

PLAYER PERFORMANCE ANALYSIS SYSTEM

USE CASE MODEL



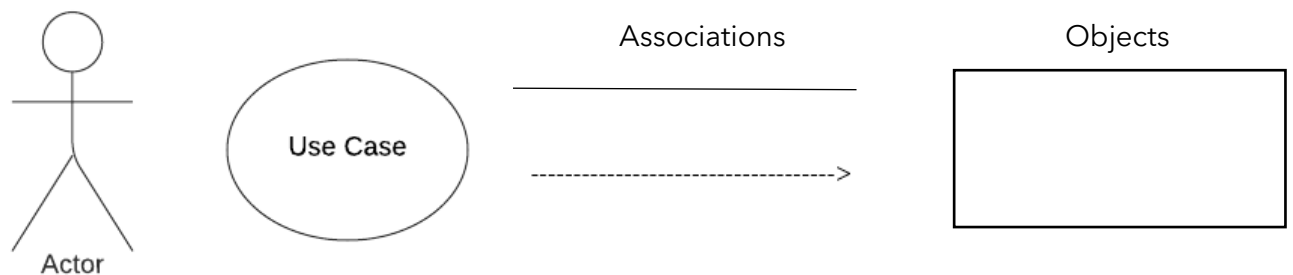
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Aim (Objective) :

Creation of a UML use case model for the Player Performance Analysis System.

Notations:

- Use Case: Horizontally placed ovals that indicate the various uses the users might have.
- Actors : Stick figures that represent the people actually employing the use cases
- Associations : Line between actors and use cases. In complex diagrams, it is important to know which actors are associated with which use cases.
- System Boundary Boxes : A box that sets a system scope to use cases. All use cases outside the box would be considered outside the scope of that system.



Identification of Actors

- Players: The end users of this software
- Admin:
 - ❖ Coach
 - ❖ Fitness Trainers
 - ❖ Analysis Team

Identification of Scenarios

Main Success Scenario

1. Register (sign up)
2. Login (Authentication)
3. Logout
4. View profile
5. View team stats
6. View individual player stats

7. View specific metrics
8. Notify during announcements
9. Post messages
 - ❖ Coach suggestions and feedback to players
 - ❖ Players messages to coach
10. View Analysis
11. View Match reports
12. View Match videos
13. View opponent reports and videos
14. Change match data
15. Change Player info.
16. View player activity

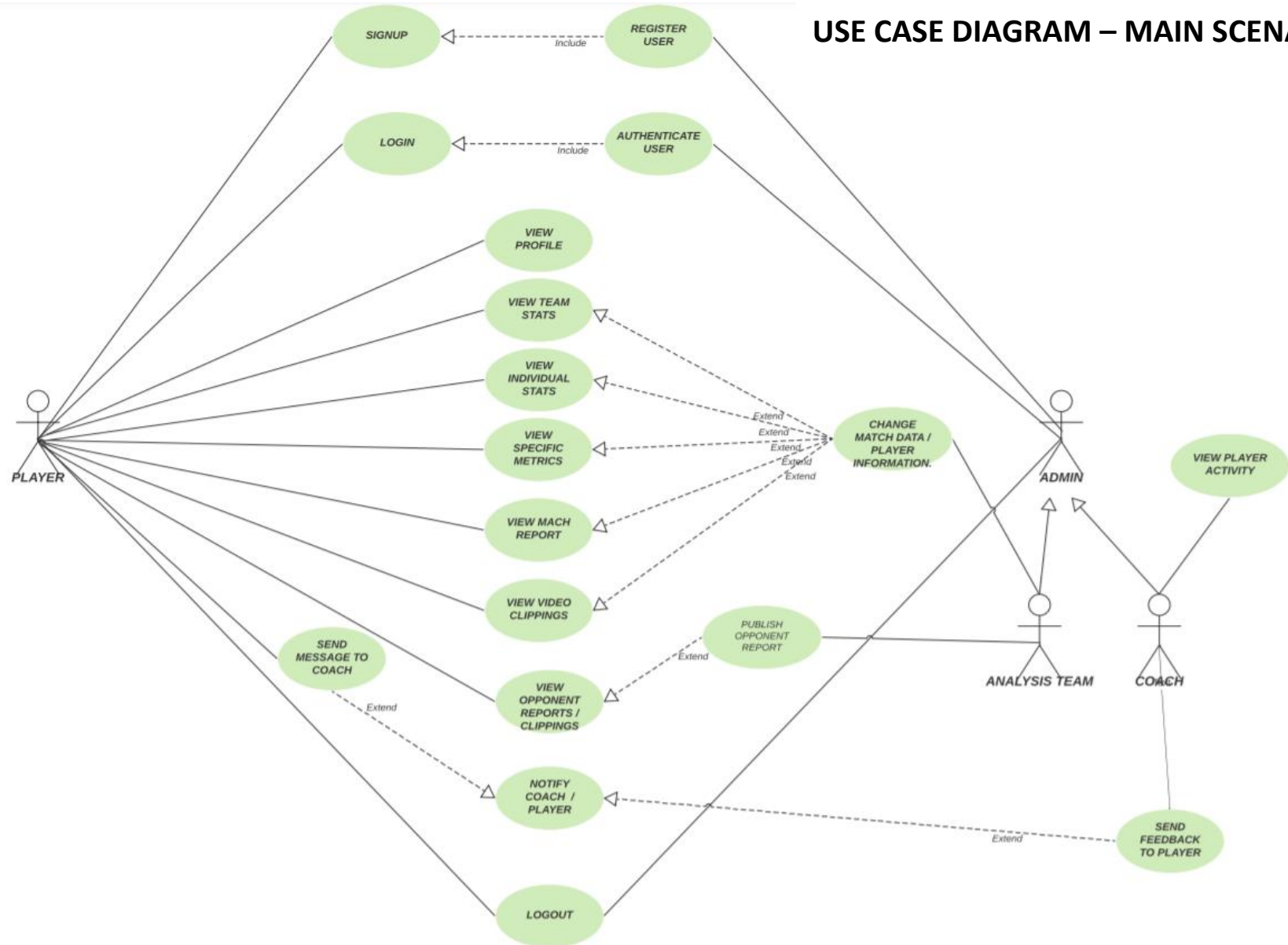
Alternate Flow (Failure Scenario)

1. Invalid credentials
2. System failure
3. Internet Connectivity issues
4. Statistics not updated

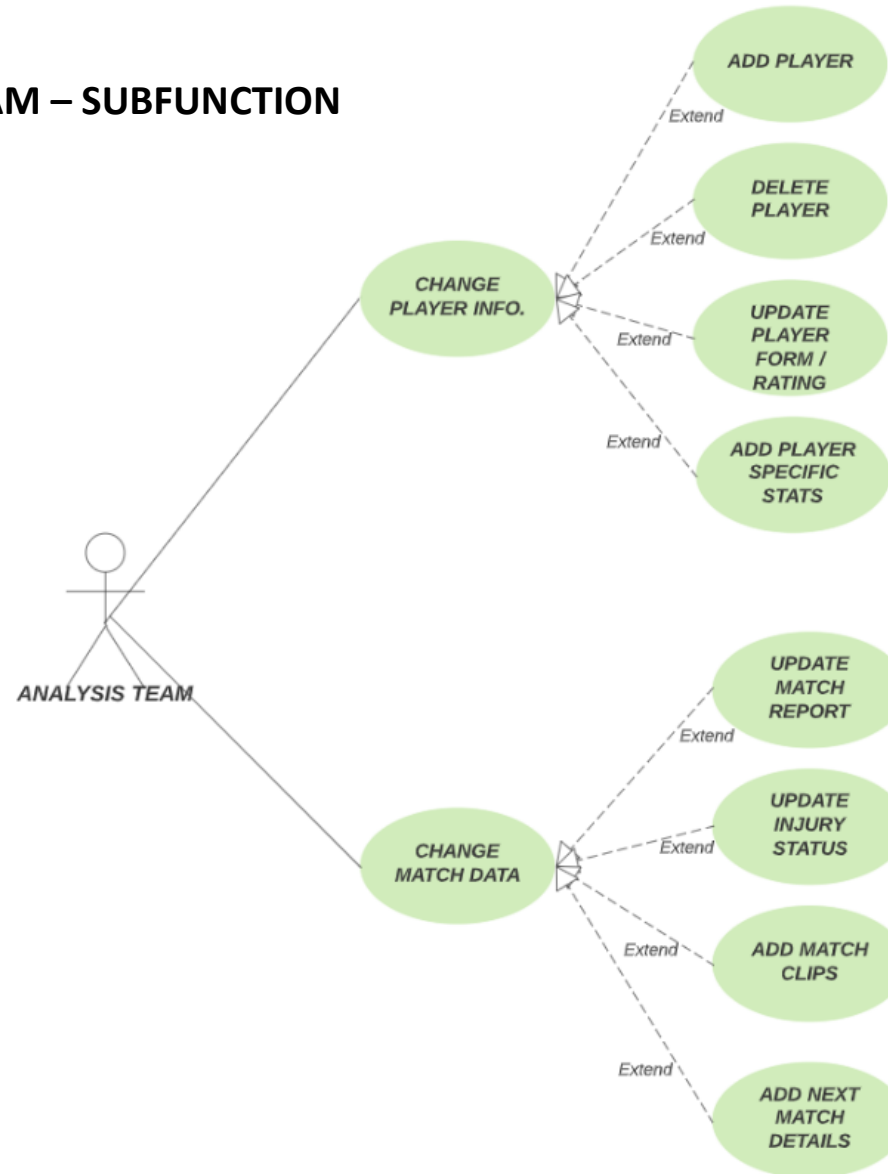
Subfunctions (Changing match data/player info.)

1. Add data
2. Delete Data
3. Update personal info. (age, fitness status etc.)
4. Update match reports
5. Update individual ratings
6. Publish specific statistics
7. New messages/suggestions
8. Schedule meetings/training session

USE CASE DIAGRAM – MAIN SCENARIO



USE CASE DIAGRAM – SUBFUNCTION



Fully Dressed Use Case Description

Main Success Scenario

1. Initially all players, coaches, fitness trainers and members of the analysis team have to register in the website: set username and password.
2. The user (admin or player) should login into the system with their username and a valid password.
3. The user can logout once they have finished accessing the software.
4. The players can view their general details in the profile section.
5. A player can view the statistics, graphs and form details for the entire team.
6. A player can view his performance and statistics for the running season.
7. A player can shortlist specific metrics like passing accuracy, arial duels won etc. and view stats corresponding to those metrics.
8. Notification is sent to the player/coach's profile on receiving new messages/announcements/updates.
9. Coaches can provide suggestions to players and players can also communicate with coaches in a "Coach's Corner" forum.
10. Players can view an in-depth analysis on the team's strength and weaknesses.
11. Players can view the repots of their previous matches.
12. Players have the provision to view match clippings for better learning and improvement.
13. Players have access to analysis and clippings of their next opponents.
14. Admin side updates data after every match.
15. Admin side updates player specific details after every match.
16. Coach can view details regarding how many players have read announcements and messages.

Alternate Scenario

To support recovery and correct accounting, ensure all transaction sensitive state and events can be recovered from any step of the scenario.

1. Login Failure:
 - ❖ New user tries to login: The system displays that the username is invalid and goes back to the login/signup page.
 - ❖ Existing user provides invalid username/password : The system displays if the username is invalid, or if the password is wrong , and goes back to the login/signup page.
2. In case of internet connection issues, the system fails to update. In this case, the data till the time of the connection failure is saved and can be recovered upon logging in again.
3. When the statistics and metrics for the last played match is not updated within the specified time, players or the coach can alert the analysis team.

4. If the player cannot view videos properly due to poor connectivity, the description given for the specific clipping will be displayed.

Subfunction (Changing Data)

1. The admin team can add/delete/update player data and match reports.
2. Team and player specific statistics can be added after every match to the database.
3. Send new messages to players/ coaches.
4. Coaches can schedule training sessions and team meetings with the entire team or a specific player.

Documentation

This use case is illustrative and exhaustive and provides a very good visual description and detail of the system. The use case brings forward the various functionalities of the system along with the alternative flows and stresses upon the important sub function of the system also. Summarising this use case diagram gives a lucid and vivid description of the system and its functionalities.