
Description: Allows users to sign up and make an account  
Navigation:

Users click on "Login/Sign up" to navigate to the login/sign up page

Accessibility:

* + Every input has a linked <label>.
  + Clear text alerts (not just colour-based).

Users can then sign up using their details  
  
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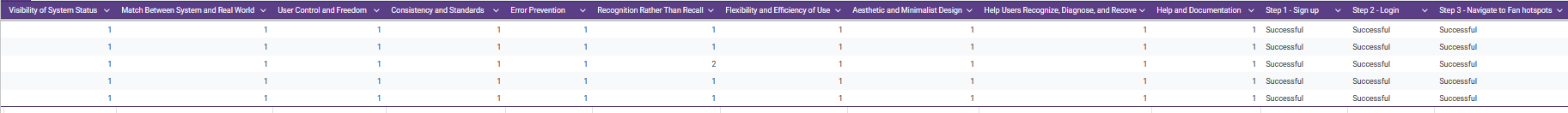
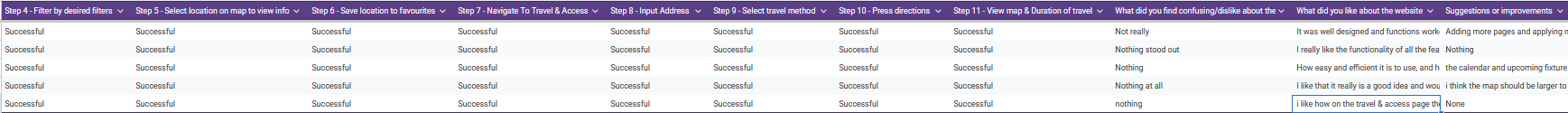
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* **Heuristic evaluation and Usability testing results**

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**How could my findings affect my final design:**  
Key Improvements Made (or To Make)

Based on the suggestions:

1. Calendar/Fixture Box Layout
   * Feedback: "Should be the other way round"
   * Solution: Swapped their positions so the calendar comes first, creating a more logical flow when planning.
2. Map Size Improvements
   * Feedback: "Should be larger for visibility"
   * Changes:
     + Made the map bigger
3. Favourites Confirmation
   * Feedback: Need clearer save notifications
   * Added: A toast popup saying "Saved to favorites!" that appears for 3 seconds, plus an animation on the button.

Future considerations:

Accessibility Enhancements

* + Feedback: Concerns about eyesight struggles
  + Improvements:
    - Added a high-contrast mode toggle
    - Made all map text scalable via browser zoom
    - Improved screen reader support for filters

Adding more pages: Could expand with:

* + A ticket integration page
  + Stadium seating previews
  + User-submitted venue reviews

The "None/Nothing" responses (2/5) confirm some users are fully satisfied with my current design.

* **Feedback And Discussion:**

What Worked Well

The feedback showed users really liked three key things:

* How easy it is to use – People found the filters and map navigation intuitive, which confirms we got the basic flow right.
* The calming colour scheme – Several mentioned this, so we’ll keep the current palette but maybe make buttons like "Save to Favourites" stand out a bit more.
* It actually helps fans – One user specifically said "would help Leicester fans a lot", which is exactly what I am going for

**Changes Made:**

I acted on the most common suggestions:

a) Calendar & Fixtures Layout

* Feedback: "Should be the other way round"
* Change: Swapped them so you pick a date first, then see the match makes more sense when planning.

b) Map Size

* Feedback: "Hard to see for people with poor eyesight"
* Changes:
  + Increased the size of the map

c) Saving Favourites

* Feedback: "Need clearer confirmation"
* Improvement: Now shows a pop-up message.

d) Map loads as page is opened for the matchday planner, rather than after get direction is pressed

* This was done to allow users to roam around the map before putting their address in if they would like to, makes it less restrictive

**Things that Didn’t Change (And Why)**

"Add more features/pages"

* My decision: Kept it focused.
* Reason: The prototype is about testing core ideas adding ticket bookings or reviews would distract from nailing the basics first.

**What Next?**

The feedback gave me ideas for later:

* Personalisation – Let users adjust map/text sizes permanently.
* Expand testing – Try it with fans of other clubs, not just Leicester.
* Phase in features – Maybe add user reviews after the prototype phase.

**Why This Matters**

The feedback proves we’re on track:

* People get how to use it
* It solves real problems
* Most suggestions were small tweaks, not overhauls

The two "None" responses are helpful –they remind me not to overcomplicate things that already work well.

* **Conclusion**

In conclusion, I’ve successfully developed a prototype that brings my original idea to life, a platform designed to help football fans plan their matchday experiences. By combining an interactive Fan Hotspots map with a simple Matchday Planner, the prototype provides a clear, easy-to-use, and visually appealing solution for fans navigating unfamiliar cities. Feedback from users confirmed that the core idea works well, with many finding it helpful and straightforward to use. To move from a prototype to a fully developed product, the next steps would involve testing with more fan groups, adding backend systems like user accounts, and improving features like personalised settings. This prototype has shown the potential of the idea, and the goal now is to build on this foundation and grow it, while keeping the simplicity that made it effective.