Sports Performance Analytics App and Dashboard Functional Specification

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The Application

Product Description

The innovative Sports Performance Analytics App and Dashboard was created to meet the demands of analysts, coaches, and sports fans. It provides a thorough framework for analysing, visualising, and reviewing data related to sports performance, including training and game data and possibly even video information.

Product Purpose

This application's main goal is to give users the resources they need to comprehend sports performance in greater detail, which will help players and teams get better.

Features and Functions

Core Features (must have)

Data Analytics Engine: huge amounts of sports performance data are processed and analysed to provide useful insights.

Visualisation Tools: provides a variety of data visualisation options, including charts, graphs, and maybe even video replays.

Dashboard: a single interface offering a comprehensive look at trends and performance data.

Multi-platform GUI: a flexible and easy-to-use UI that works well for cross platform use.

Data Security: ensure that the personal/performance data stays protected and unphased by threats.

None Core Features (nice to have)

Video Analysis Module: Analyse video data in different ways to assess player motions, judgement, and other aspects.

Feedback Mechanism: Enables users to rank or comment on certain performance indicators.

Connectivity to Wearables: assemble wearable data to provide a more thorough performance analysis.

Target Users

This application will be developed for:

Coaches: Providing an outlet for analysing the performance of their squad, planning practices, and making wise choices on the field.
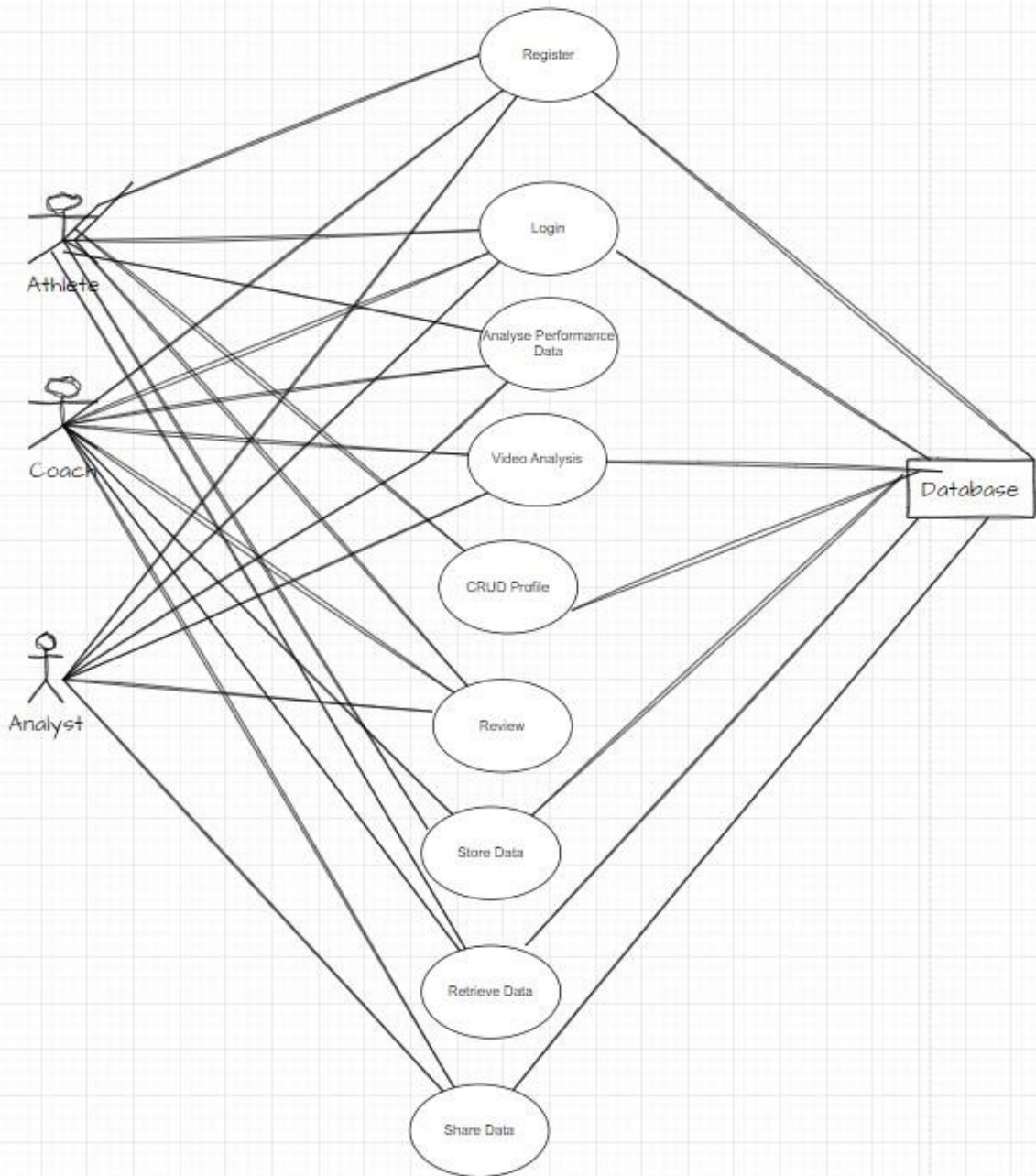
Athletes: Allowing performance monitoring and self-evaluation.

Sports analysts: Facilitating in-depth data analysis for reporting, research, or opinion.

Enthusiasts: Assisting individuals who are passionate about researching sports analytics for fantasy sports or personal knowledge.

Context Diagram and Use Cases

Sports performance and Analytics app

Register

Login

Analyse Performance Data

Video Analysis

CRUD Profile

Review

Store Data

Retrieve Data

Share Data

Athlete

Coach

Analyst

Database

Use Case Name	Register
Actors	Athlete, Coach, Analyst
Brief Description	This use case shows the process in which a new user signs up.
Main Success Scenario	1. The user selects the register option in the app. 2. The user puts in the required information, including username, email and password. 3. The user submits the registration form. 4. The system validates the information and creates a new account 5. The user receives confirmation of registration
Alternatives	1a. The email is already in use

Use Case Name	Login
Actors	Athlete, Coach, Analyst
Brief Description	This use case shows the process in which a user logs in.
Main Success Scenario	1. The user selects the login option in the app. 2. The user enters their username and password 3. The system verifies the credentials. 4. Upon successful verification, the user is logged in and directed to the homepage.
Alternatives	1a. The password is incorrect

Use Case Name	Analyse Performance Data
Actors	Athlete, Coach, Analyst
Brief Description	This use case shows the process in which a user analyses data.
Main Success Scenario	1. The user navigates to the performance section. 2. The user selects the dataset they wish to analyse. 3. The system presents data in form of graphs and charts 4. The user examines the data for their benefit.
Alternatives	1a. Data not available

Metrics for Success

Success of the project will be judged based on:

Functionality: Once I create a fully functional application

User Engagement: The frequency and duration of user interactions with the application.

Feedback and ratings: Positive user reviews and high application platform rating scores.

Data Accuracy: Making certain that the insights and analytics offered are reliable and precise.

Precedent and Inspiration

This concept maintains a unique vision while gaining influence from existing tools in the constantly evolving field of sports analytics. My deep love for the game and strong interest in data analysis have been crucial in defining this project. I am a passionate fantasy football fan and sports fan.

User-Centric Approach: This project's main goal is to understand sports data analysis from a user's perspective. The goal is to improve the user experience and create a connection among professionals and sports fans.

Cross-Platform Compatibility: Our project aims to be a useful Cross-platform tool.

Data Security: To promote a sense of dependability and trust among the user base, there is a high priority on data security.

In summary, the precedent and inspiration for this project are deeply rooted in a love for sports, a passion for fantasy football, and the desire to give users access to an extensive, safe, and user-friendly sports analytics platform. The initiative is motivated by a sincere love of the sport and the ability to use data analysis to improve the sports experience.

Bibliography

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