Project 2 - Report

Introduction:

Welcome to the Soccer 2019 Application. The goal of this app is to give soccer fans an easy to use platform where they can view recent match results, view teams and their players data, and see various visualizations like maps of stadiums and stats. As of now, its built for the Premier League 2019 season and aims to deliver useful information while bein visually attractive to soccer fans.

Usability goals: Describe the usability goals you set for your web app and explain how you addressed each goal.

One of the usability goals I set was the ease of navigation. Users should be able to see the content without confusion. I used the tabs, Overview, Standings, Players, and Map to look familiar to other sport apps, specially those used by soccer fans.

Another key usability goal was responsiveness: The layout was designed using Streamlit's column and tab structure so the content worked well across different devices.

Lastly I set the goal of getting feedback and accessibility within the use of the app. I added user feedback sections and visual cues (e.g., success/warning messages) to guide users through their actions.

Design process: Discuss your design process, from sketching to implementation.

I began the design process by researching my target audience, those who are soccer fans. To make the experience familiar, I researched existing sports apps and websites to identify common layouts and patterns.

I sketched a rough layout and brainstormed the main functions needed for each section.Once I had a layout plan, I implemented the web app using Streamlit, using columns, markdown, and visuals. I tested and edited the design as needed to ensure a clean program and that everything was coherent.

API integration: Explain how you utilized the APIs and discuss any challenges or limitations encountered.

I was able to use API from rapidapi website, they were the first one that had soccer open API. One of the many challenges was connecting to the API. It was my first time using this website and the NASA API connection was different. However, the website

did a good job guiding me and showing samples. It was also difficult to find an up to date API for soccer.

Interactive widgets: Describe the widgets you incorporated and their purposes.

Tabs: To organize the app into clear sections.

Selectbox: For choosing a specific Premier League team and displaying its players.

Color Picker: Let users customize the color of the bar chart.

Slider: Allowed users to choose how many teams to view in the chart.

Checkbox: To show or hide liked matches in the sidebar.

Buttons: Used for liking/disliking matches and submitting feedback.

Text Area: For collecting feedback from users.

HCI design principles: Discuss how your web app adheres to HCI design principles.

One of the main principles of my app that adheres to the HCI design is consistency. I repeated tabs, columns, and visuals to make sure the users can predict where to find things.

User control is another principle used. Users can choose teams, like games, and adjust visual settings. Feedback and simplicity played a crucial area in the HCI design. Users receive confirmation after liking matches or submitting feedback and the layout is clean to make it easy for users to understand the information.

Conclusion: Reflect on your experience and discuss potential future improvements.

Building this soccer web app was difficult at first but rewarding. It helped me grow in front-end, API use, and UI/UX design. I learned how to structure data visually and handle real world challenges like API limitations. For future improvements, I would add more seasons with real-time updates if a better API is available. Maybe even have a

search functionality for players or teams. Overall, this project gave me a practical understanding of building user-centric, data-driven web apps.