

**SCSJ3253: PROGRAMMING TECHNIQUE III**

# **PROJECT**

# **PLAYER SCOUTING MANAGEMENT SYSTEM**

|  |  |
| --- | --- |
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1. **PROJECT OVERVIEW**

Every students has been assigned to program a project. Theme that were given by lecturer is FIFA World Cup. Hence, it has been decided among groupmates to create a project called Player Scouting System.

FIFA World Cup is the short form of Federation Internationale de Football Association or Soccer’s World Governing Body. It is an international association football boasts 209 member’s, rivalling that of the United Nations, and is arguably the most prestigious sports organization in the world. The tournament will be held every four years since the inaugural tournament in 1930.

* 1. **TITLE**

Player Scouting System aims to manage player’s statistics along with information in each country that were participated in FIFA World Cup. The information that will be provide by the system is player’s information, tournament matches and information such as goal’s, assist and card’s throughout FIFA World Cup games. It can only be access by management staffs and administrator itself.

This system contains homepage module along with login button’s for administrator and staffs. Administrator and staffs have their own access level. For administrator, they will be able to create and edit player information’s while staffs should only be able to view all the player’s information.

* 1. **OBJECTIVE**

Each project must have their own objective in order to create a project. Player Scouting System as well have their own objective.

Our main focus for this project is to allow management to manage FIFA World Cup much more systematic. They can create and update ongoing information in this system. This can minimise their time management to update all the information. Other than that, they can begin to start paperless campaign whereby they can use this system without having any hassle of managing FIFA World Cup activity.

Last but not least, they can update on the spot if there is any impromptu update such as player admitted to hospital and cannot be playing the whole season due to injury. This can be the advantage for management team since they are going to be on track in any situation.

* 1. **PROJECT SCOPE**

Player Scouting Management System have two different kind of scope which is Administrator and Staffs. Their access level is different whereby staffs have read-only access while administrator should have read and write access.

* + 1. **USER SCOPE**

Below are the users scope for Player Scouting Management System.

* + - 1. **ADMINISTRATOR**

Administrator should be able to login. Once admin is logged in, they should be able to see multiple kind of country or teams that participate for FIFA World Cup. Admin should be able to view player for each teams. Admin have write access whereby they can create player or team for this tournament. Admin should be able to view matches along with their score.

* + - 1. **STAFFS**

Staffs should be able to login. Once staffs is logged in, they should be able to see multiple kind of country or teams that participate for FIFA World Cup. Staffs should only have read-only access hence they should only be able to view teams, players and matches.

* 1. **METHODS**

Developers of Player Scouting Management System has decided to use Agile Methodology which they believe that it could speed-up the process of developing the system. Lead developer has distribute each module for each developer.

At the end of the day, each module can be finish up on time without exceeding given timeline by project manager.

* 1. **TIMELINE**

For this project, we have set a timeline where we should be finishing all modules including testing and document creation. Hence, attached timeline of this project for reference using gantt chart table.

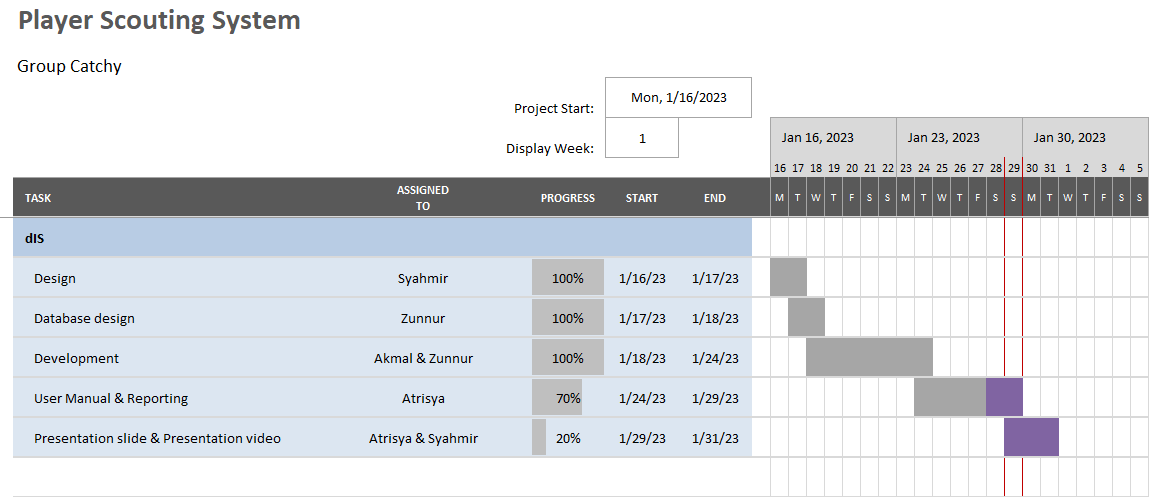


Figure 1.5 Project Timeline

* 1. **TEAM**

Each member in this project has been given task to develop, testing including document creation in order to finish up this project within the timeline. Table below define each task that has been assigned to members.

|  |  |
| --- | --- |
| **Name** | **Task** |
| Zunnur | Develop module, Testing |
| Akmal | Develop module, Testing |
| Atrisyia | Testing, Document Creation |
| Syahmir | Testing, Document Creation |

Table 1.6 display assigned task to each member

* 1. **DELIVERABLES**

As we known, deliverables need to be provide upon the completion of the project. Upon of that, we managed to meet within the timeline following to all modules that has been developed along with its documents. Hence, below attached project deliverables table for reference.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Deliverable Name** | **Description** | **Owner** | **Status** |
| 1 | Prepare Project Plan | Define objective and timeline of the project. Assigning module task to each member | Zunnur | Completed |
| 2 | Design Wireframes | Design layout of Player Scouting Management System | Syahmir | Completed |
| 3 | Develop Register Module | Develop register page front end and its functionality | Akmal | Completed |
| 4 | Develop Login Module | Develop login page front end and its functionality | Syahmir | Completed |
| 5 | Develop Country List Module | Develop country list page front end and its functionality | Zunnur | Completed |
| 6 | Develop Player List Module | Develop player list page front end and its functionality | Zunnur | Completed |
| 7 | Develop Search Player Module | Develop search player page front end and its functionality | Zunnur | Completed |
| 8 | Develop Player Information Details Module | Develop player information details front end page and its functionality | Akmal | Completed |
| 9 | Develop Edit Player Information Details Module | Develop edit player information details front end page and its functionality | Akmal | Completed |
| 10 | Develop Create Player Module | Develop create player front end page and its functionality | Akmal | Completed |
| 11 | Develop Create Match Module | Develop create match front end page and its functionality | Zunnur | Completed |
| 12 | Unit Testing | Conduct unit testing after all module has been developed | Akmal, Zunnur, Atrisyia, Syahmir | Completed |
| 13 | Preparation Project Report and Slide | Preparation of project documents | Atrisyia, Syahmir | Completed |

Table 1.7 Project Deliverables

* 1. **RISK**

Risk is any unexpected event that could affect your project. It would not only be apply to project but to people, processes, technology and resources throughout the project.

As for this project, we intended to do a management system to reduce the cost, time and technology. Hence, the risk for this system is low. However, the risk of this project along the way is wrong inserted data into the system. This could be apply since this system need to be insert all the details one by one. We are yet to create a system with bulk upload functionality which we believe it could be implement in the next version.

As for now, we created a system where they can fill all the information and refer to it instead of using manual ways.

1. **TOOLS AND TECHNOLOGY USAGE**

Tools and technology are important in developing a system hence for tools that developers has decided to use is as below:-

|  |
| --- |
| **Tools and Technology Usage** |
| * GitHub * Visual Studio 2022 * Nuget * MySQL * Dbdiagram.io |

Table 2.0 display Tools and Technology Usage

1. **SYSTEM MODULE**

Player Scouting Management System divided into six section which is:-

* Login Page
* Register Page
* Country List Page
* Player List Page
* Create Player Page
* Create Match Page

Registered members have their own ability to view the system whether as administrator or normal members. For example, administrator should be able to edit the module otherwise they will become a normal member since they only be able to view the module.

1. **MODULE FUNCTIONALITY**

This section will describe each module functionality in terms of usability. It contains several kind of module which will define how to use this system wisely.

* + 1. **REGISTER**

Register page is for FIFA World Cup member who yet to have an account. In order to register, user must not have any binding account. To register, user can simply fill in their email, password and confirm password. Once done, user shall be able to click register and they should be able to view the system.

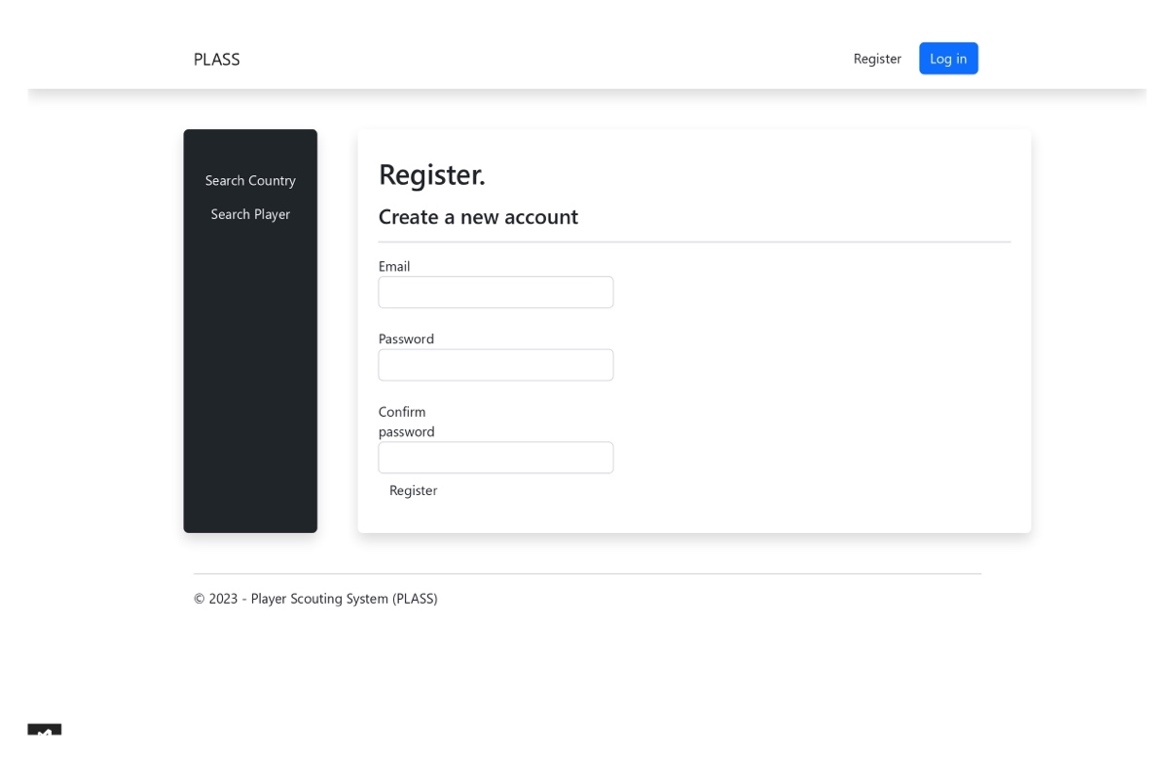


Figure 4.0.1 Register Page

* + 1. **LOGIN**

Login page is for FIFA World Cup member who have already registered to this platform. In order to login, user must using information that they use throughout registration process. User can simply fill in their email and password. Once done, user shall be able to click login and should be able to view the system.

User should also be able to use Remember Me checkbox for future login to avoid any wrong login in case they forgot their credentials.

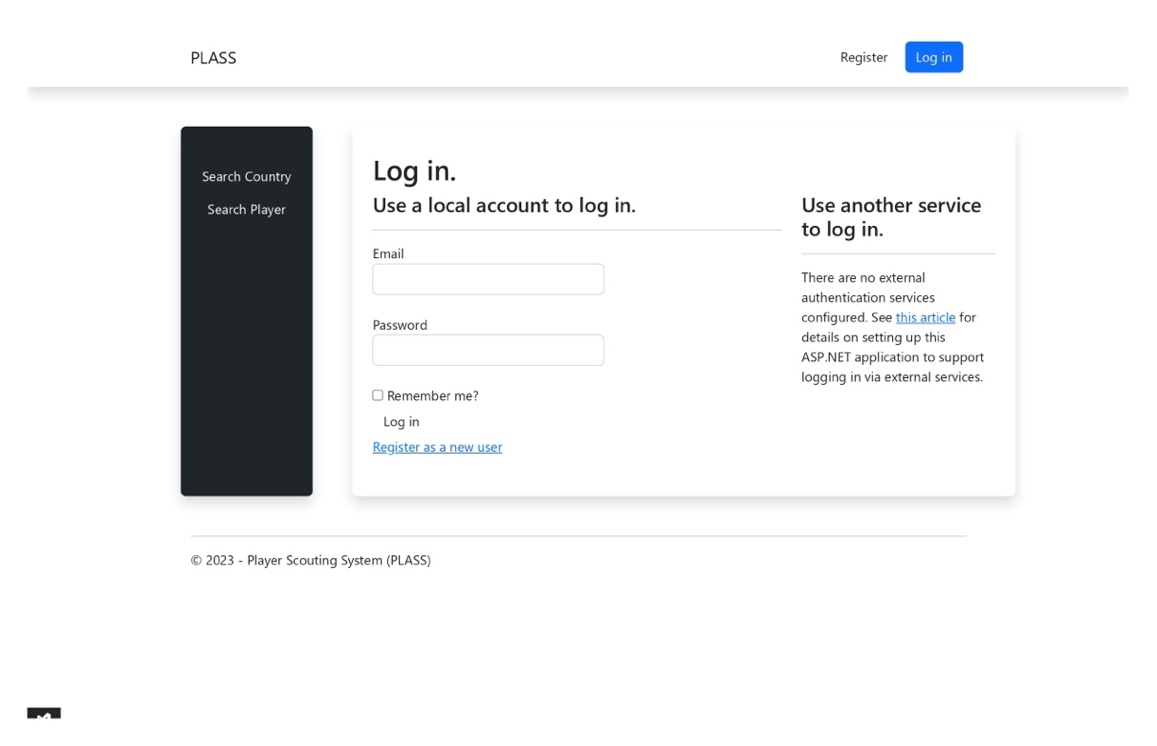


Figure 4.0.2 Login Page

* + 1. **COUNTRY LIST**

This page is for user to view all country that participate for this tournament. It can be seen that the list display in alphabetical order. User should also be able to search by country to see particular country that they demand to see.

In this page, the list is displayed name of the country, country flag and a checkbox which will be define whether the country qualify for the tournament or vice versa.

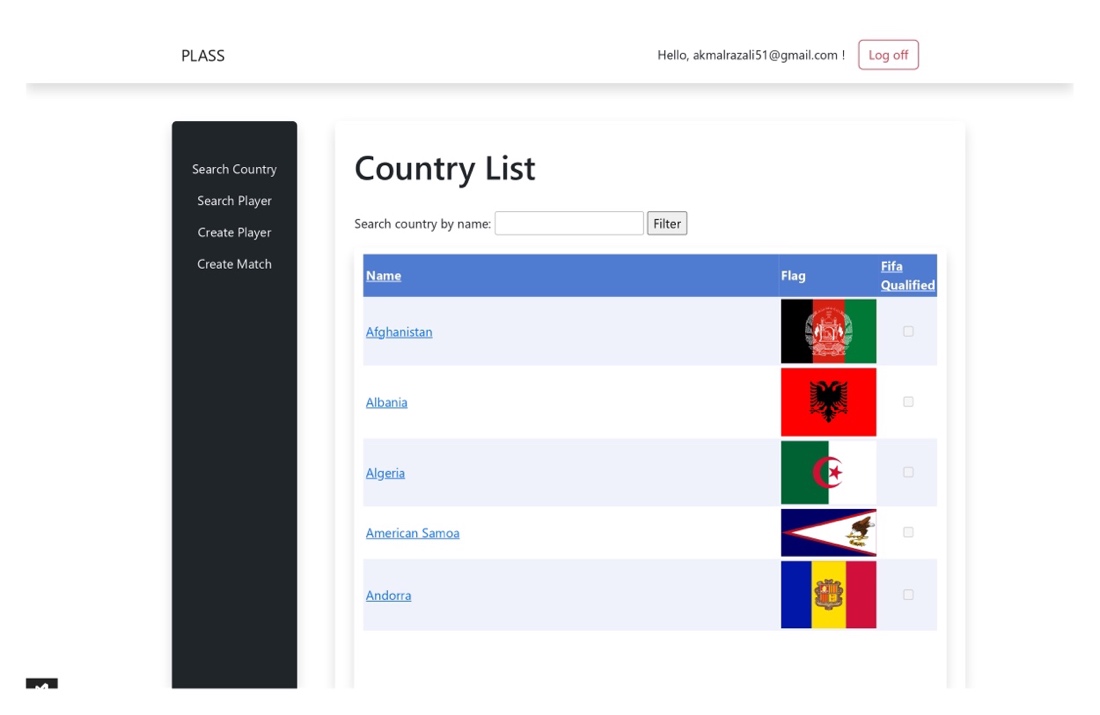


Figure 4.0.3.1 Country List Page

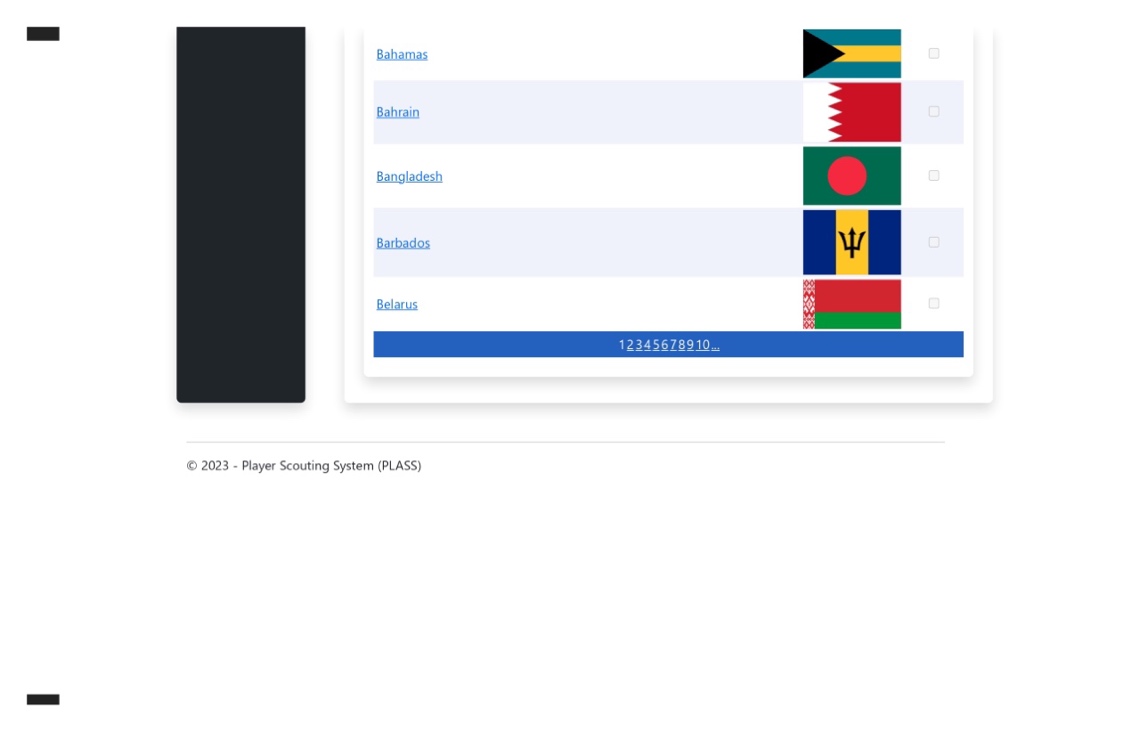


Figure 4.0.3.2 Country List Page

* + 1. **PLAYER LIST BY SELECTED COUNTRY**

This page contains players of the country that user selected. It display players name, date of birth, height, weight, dominant foot and their estimated value. User should also be able to create player in case there is any new member of the team.

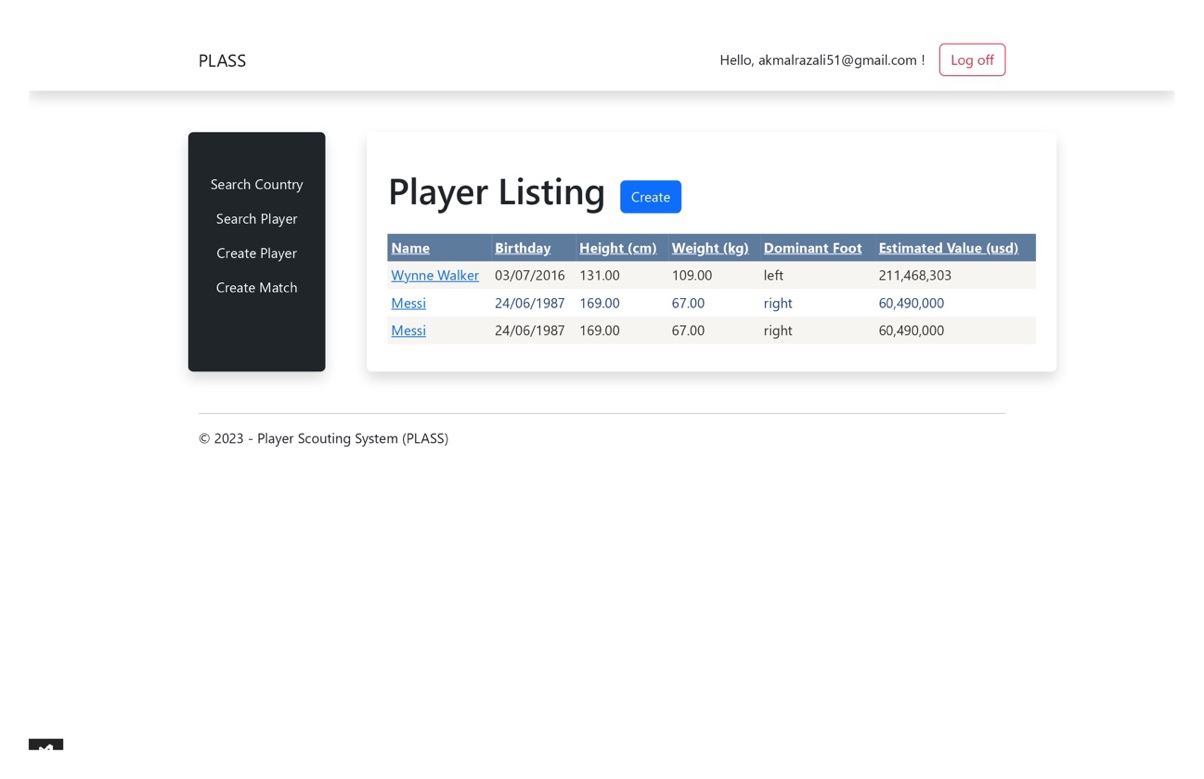


Figure 4.0.4 Player List by Selected Country Page

**4.0.5 SEARCH PLAYER**

This page contains list of players that participate this tournament. It can be search by country which can be simply insert into the textbox and click filter button.

The data that will be display in this page is such as name of the player, country, date of birth, height, weight, dominant foot and their estimated value.

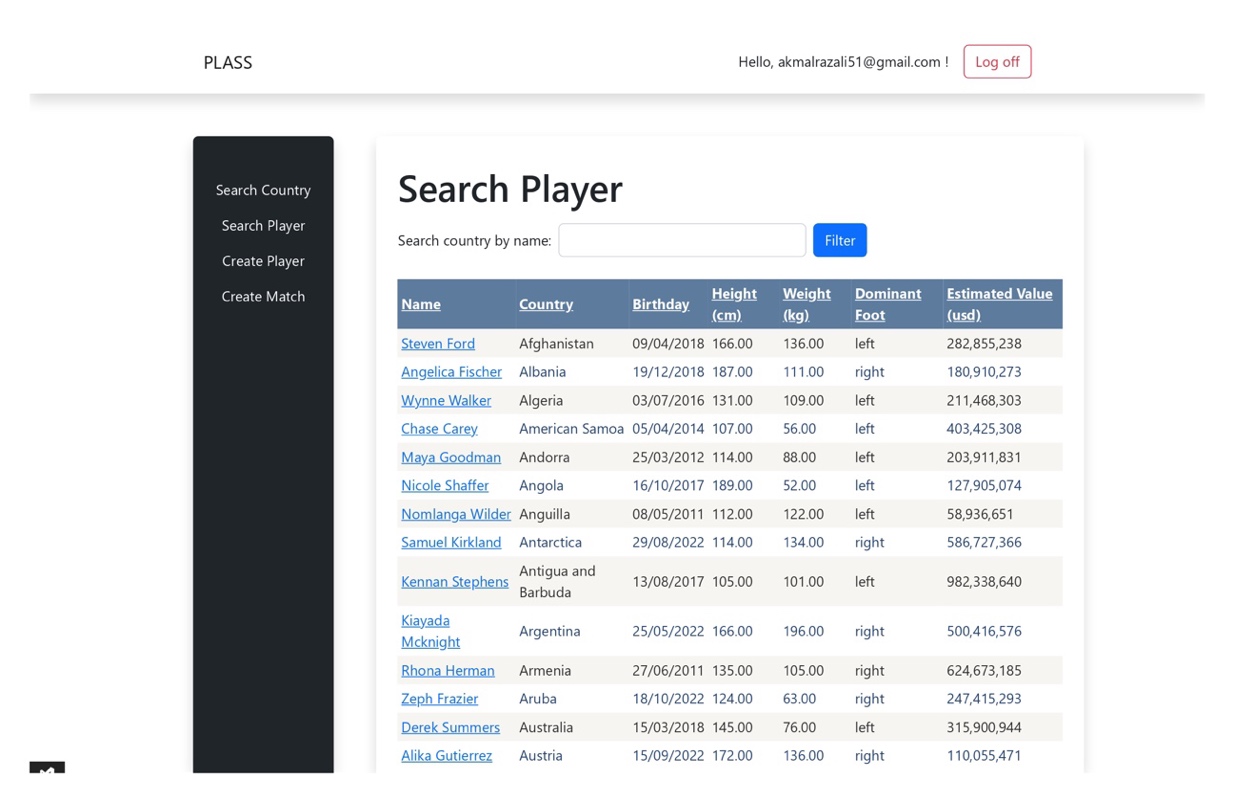


Figure 4.0.5.1 Search Player Page

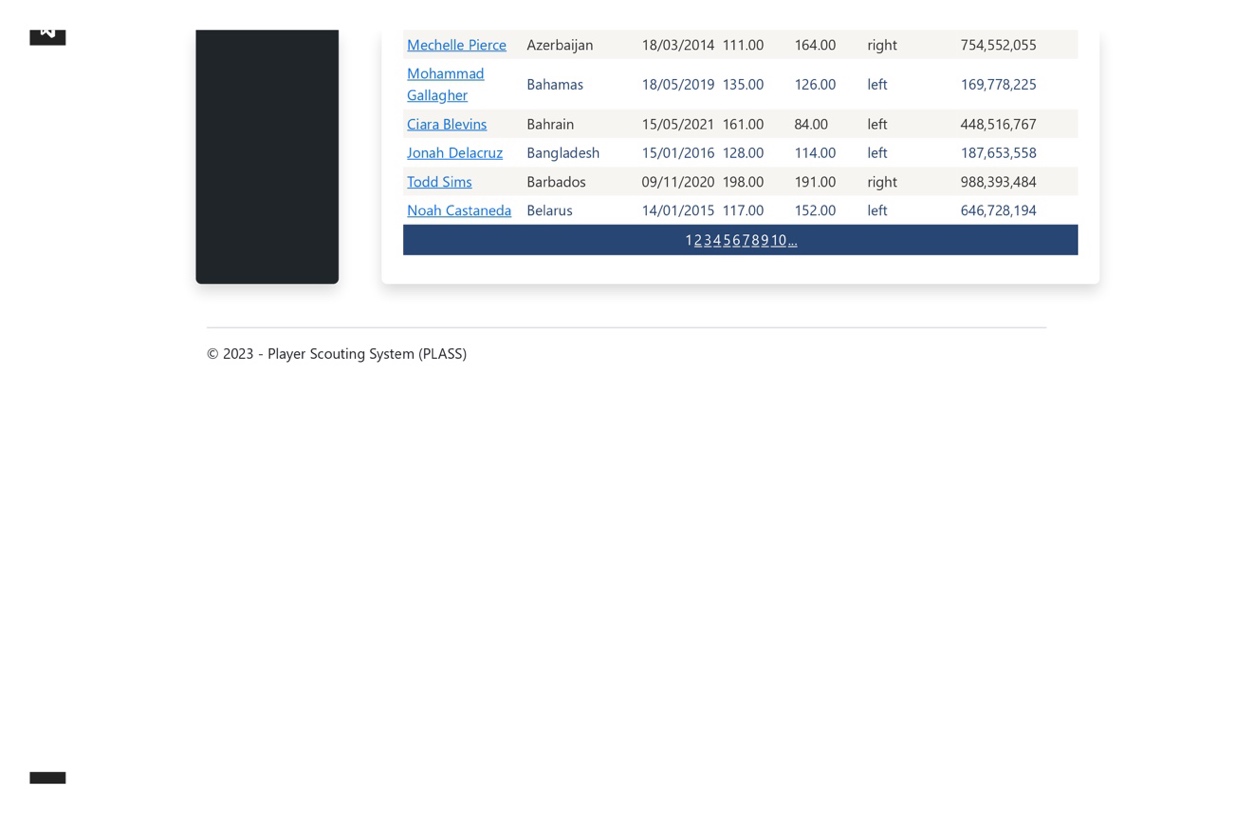


Figure 4.0.5.2 Search Player Page

* + 1. **PLAYER INFORMATION DETAILS**

This page contains particular player information details based on participant that user click. In this page, user shall be able to view into two separate section which is player details and match history.

For player detail section, user should be able to view their name, date of birth, height, weight, dominant foot, estimated value and country name. At the end of the section, user shall see edit button where they can edit player information.

As for match history section, user should be able to view date, goals, assists, yellow card, red card, jersey number and their position.

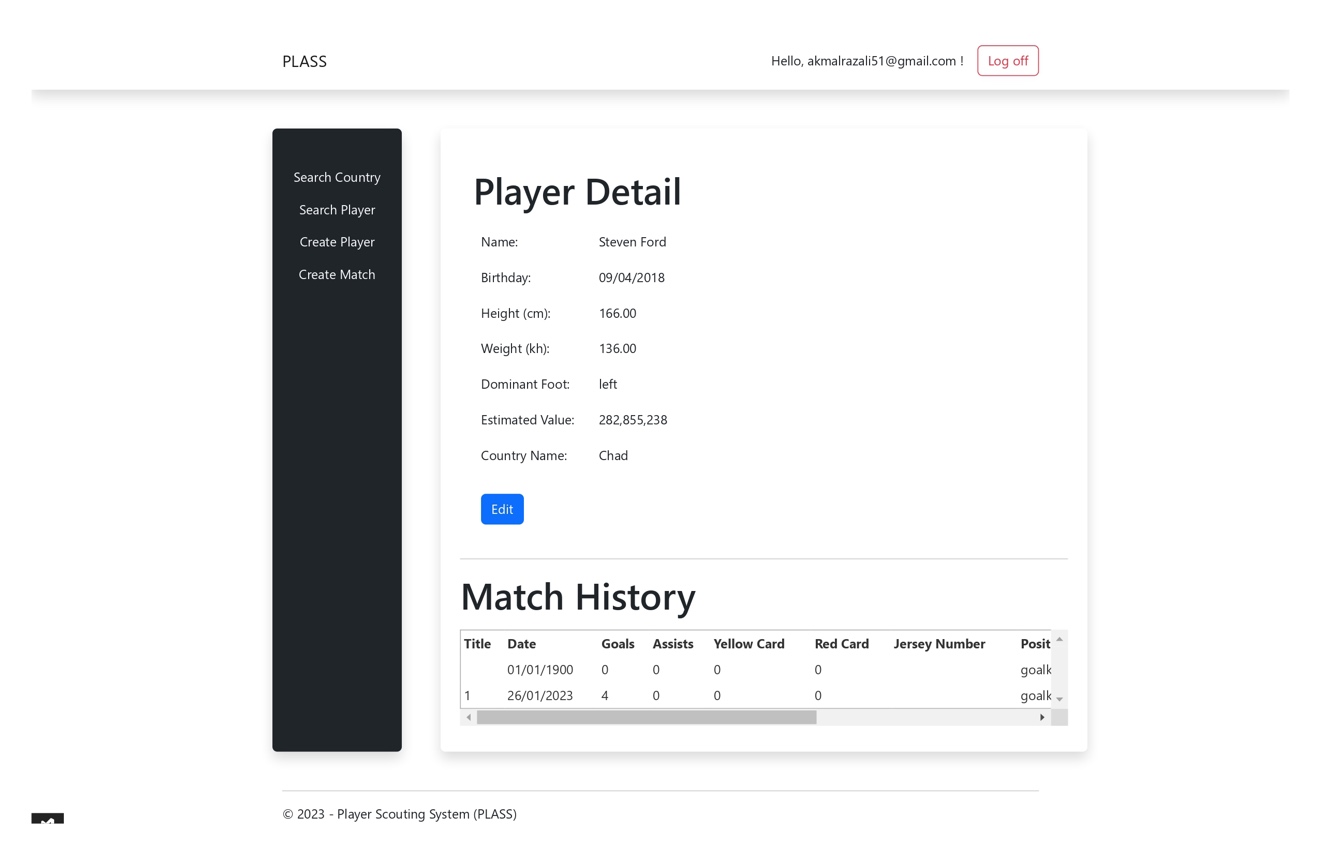


Figure 4.0.6 Player Information Details Page

**4.0.7 EDIT PLAYER INFORMATION DETAILS**

This page display edit player information details page after user click edit button in player information details page. In this page, user shall be able to view into two separate section which is player details and match history.

For player detail section, user should be able to view their name, date of birth, height, weight, dominant foot, estimated value and country name. At the end of the section, user should be able to see update button where they can update what has been edited and cancel button where they can cancel all edited details that has been filled.

As for match history section, user should only be able to view the details.

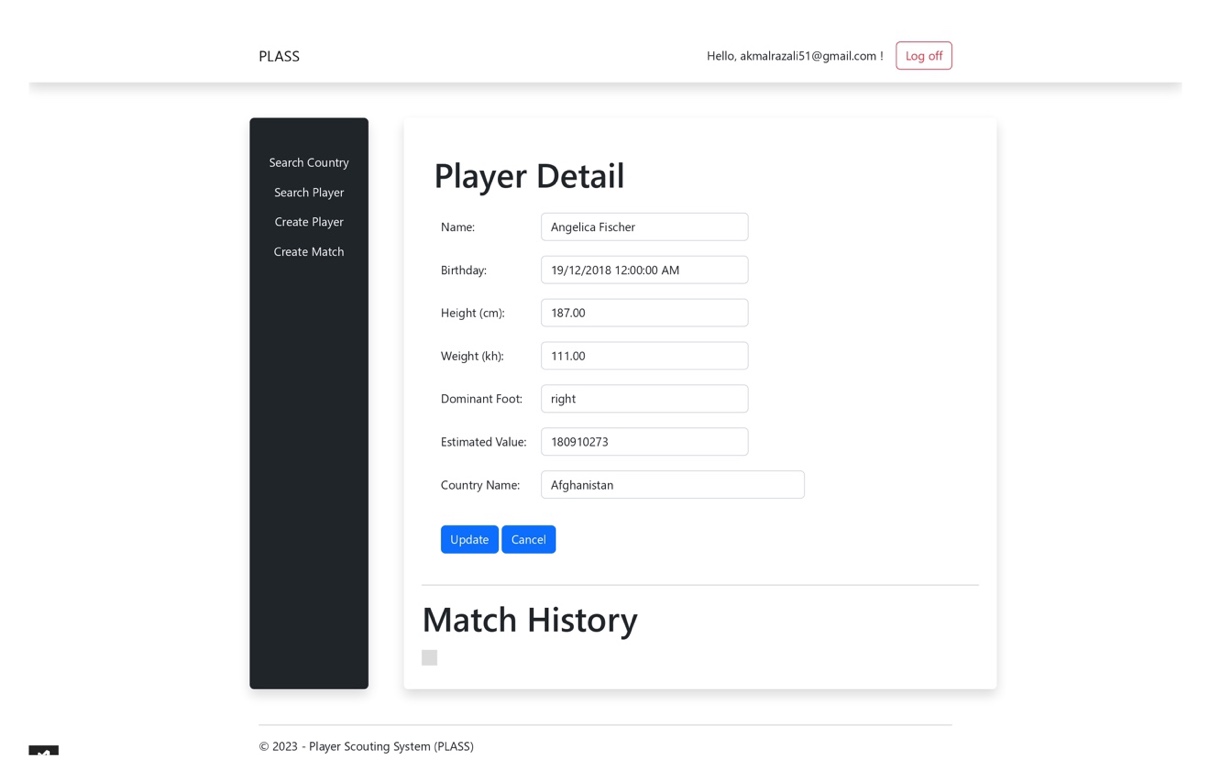


Figure 4.0.7 Edit Player Information Details Page

**4.0.8 CREATE PLAYER**

This page display create player page after user click create button in player list page. In order to create player, user can simply fill in particular player name, date of birth, height, weight, country, dominant foot and their estimated value. Once done, user can click submit button and shall be seen in player list page afterwards.

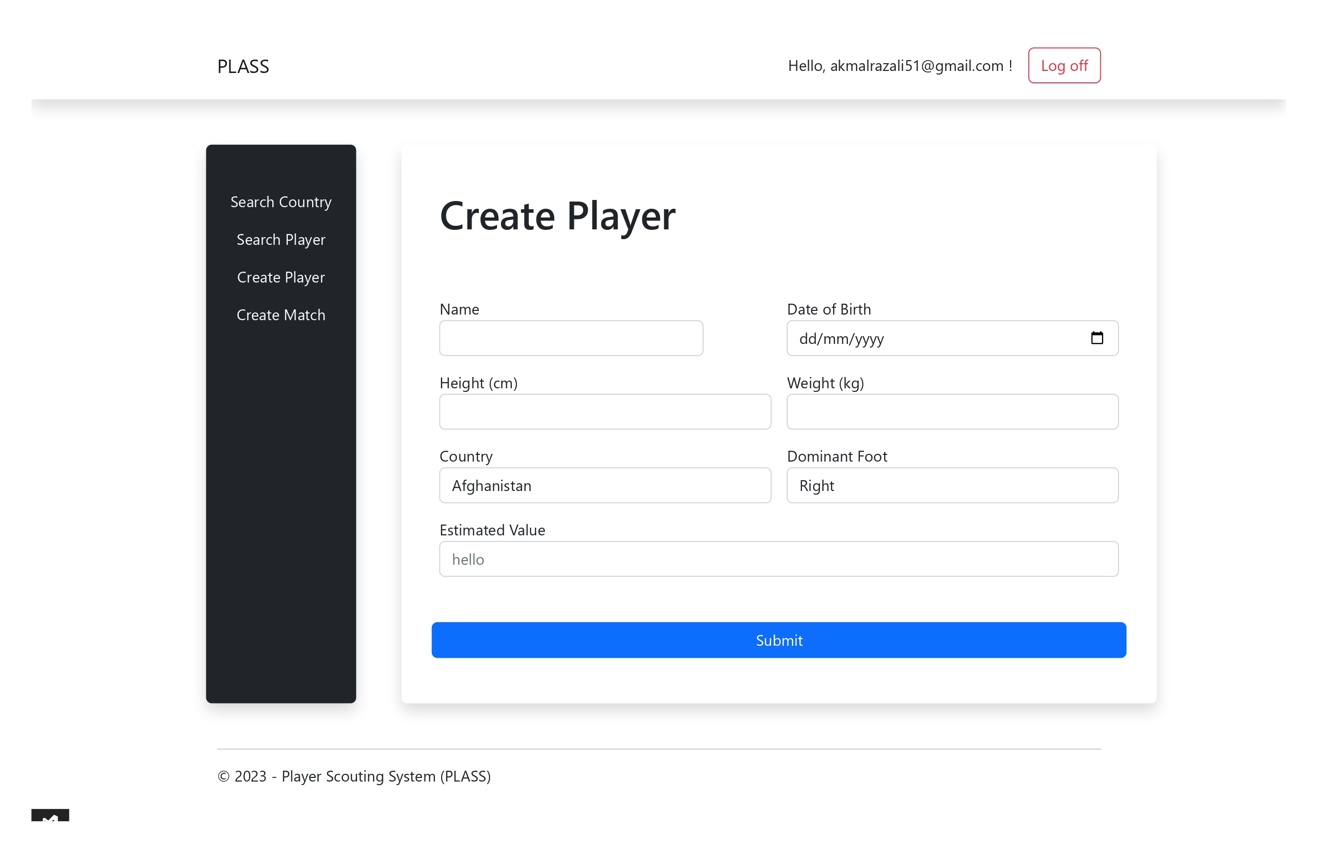


Figure 4.0.8 Create Player Page

**4.0.9 CREATE MATCH**

This page display create match page when user click Create Match button at the sidebar. In order to create match, user can simply insert player name, title, date, goal, assist, yellow card, red card, position and jersey number. In radio button form, user can select whether the player is captain or vice versa. As for team, in dropdown form, user can select country that they playing for. Once done, user can click submit in order to commit the changes.

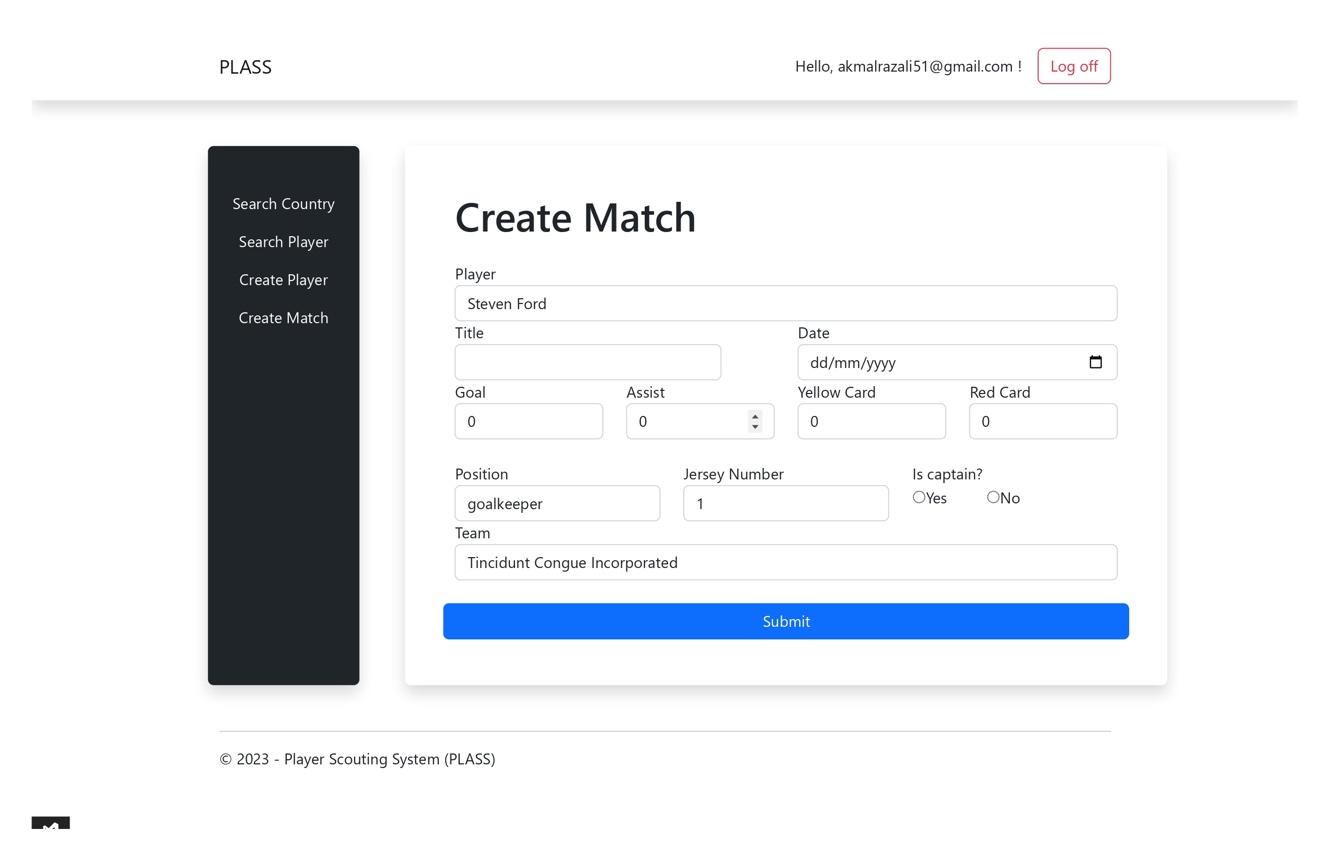


Figure 4.0.9 Create Match Page

1. **DATABASE DESIGN**

Database Design is the organisation of data according to a database model. The designer determines kind of data that need to be stored and how the data elements tie with one another. Attached database design figure for Player Scouting Management System.

* 1. **ENTITY RELATIONSHIP DIAGRAM (ERD)**

Entity Relationship Diagram or ERD for short form is a graphical representation that depicts relationships among people, objects, places, concepts or events within an information technology system. Attached Entity Relationship Diagram figure for Player Scouting Management System for the whole system including administrator and staffs.

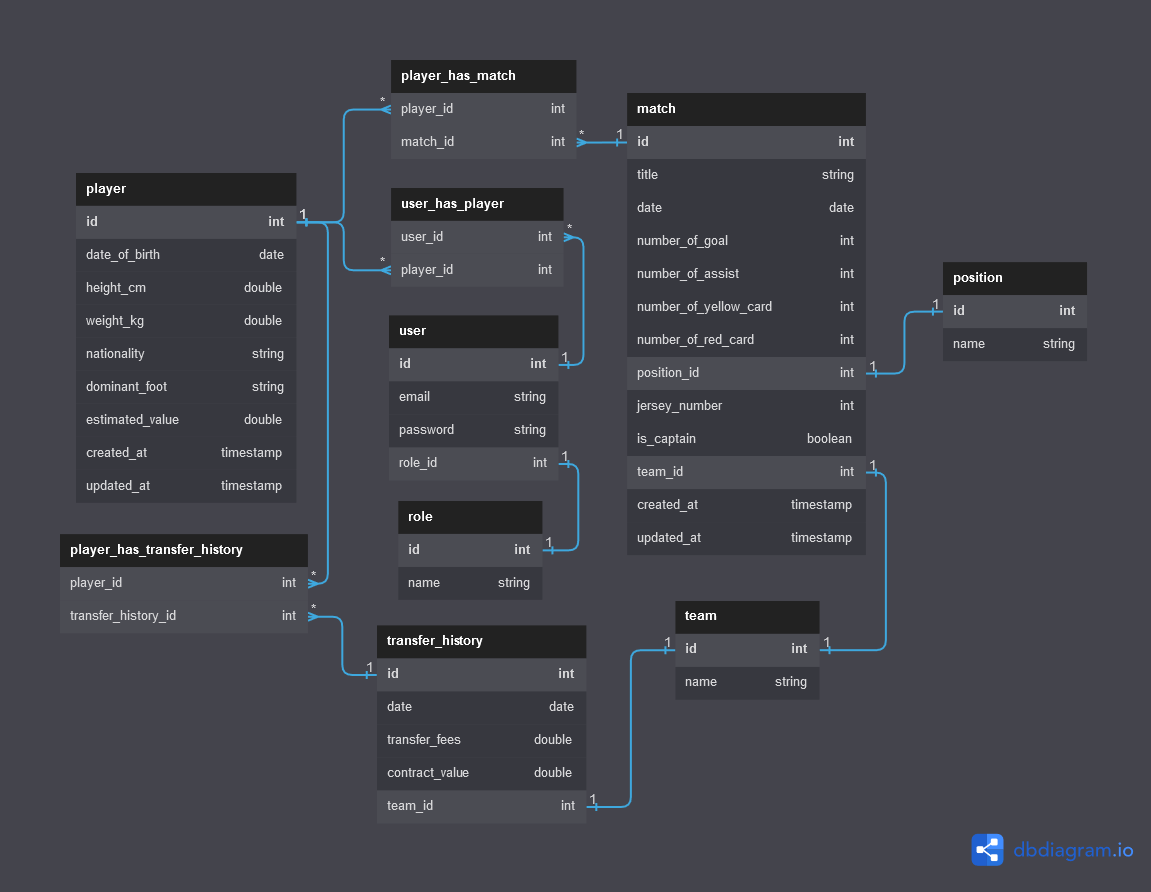
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Figure 5.1 Player Scouting Management System ERD

* 1. **USE CASE DIAGRAM**

User Case Diagram describe the high-level functions and scope of a system. It also identify the interactions between the system and its actors. This can be define as in how the system does and how the actors use it. Attached Use Case Diagram figure for Player Scouting Management System for the whole system including administrator and staffs.

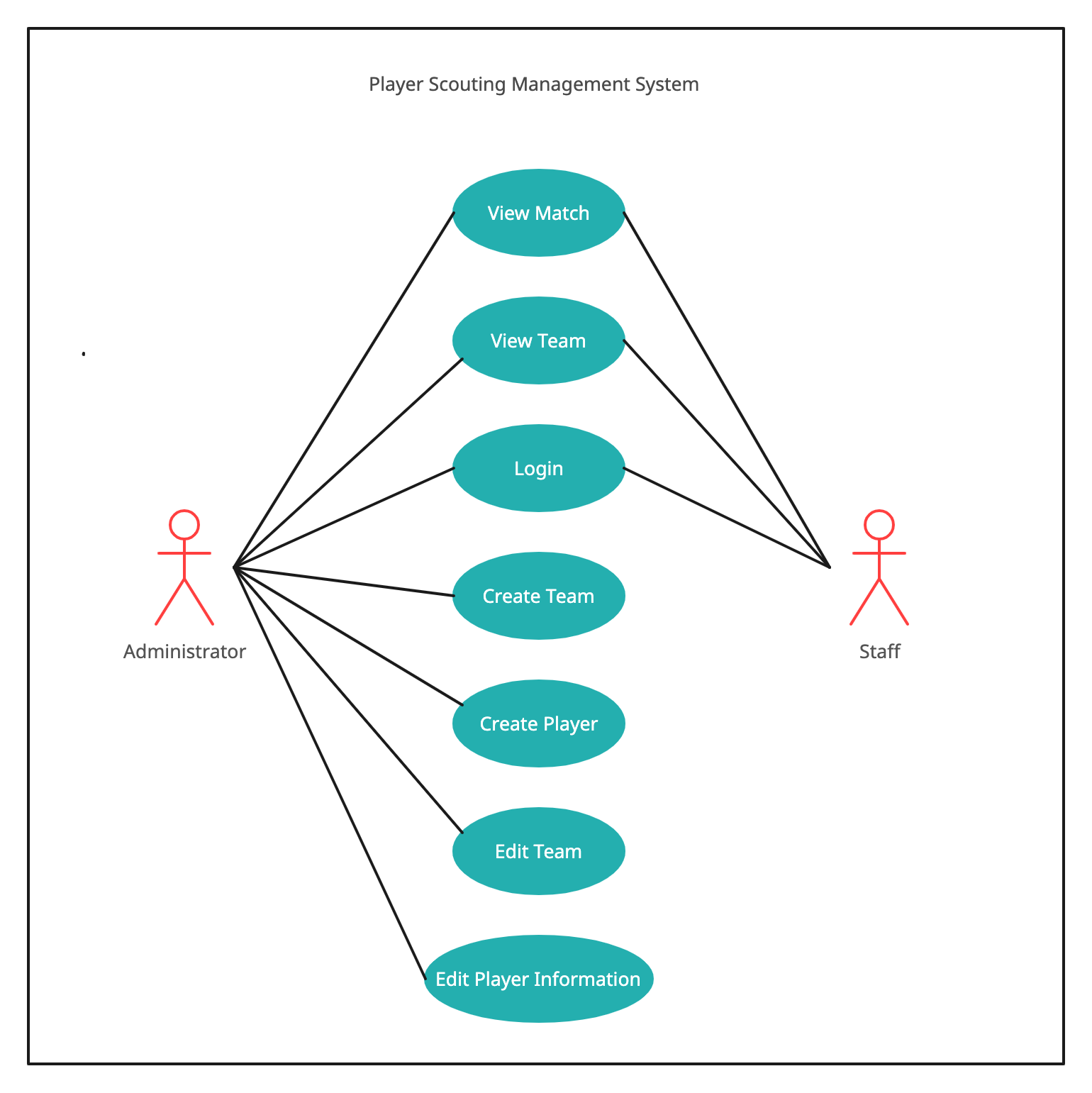


Figure 5.2 Player Scouting Management System Use Case Diagram

* 1. **ACTIVITY DIAGRAM**

Activity diagram is a series of actions or flow of control in a system similar to a flow chart or data flow diagram. Below are the activity diagram for Player Scouting Management System.

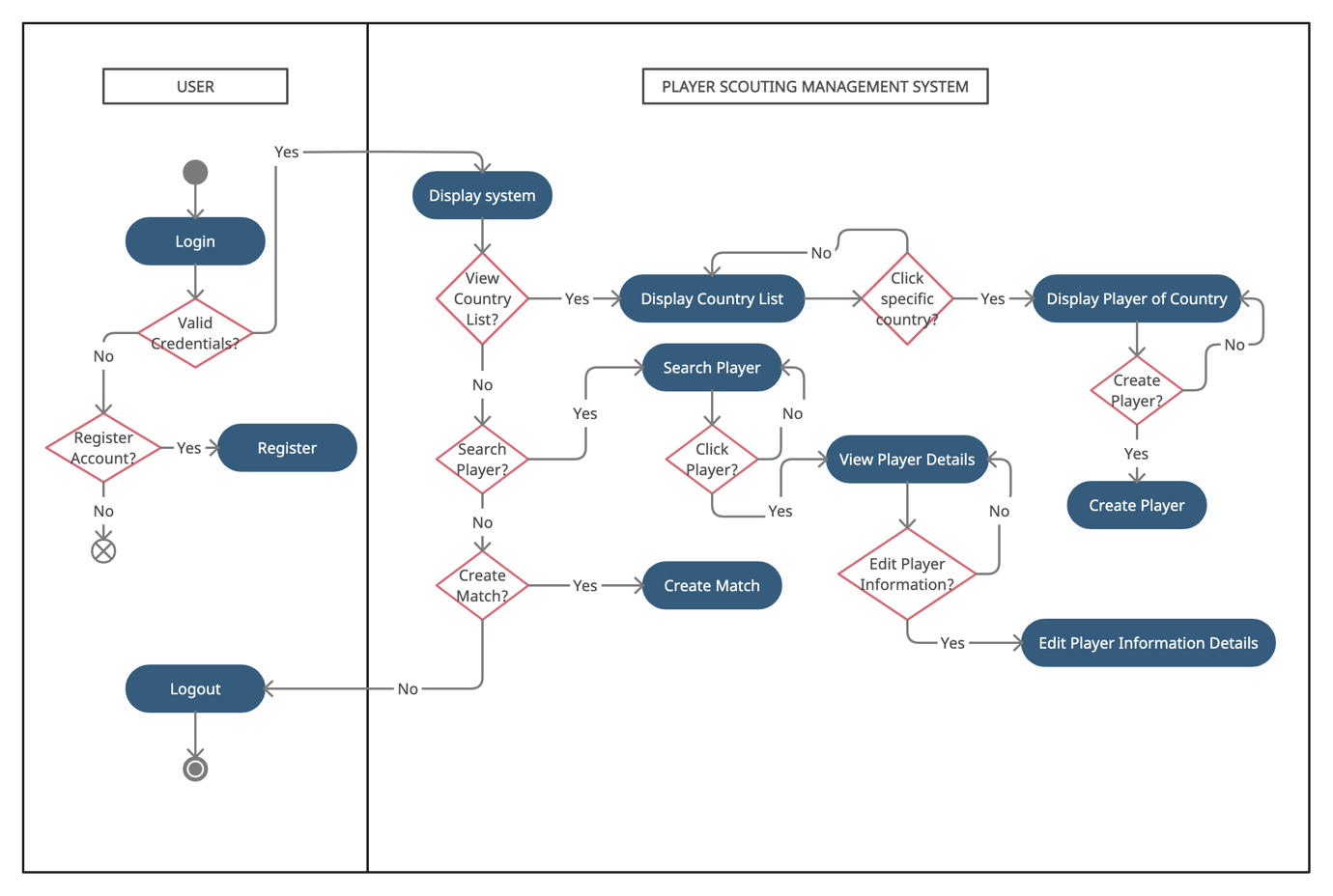


Figure 5.3 Activity Diagram

* 1. **AUTHENTICATION**

Authentication is activity user that performed using specific credentials or details. For this project, we are using email and password as our authentication basis. Below are the authentication process figure throughout the system.

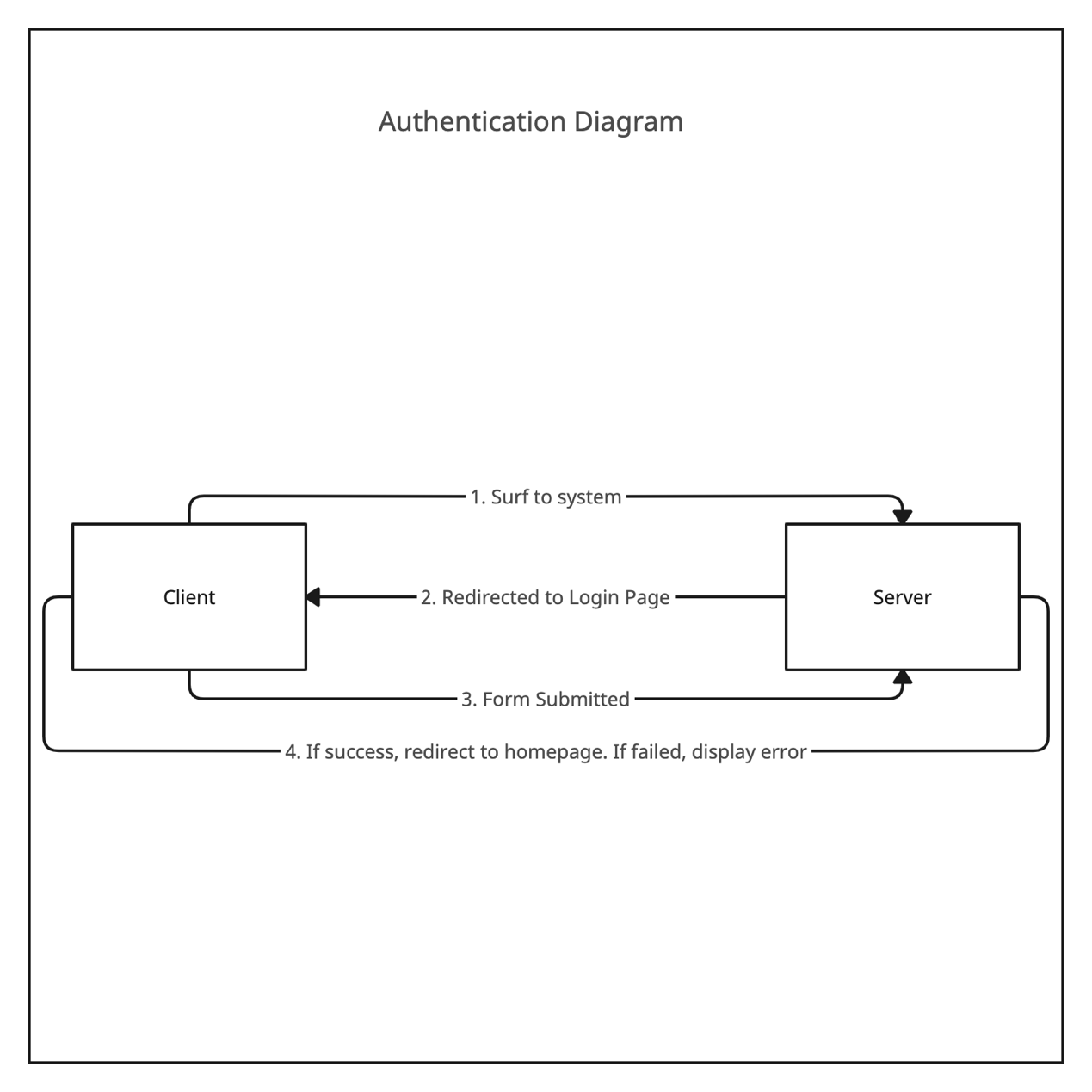


Figure 5.4 Authentication Diagram

1. **REFERENCES**
2. Kattner, M. (no date) *FIFA*, *US Soccer. Sponsored by Volkswagen*. Available at: https://www.ussoccer.com/history/organizational-structure/fifa (Accessed: January 29, 2023).
3. *Official documents* (no date) *FIFA Official Documents*. FIFA World Cup. Available at: https://www.fifa.com/about-fifa/official-documents (Accessed: January 29, 2023).
4. *FIFA World Cup* (2023) *Wikipedia*. Wikimedia Foundation. Available at: https://en.wikipedia.org/wiki/FIFA\_World\_Cup (Accessed: January 29, 2023).