Utility

This prototype is a dashboard designed for football scouts seeking to discover new players based on their specific needs. It allows users to filter players by attributes such as height, position, preferred foot, age, and market value. In addition to these predefined filters, scouts can enter text comments such as the player's fit for a particular playing style, ease of transfer, or other strategic considerations. Using these additional comments, the app leverages the OpenAI API to suggest a suitable player from the dataset. The AI provides an introduction to the selected player, including a summary of their strengths and weaknesses. Once a player is chosen, the app dynamically updates an embedded SofaScore widget using the player's ID to display up-to-date performance data and player ratings. Simultaneously, it uses the Pytube library to search for and display a relevant YouTube video of the player—all without requiring a YouTube API key. Finally, the app maintains a searchable log of all previously reviewed players and offers users the ability to download this history, along with the AI's comments, as a CSV file.

Main Design Decisions

One of the key design decisions was selecting a dataset suitable for integration with the SofaScore widget. Specifically, it was essential to find a dataset that included player IDs compatible with SofaScore, as these IDs were critical for dynamically embedding the external widget. For this reason, a Kaggle dataset sourced directly from SofaScore was chosen. Although the number of players in the dataset is somewhat limited, it is sufficient to demonstrate the functionality and potential of the prototype. To handle natural language inputs and player selection, the OpenAI API was chosen for its speed and reliability. The prompt was carefully designed to extract the player's name separately, allowing seamless integration with both the SofaScore widget and the YouTube video component. Pytube was another key addition. It enabled the app to search YouTube using a custom query based on the selected player and return the top result. This video is then embedded directly into the app without requiring a YouTube API key.

Difficulties

The primary challenge was finding a dataset that included a large number of players while also meeting the specific requirements of the app—most importantly, containing SofaScore-compatible player IDs. As a result, a smaller dataset was used, which limited the variety of players but still allowed the app's core functionality to be demonstrated. Initially, the app was intended to rely on football APIs to retrieve up-to-date player statistics. However, most of these APIs proved to be either difficult to integrate or too expensive for accessing high-quality data. This led to a shift toward using a static dataset alongside the SofaScore widget for real-time statistics. Another limitation involved the OpenAI API's lack of access to real-time data. As a result, any statistical information it provided was based on general knowledge rather than current data. To address this, actual performance metrics were shown using the SofaScore widget, while the OpenAI API was used to generate player summaries and insights. Lastly, the app was originally intended to export the AI-generated report as a PDF. However, due to the complexity of implementing PDF generation and managing additional dependencies, this feature was not completed in the current version.