COS30043 – Interface Design and Development

Project Report

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1. Introduction

This document outlines the design and development of a web application that provides comprehensive information about the 2023-2024 UEFA Champions League season, leveraging the VueJS framework and PrimeVue UI library for the front-end, and the football-data.org API and Axios library for the back-end. League standings, match data, and the ability to search for matches using a variety of criteria will all be shown on the app. Users will also be able to comment on and share their opinions about specific matches, as well as like and dislike remarks made by other users. To ensure a thorough grasp of the entire system, the paper offers a full overview of the application, covering the requirements, layout, execution, and deployment elements.

2. Requirements

A. Functional Requirements

The web application offers seven key functionalities:

1. Displaying the league standings for groups A through H, including details such as team order, matches played, wins, draws, losses, points, goals scored, and goals conceded.
2. Showing all the matches, including the stage, time, home team, away team, and match score.
3. Enabling users to search for matches based on filters like country, goal statistics, or free-text search.
4. Providing detailed match information, including the stadium, referee, matchday, and group.
5. Allowing users to sign in and sign up to the application.
6. Enabling authenticated users to comment on matches, as well as edit or delete their own comments.
7. Enabling authenticated users to like or dislike the thoughts and comments made by other users.

B. Non-functional Requirements

The app contains three non-functional requirements: responsiveness, usability, and accessibility.

1. Responsiveness: This application adheres firmly to a responsive layout in general. Whether an individual is using a laptop, mobile phone, or tablet to visit the web page, it automatically modifies its layout and content to match various screen sizes and devices.
2. Usability: Users can easily search for matches, examine comprehensive details about each match, and comment on the match thanks to the app's simple and straightforward user interface.
3. Accessibility: All pages and dynamic sections have a vividly colored display, which indicates how accessible the software is.

3. Innovative features

The web application offers several innovative features that enhance the user experience and provide unique functionality:

1. Interactive Match Search: Users can search for specific matches using a variety of filters, including country, goal statistics, and free-text search. This allows fans to quickly find the information they are most interested in, streamlining the browsing experience.
2. Match Commenting: Authenticated users can leave comments on individual match pages, sharing their thoughts and analysis with the community. Users can also edit or delete their own comments, providing them with full control over their contributions.
3. Engagement Interactions: Users can like or dislike the comments and thoughts posted by other users. This social engagement feature encourages discussion and interaction among the application's user base, fostering a sense of community around the UEFA Champions League.
4. Comprehensive Data Visualization: The application's standings page presents detailed statistics for each team, including matches played, wins, draws, losses, points, goals scored, and goals conceded. This data is displayed in a clear and intuitive manner, allowing users to quickly assess the performance of their favorite teams and players.

5. Screenshots of the project

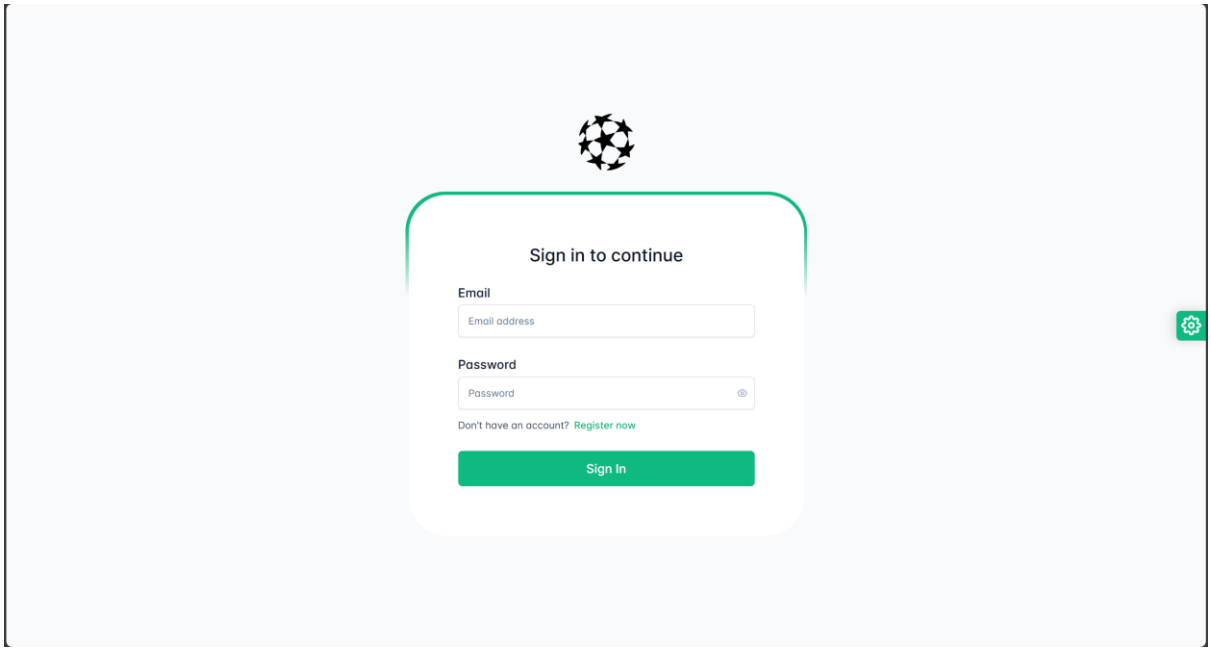

Figure 1: Sign In Page

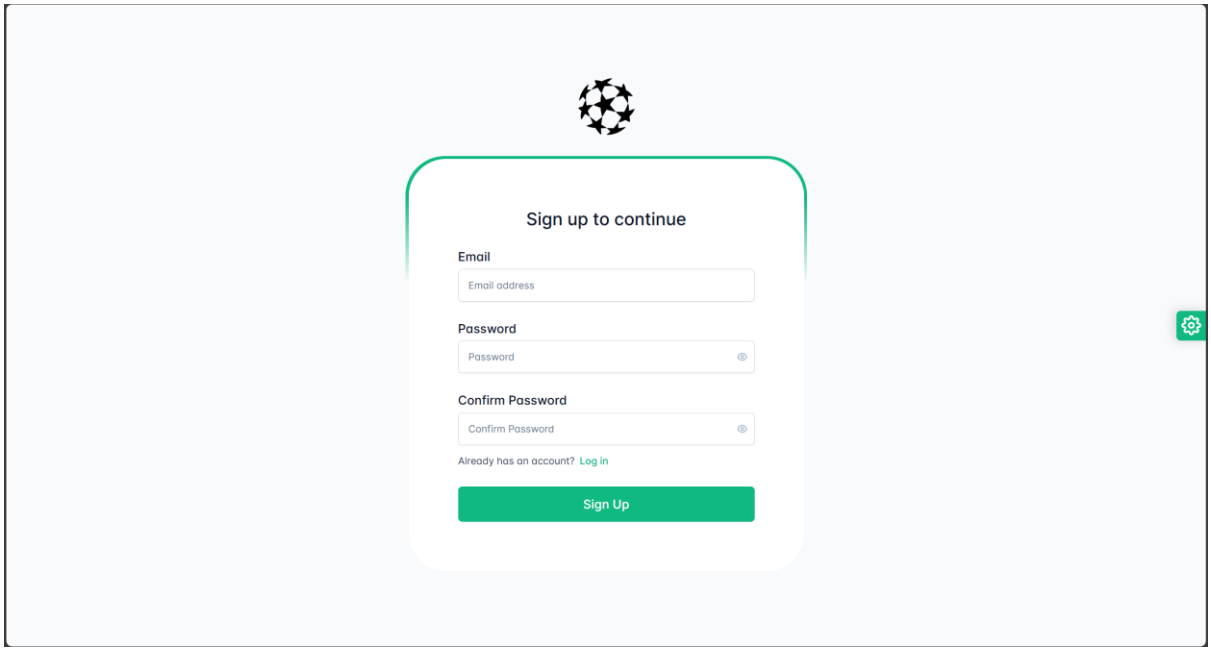

Figure 2: Sign Up Page

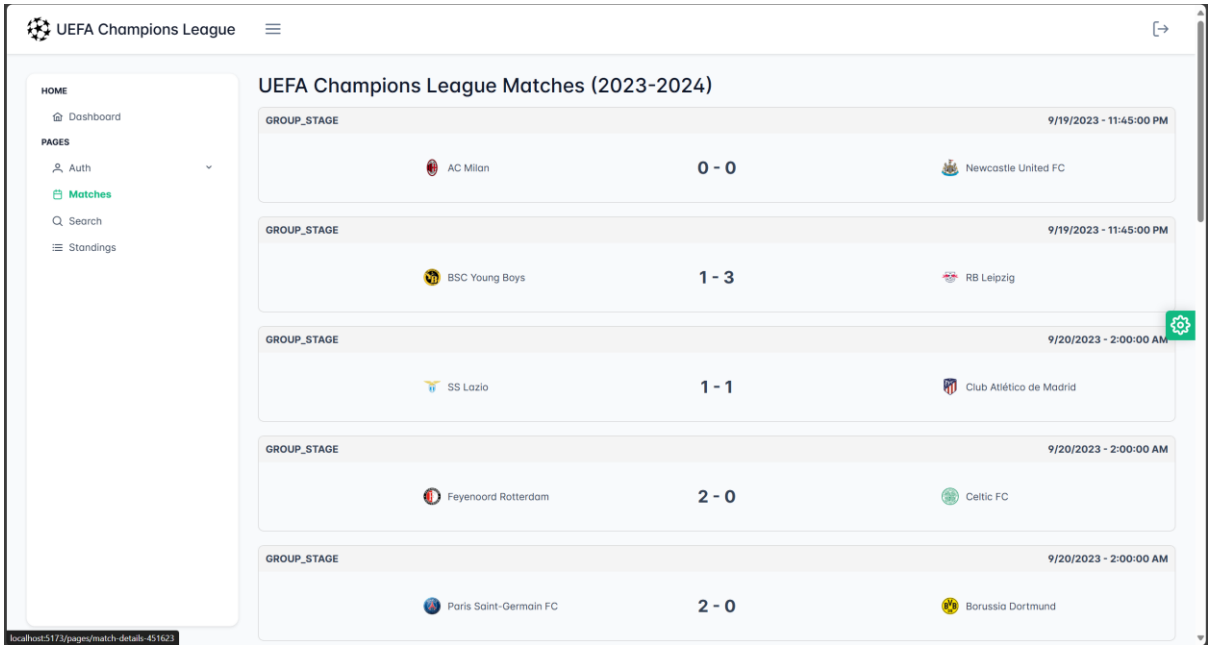

Figure 3: Matches Page

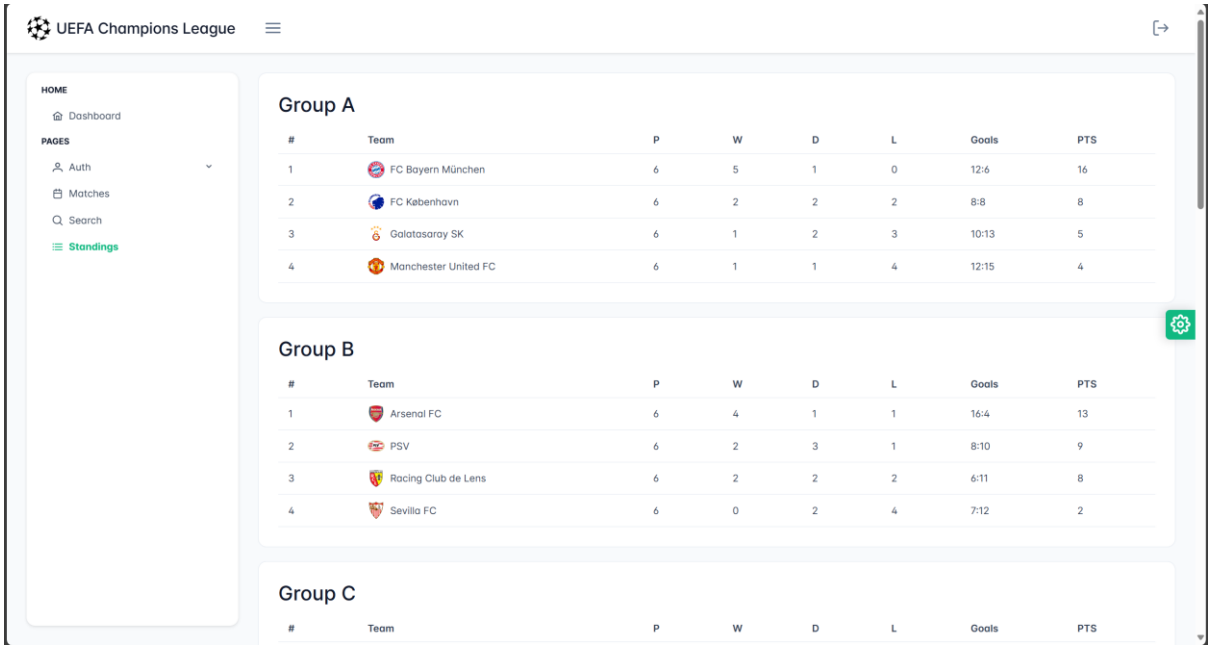

Figure 4: Standings Page

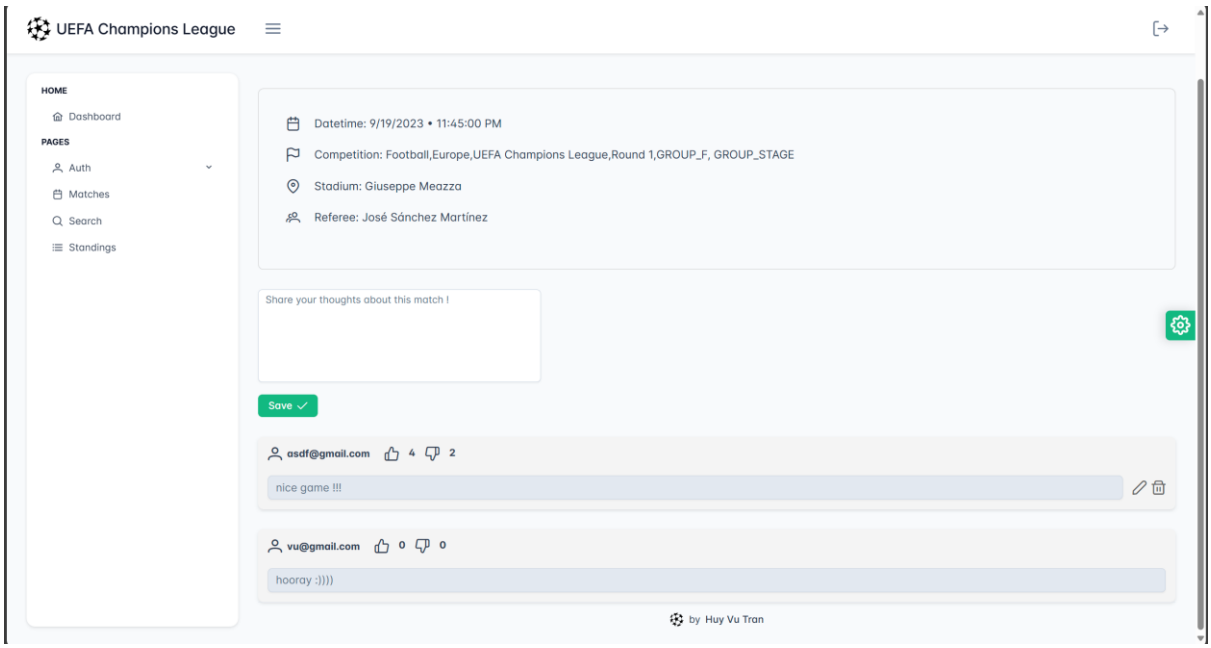

Figure 5: Match Details Page

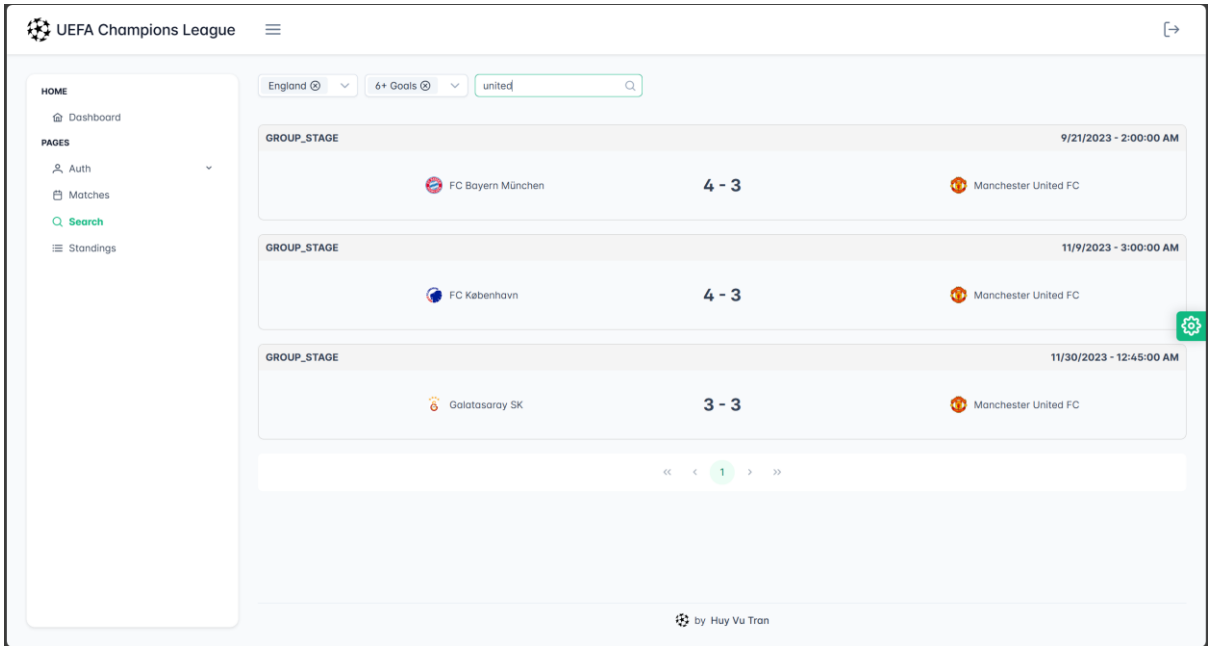

Figure 6: Search Page

- The video demonstration for this custom-app: https://www.youtube.com/watch?v=Ui975Cvwb_Y