

Project Phase 2

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Course: CSCI-136-03

Player Ranking System

The player ranking system will take the names and statistics of players and place them according to their consistency and performance. The rankings will be produced to indicate how well the players perform at the highest levels consistently. Each player will be given a score and based on the score they will be ranked.

In order to meet all the requested software requirements the software must be able to:

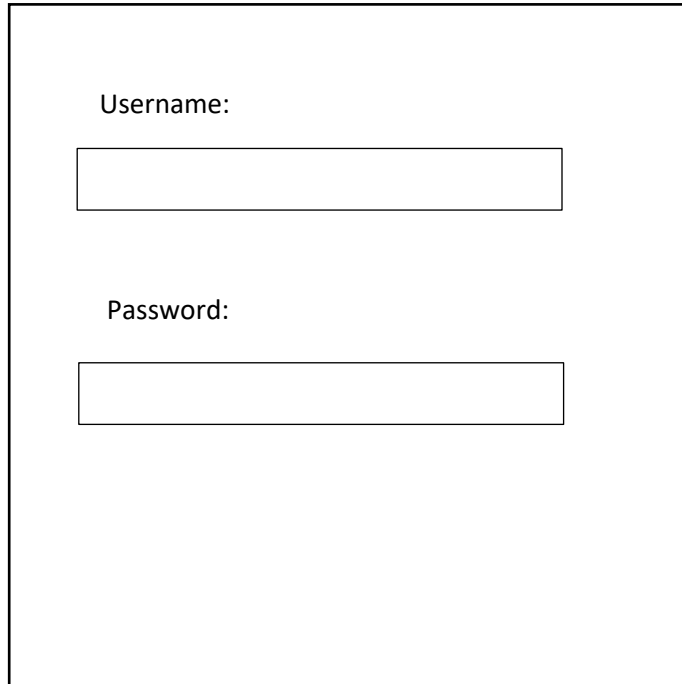
1. Accept player names
2. Develop a unique ID for every player
3. Place players on a list in order of their ability and depending on their position
4. Generate a players name statistics and a picture as well as the player ID once player details have been stored.

User Experience

This program is being created with the idea that club analysts and directors of sport would be the ones to use it. Based on this the software should be easy to use but include the technical terms that these individuals would see on a daily basis. When entering a player name an ID will be generated for him/her and the rest of the statistics can be entered. This is to prevent confusing the system with players that have the same name. The player ID would be placed next to each players name as the lists are generated . To remove players from the list a delete function would be included. For example a player can be removed from the list in the case of that individual being signed by the club, signed by another club or he/she rejects the contract offer and has closed negotiations. The interface will also be password protected so that only specific individuals can have access to the interface and information.

Mock images of Software

The images below are basic images of what the final design should hold. All classes were provided in the first section of the proposal.



A mockup of a sign-in page for a player ranking system. The page is enclosed in a black rectangular border. It features two input fields: a text box for the username and a text box for the password. The text 'Username:' is positioned to the left of the first input box, and 'Password:' is positioned to the left of the second input box. Both input boxes are empty and have a thin black border.

Figure 1 Showing the sign in page for the player ranking system

Class: Midfielder

Image of player

Name: Declan Rice

Height: 6'1"

ID:#####1234D

Specialized Position: Defensive Midfielder

Tackles per game: 1.9

Interceptions per game: 1.9

Blocks:0.2

Score:7.03

Figure 2 Showing profile page for every player with name and statistics

Forwards Rankings:

1. Robert Lewandowski
2. Erling Haaland
3. Cristiano Ronaldo
4. Lionel Messi
5. Kylian Mbappe

Midfielder Rankings

1. Bruno Fernandez
2. Kevin De Bruyne
3. Joshua Kimmich
4. N'golo Kante
5. Leon Goretzka

Defender Rankings

1. Virgil Van Dijk
2. Sergio Ramos
3. Kalidou Koulibaly
4. Raphael Varane
5. Alphonso Davies

Figure 3 Showing transfer targets ranked according to performance

User Experience Test Plan

This section of testing will focus mainly on the simplicity of the user interface and planning to account for human error. Error's can appear from many different directions such as incorrectly entered passwords, entering the wrong player ID and a few other that cannot be predicted. As such this phase will focus on the most common errors and determining how to prompt the user in specific ways to solve his or her issues.

Another important factor is that the software should not crash if an error was to occur. Through this section of testing precautions will be taken to test the software ensuring that it is stable enough to run after an error. There will be no exceptions for incorrect inputs. If a user enters an incorrect password or player ID the system will inform the user that the password is wrong or the player that had been requested does not exist. To solve the above issues error codes and protocols with instructions will be developed during this testing phase to ensure a simple and secure user experience.

Software

The application will have a main class which is the player class. There will be 3 sub classes to then separate players into the major roles which are forward, midfielder and defender. Each class would then be divided into further sub classes to specify where players are specialized. The player class will have the simpler attributes such as name, height, player ID etc. The other classes will inherit these attributes along with having the specific attributes for the required stats.

Software Test Plan

This process requires extensive testing to ensure that the data that is stored is in the right place and cannot be overwritten unintentionally. In addition to this the software must account for incorrect data types being input as well as mistakes with entering information. This can come in the form of missing data field or placing the age in the wrong position.

Projected Usability

This application will be useful to any scouts ,team managers or coaches. These are usually the individuals that recommend what players will be purchased or sold by a club. This is based on a specific criteria. This should make it easier for them to persuade a board of directors on which players attributes and physical qualities warrant a hefty price tag or a new contract. This document may not seem useful to clubs that manage younger players under the age of 16 because they do pay players. However for a large club, that would like to scout the best young talents, it can be useful if they wish to make an investment in starting a players career.