UNIVERSITY OF INFORMATION & TECHNOLOGY

FACULTY OF COMPUTER SCIENCE

**Logo

Description automatically generated**

Detailed design document

**Topic: National Football League Management**  
**Class code:** SE104.N24.CLC  
**Instructor:** Ths. Nguyễn Thị Thanh Trúc  
**Implementation team:** Team 13

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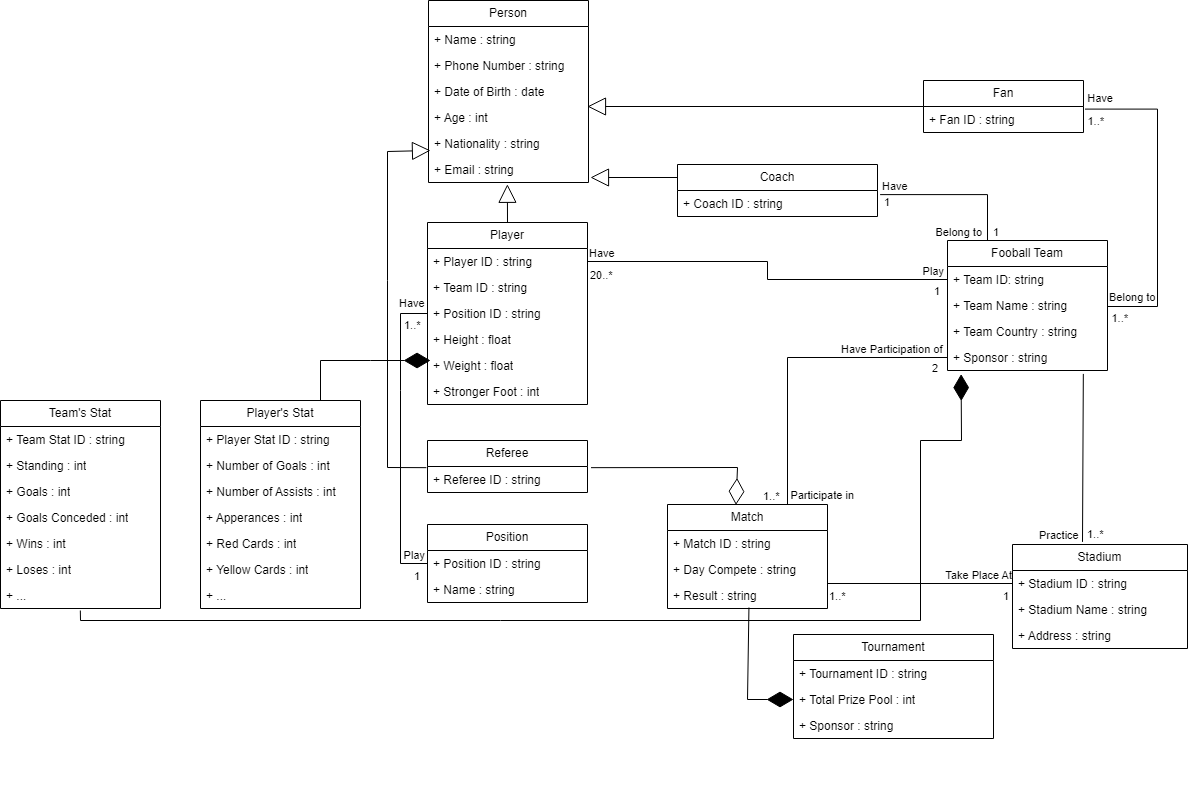
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# **National Football League Management**

## **Class diagram**



## **Sequence diagram**

* + 1. **Tạo tài khoản**

Calendar

Description automatically generated

* + 1. **Đăng nhập**

Chart, box and whisker chart

Description automatically generated with medium confidence

* + 1. **Đăng ký hồ sơ**

Calendar

Description automatically generated

* + 1. **Lập lịch thi đấu**

Calendar

Description automatically generated

* + 1. **Ghi nhận kết quả trận đấu**

A screenshot of a computer

Description automatically generated with low confidence

* + 1. **Tra cứu cầu thủ**

Calendar

Description automatically generated

* + 1. **Lập báo cáo giải**

A picture containing chart

Description automatically generated

* + 1. **Thay đổi hoặc thêm mới qui định**

Diagram, table

Description automatically generated

## **Screen**

### Create Account Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Create Account |
| **Description** | Create account |
| **Screen Access** | Users click on sign up button |

* + - 1. User Interface

Graphical user interface, application

Description automatically generated

* + - 1. Validation Rule/Data mapping

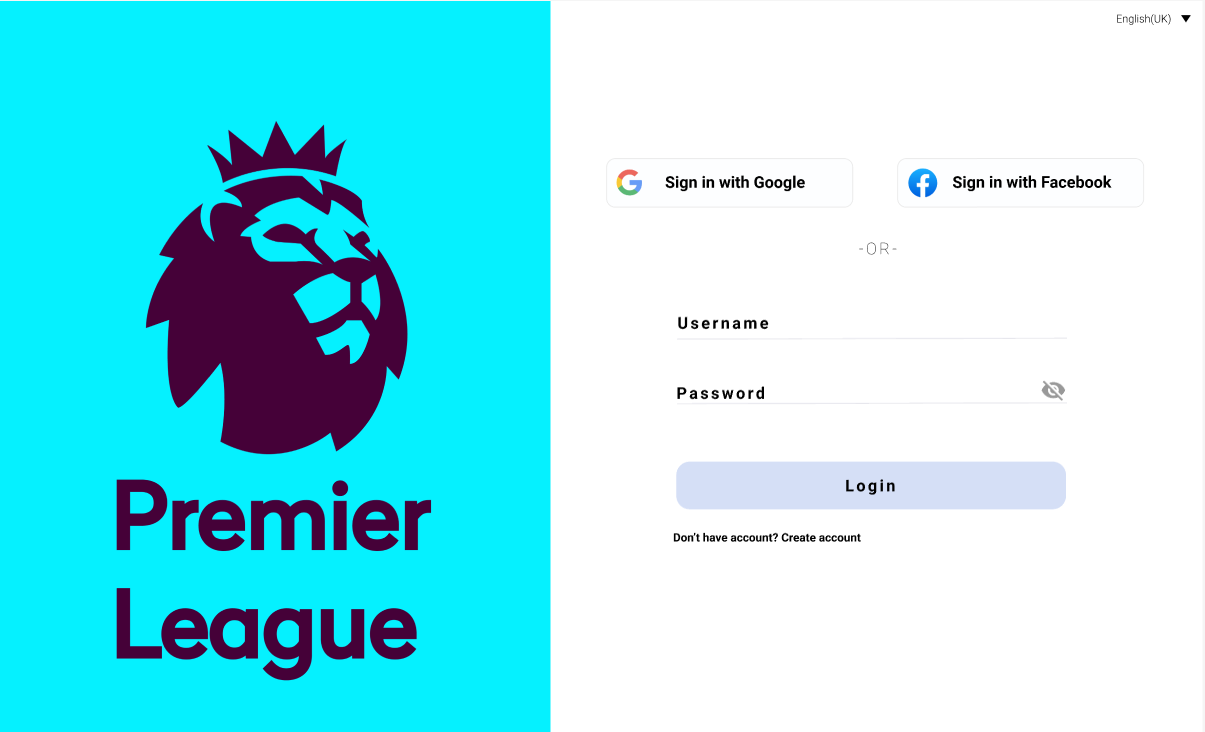
|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Username | Label | * Username * Insert to field in DB: NFLM\_USER. USERNAME |
| Password | Label | * Password * Insert to field in DB: NFLM\_USER. PASSWORD |
| Email | Label | * Email * Insert to field in DB: NFLM\_USER. EMAIL |
| Sign up with Google | Button | * Create account with Google email & username |
| Sign up with Facebook | Button | * Create account with Facebook email & username |
| Create Account | Button | * Request acknowledgment to system to record |
| Login | Link | * Link to login page |

### Sign-in Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Sign-in |
| **Description** | Sign-in |
| **Screen Access** | Users click on login button |

* + - 1. User Interface



* + - 1. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Username | Label | * Username * Mapping to field in DB: NFLM\_USER. USERNAME |
| Password | Label | * Password * Mapping to field in DB: NFLM\_USER. PASSWORD |
| Email | Label | * Email |
| Sign up with Google | Button | * Log in with Google email & username |
| Sign up with Facebook | Button | * Log in with Facebook email & username |
| Login | Button | * Request acknowledgment to system to sign in |
| Create Account | Link | * Link to create account page |

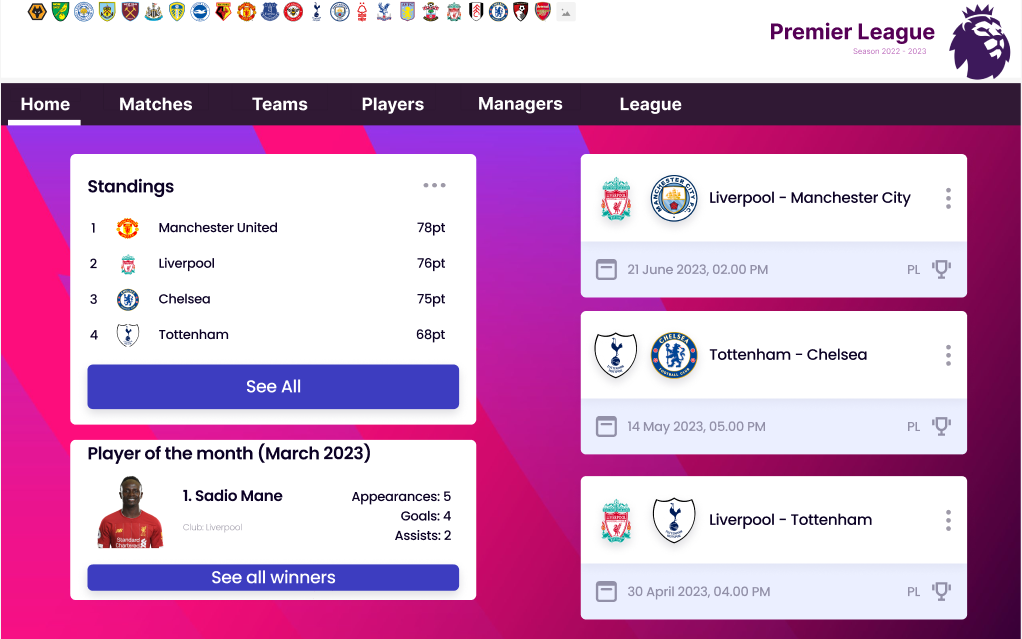
### Homepage Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Home page |
| **Description** | Home page |
| **Screen Access** | Users sign in or click to home button |

* + - 1. User Interface

Home page section



Standings table section

Table

Description automatically generated with medium confidence

* + - 1. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Standings | Dropdown list | * Standings * Display top 4 team’s standing * Mapping to field in DB: NFLM\_TEAM’S STAT. STANDING |
| Player of the month | Dropdo wn list | * Player of the month * Display top 1 player * Mapping to field in DB: NFLM\_PLAYER’S STAT. STANDING   NFLM\_PLAYER’S STAT. NoG  NFLM\_PLAYER’S STAT. NoA  NFLM\_PLAYER. NAME |
| See all winners | Button | * List all data about player of the month |
| See all | Button | * List all data about team’s standing |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### Matches Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Matches |
| **Description** | Matches |
| **Screen Access** | Users click on matches button |

* + - 1. User Interface

Graphical user interface, website

Description automatically generated

* + - 1. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Results | Dropdown list | * Results * Display matches result * Mapping to field in DB: NFLM\_MATCH. RESULT |
| Fixtures | Dropdown list | * Match schedules * Display matches schedules |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### Teams Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Teams |
| **Description** | Teams |
| **Screen Access** | Users click on teams button |

* + - 1. User Interface

Graphical user interface, application, website

Description automatically generated

* + - 1. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Clubs | Dropdown list | * Teams * Display all teams * Mapping to field in DB: NFLM\_TEAM |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### Players Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Players |
| **Description** | Players |
| **Screen Access** | Users click on players button |

* + - 1. User Interface

A picture containing table

Description automatically generated

* + - 1. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Players | Dropdo wn list | * Players * Display all players * Mapping to field in DB: NFLM\_PLAYER |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### Managers Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Managers |
| **Description** | Managers |
| **Screen Access** | Users click on managers button |

* + - 1. User Interface

Graphical user interface

Description automatically generated

* + - 1. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Managers | Dropdo wn list | * Managers * Display all managers * Mapping to field in DB: NFLM\_MANAGER |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### League Info Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | League |
| **Description** | League |
| **Screen Access** | Users click on league button |

* + - 1. User Interface

Graphical user interface, website

Description automatically generated

* + - 1. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Standings | Button | * Link to standings page |
| Awards | Button | * Link to awards page |
| Stats and Records | Button | * Link to stats and records page |
| Regulations | Button | * Link to regulations page |
| Reports | Button | * Link to reports page |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### Regulations Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Regulations |
| **Description** | Regulations |
| **Screen Access** | Users click on league button then click on regulations button |

* + - 1. User Interface
      2. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Regulations | Dropdo wn list | * Regulations * Display all regulations * Mapping to field in DB: NFLM\_REGULATION |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### Reports Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Reports |
| **Description** | Reports |
| **Screen Access** | Users click on league button then click on reports button |

* + - 1. User Interface
      2. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Reports | Dropdo wn list | * Regulations * Display all reports |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### Awards Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Awards |
| **Description** | Awards |
| **Screen Access** | Users click on league button then click on awards button |

* + - 1. User Interface
      2. Validation Rule/Data mapping

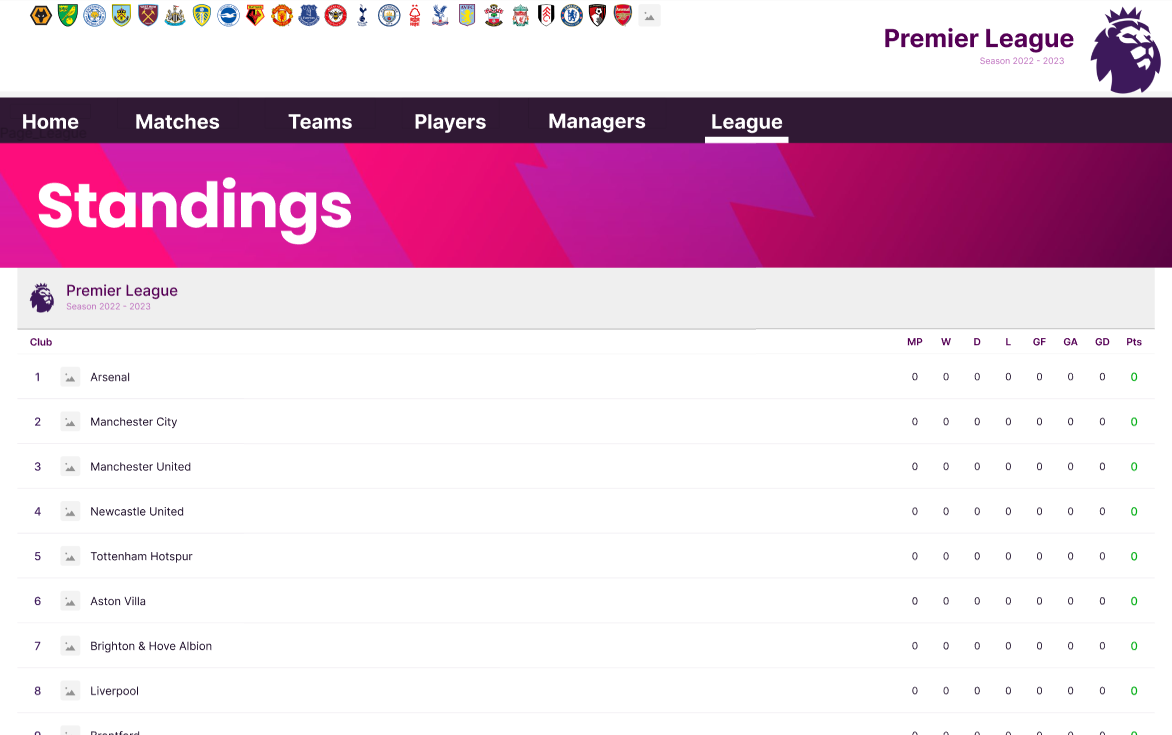
|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Awards | Dropdo wn list | * Regulations * Display all awards |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### League Standings Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | League Standings |
| **Description** | League standings |
| **Screen Access** | Users click on league button then click on standings button |

* + - 1. User Interface



* + - 1. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Standings | Dropdo wn list | * Standings * Display all teams with rank filtered * Mapping to field in DB: NFLM\_TEAM   NFLM\_TEAM’S STAT |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |

### Stats & Records Screen

* + - 1. Main flow

|  |  |
| --- | --- |
| **Screen** | Stats & Records |
| **Description** | Stats & Records |
| **Screen Access** | Users click on league button then click on stats & records button |

* + - 1. User Interface
      2. Validation Rule/Data mapping

|  |  |  |
| --- | --- | --- |
| **Field** | **Type** | **Description** |
| Stats | Dropdo wn list | * Stats * Display all players with their stats * Mapping to field in DB: NFLM\_PLAYER’S STAT |
| Records | Dropdo wn list | * Records * Display all match records * Mapping to field in DB: NFLM\_MATCH. RESULT |
| Home | Button | * Link to home page |
| Matches | Button | * Link to matches page |
| Teams | Button | * Link to teams page |
| Players | Button | * Link to players page |
| Managers | Button | * Link to managers page |
| League | Button | * Link to league page |