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## Group assignment 2: Class diagram

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PRÓUN HUGBÚNAÐAR  
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# 1 Introduction

In this document there's the class diagram for group F2a. Group members are: Einar Helgi Þrastarson (personal ID number: 110287-2919), Hannes Pétur Eggertsson (240889-2939) and Sigurður Birkir Sigurðsson (120589-2539). Our project is to build an user interface for a fantasy football game. In our class diagram we felt it made sense to split the classes into two categories, back-end classes and front-end classes. In the appendix we put our current idea how the UI will look like when the game is ready. The presenter on Wednesday, March 4th 2015, will be Hannes Pétur Eggertsson.

## 1.1 Notation

In our class diagrams we use the following notation:  
- means a private variable or method (not directly accessible by other classes).  
+ means a public variable or method (directly accessible by other methods).

Also, each class in the diagram has four sections:

<i>The class' name.</i>
Short description of the class.
The class' variables and their type listed on the format: -/+ <b>type1</b> <b>variable1</b> -/+ <b>anotherClass</b> <b>variable2</b>
The class' methods listed on the format: -/+ <b>type1</b> <b>method1(type variable,...)</b> -/+ <b>type2</b> <b>method2(...)</b>

Classes are then connected using arrows:

Class A  $\xrightarrow{\text{uses}}$  Class B

Class A  $\xrightarrow{\text{extends}} \triangleright$  Class B

Class A  $\xrightarrow{\text{implements}} \blacktriangleright$  Class B

In most cases we can tell how many classes 'Class A' and 'Class B' will be associated with, this is shown by placing an arrow at the beginning and end of an arrow, e.g.

Class A  $\xrightarrow{1 \text{ uses } 0-10}$  Class B

if each instance of 'Class A' will use 'Class B' in a range of 0 to 10 instances.

## 1.2 Terminologies and Concepts

**User** A (human) user actually playing the game.

**Player** A football player in the game, e.g. Gylfi Sigurðsson.

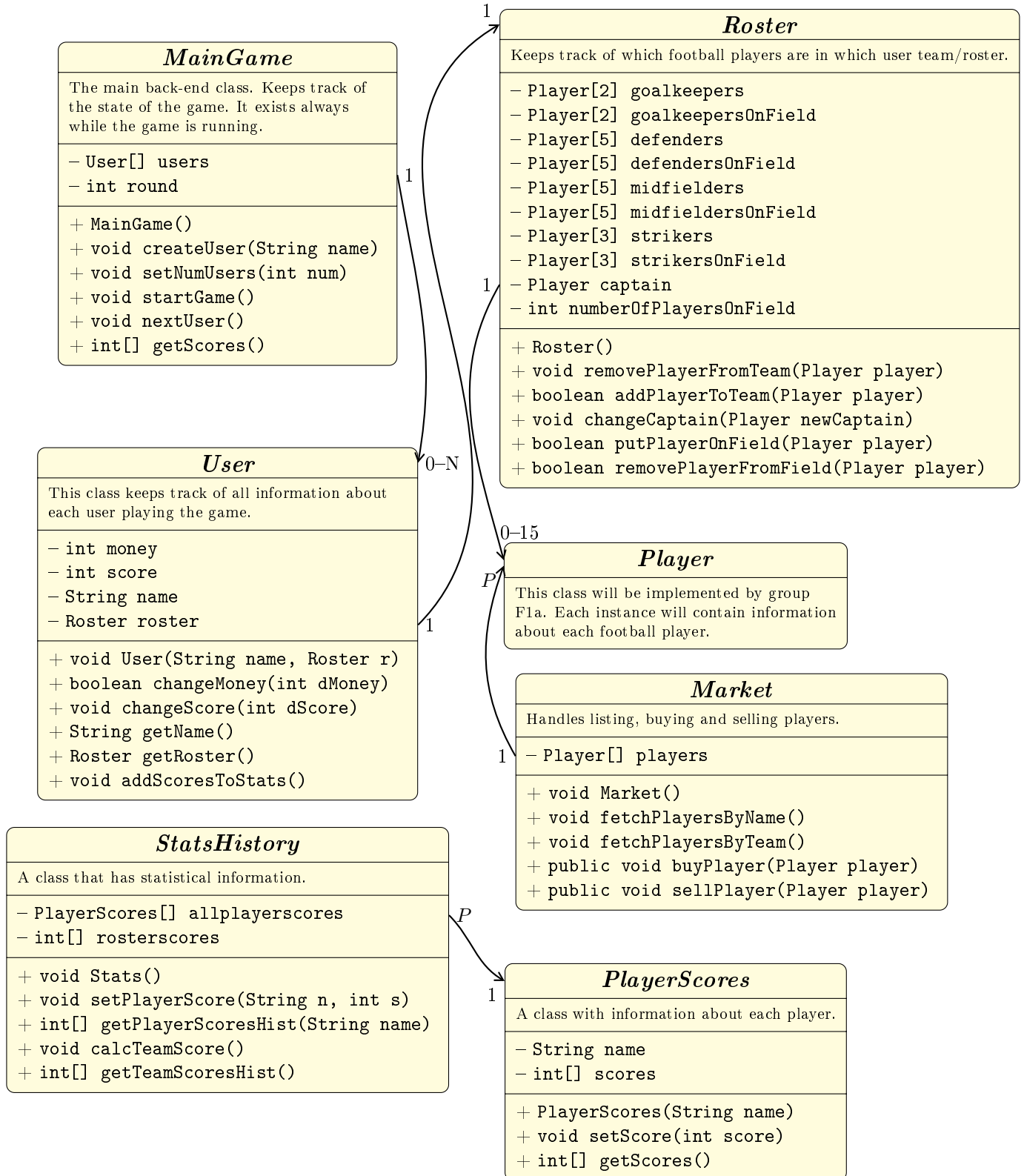
**Team** A football team in the game, e.g. Manchester United.

**Roster** The user's bought players, the players could be from multiple teams. Note that the roster includes both players which user has set on and off the field. A roster can have up to 15 players.

# 2 Class diagram

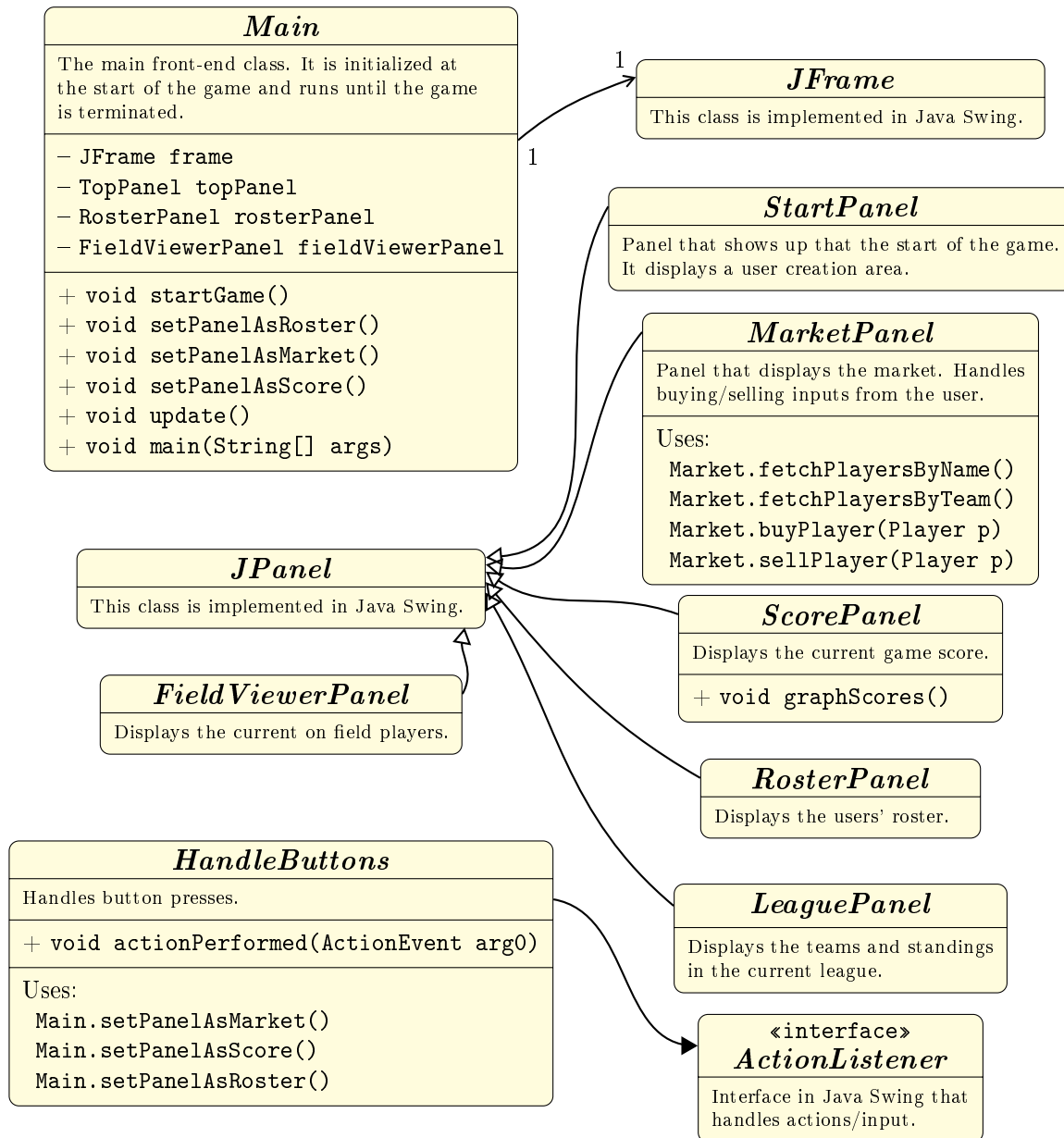
We decided to split our class diagram into two figures: **Back-end classes** and **Front-end classes**. The back-end classes take care of storing and keeping track of all information as the game is running. The front-end classes take care of displaying the information to the users playing the game as well as handling their input.

## 2.1 Back-end classes



Where  $N$  is the number of total users in the current game and  $P$  is the total amount of football players in the game.

## 2.2 Front-end classes



# Appendix

## User interface

ROSTER   MARKET   SCOREBOARD

Q |

Goalkeepers

Victor Valdés

Anders Lindegaard

Defenders

Marcos Rojo

Paddy McNair

Luke Shaw

Rafael

Phil Jones

Midfielders

Ángel Di Maria

Daley Blind

Ander Herrera

Maroune Fellaini

Andreas Pereira

Strikers

SELL

SELL

SELL

SELL

SELL

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BIRKZ'S TEAM:

END TURN