Cairo University
Faculty of Computers and Artificial Intelligence

CS251

Intro. to Software Engineering

GO-Football

Software Design Specifications

Version 1.0

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Table of Contents

CU – FCAI – CS251 Introduction to Software Engineering – 2020 - Software Design Specifications
Prepared by Mostafa Saad and Mohammad El-Ramly V1.0
Edited by Mohamed Samir, Updated to V2.0 by Mohammad El-Ramly 10/4/2020 and V3.0 25/5/2021 | 2

CS251: Phase 2 – < Creative Thinking Team >
Project: < Go Football >

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Team

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Document Purpose and Audience

1) What is this document?

This file includes most of the graphs that illustrate the system, such as the diagram class, which illustrates most of the task classes that are used in the system and the sequence diagram in which the sequence of a specific case is clarified, such as the state of Log and the sequence of steps by calling functions from the class diagram.

2) Who is expected to read it?

Those who are interested in playing football and stadium owners, that is the system that gives them opportunities to make the most profit and Stockholders to to view a sample of the work piece, take their opinion and make sure that Requirements are correct.

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Prepared by Mostafa Saad and Mohammad El-Ramly V1.0
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Software Design Specification

3) simple notes

- This file shows all the graphs to clarify all the features provided by the system to the user.
- Most of the major operations of the system are shown.
- Model in which most operations are shown.

4) Target audience

- CEO
- Project Manager
- Stadium owners
- Developer

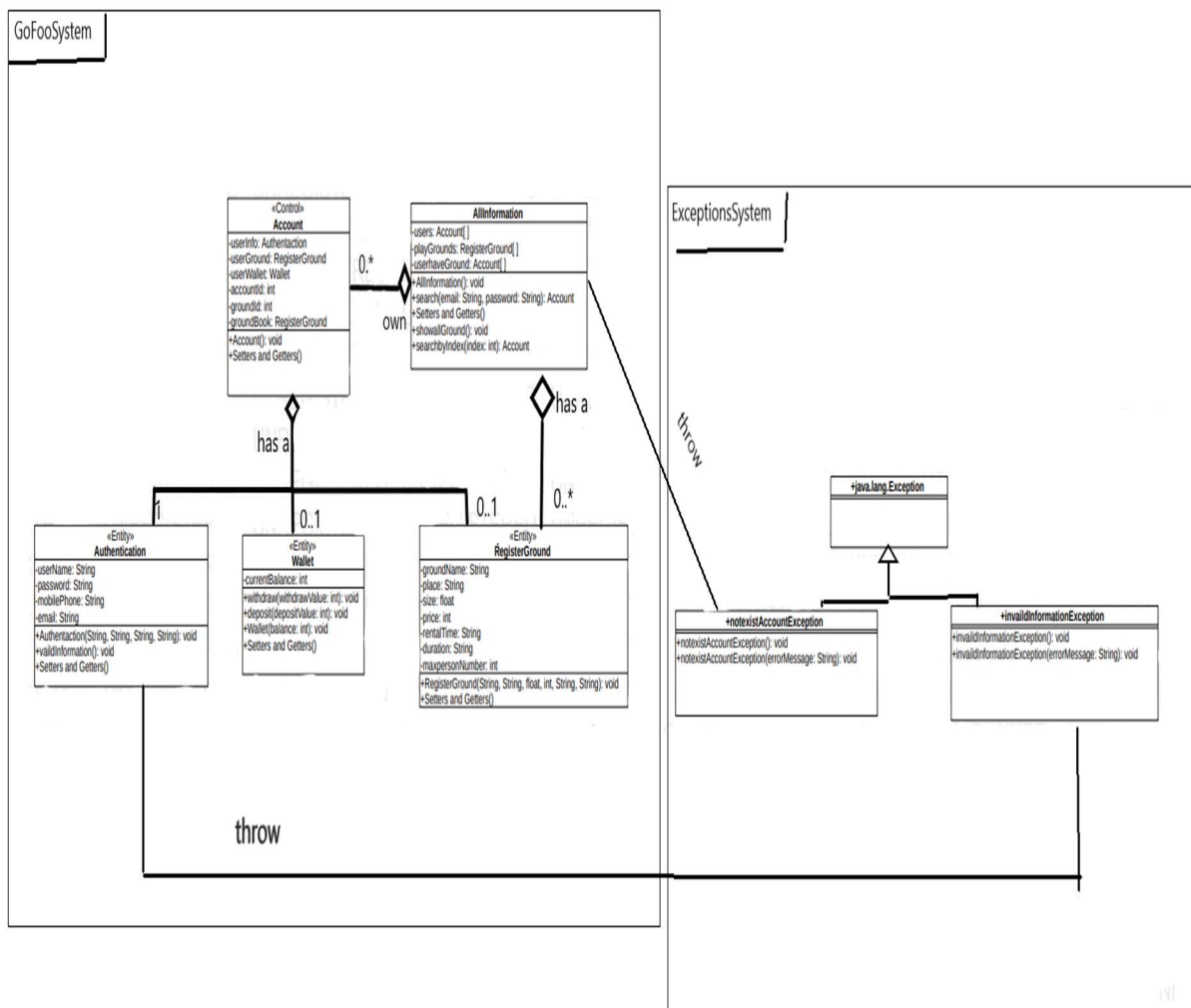**CU – FCAI – CS251 Introduction to Software Engineering – 2020 - Software Design Specifications**
Prepared by Mostafa Saad and Mohammad El-Ramly V1.0
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Software Design Specification

System Models

I.   Class Diagram:

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Prepared by Mostafa Saad and Mohammad El-Ramly V1.0
Edited by Mohamed Samir, Updated to V2.0 by Mohammad El-Ramly 10/4/2020 and V3.0 25/5/2021 | 5

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Project: < Go Football >

Software Design Specification

II. Class Descriptions

Class Id	Class Name	Description & Responsibility
1	Account	Any account that you have on the system with it represents the two most important parts, namely that there is inside the account information, features and services provided in the account by the site and the first part which is represented by the authentication in which all important information is provided, and the second part in which the features that the user can participate in, such as reserving a playground or registering a playground or offer portfolio services.
2	Authentication	This class represents information about the user when a new account is created and information is given such as name, password, email, and phone number, and it has a function to confirm the information entered by the user, such as checking the email format or the number of digits in the phone number.
3	RegisterGround	This feature is chosen by the user in creating and registering a stadium on the system, and with this class, all the information related to the stadium will be found, such as the location, the rental time, the rental period, the required amount, the largest number possible to attend in the stadium and the size of the playing field.
4	Wallet	In this class, the operations that will be performed in your wallet, such as the feature of withdrawal or deposit, or showing the current value of money in the wallet,will be determined.

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Software Design Specification

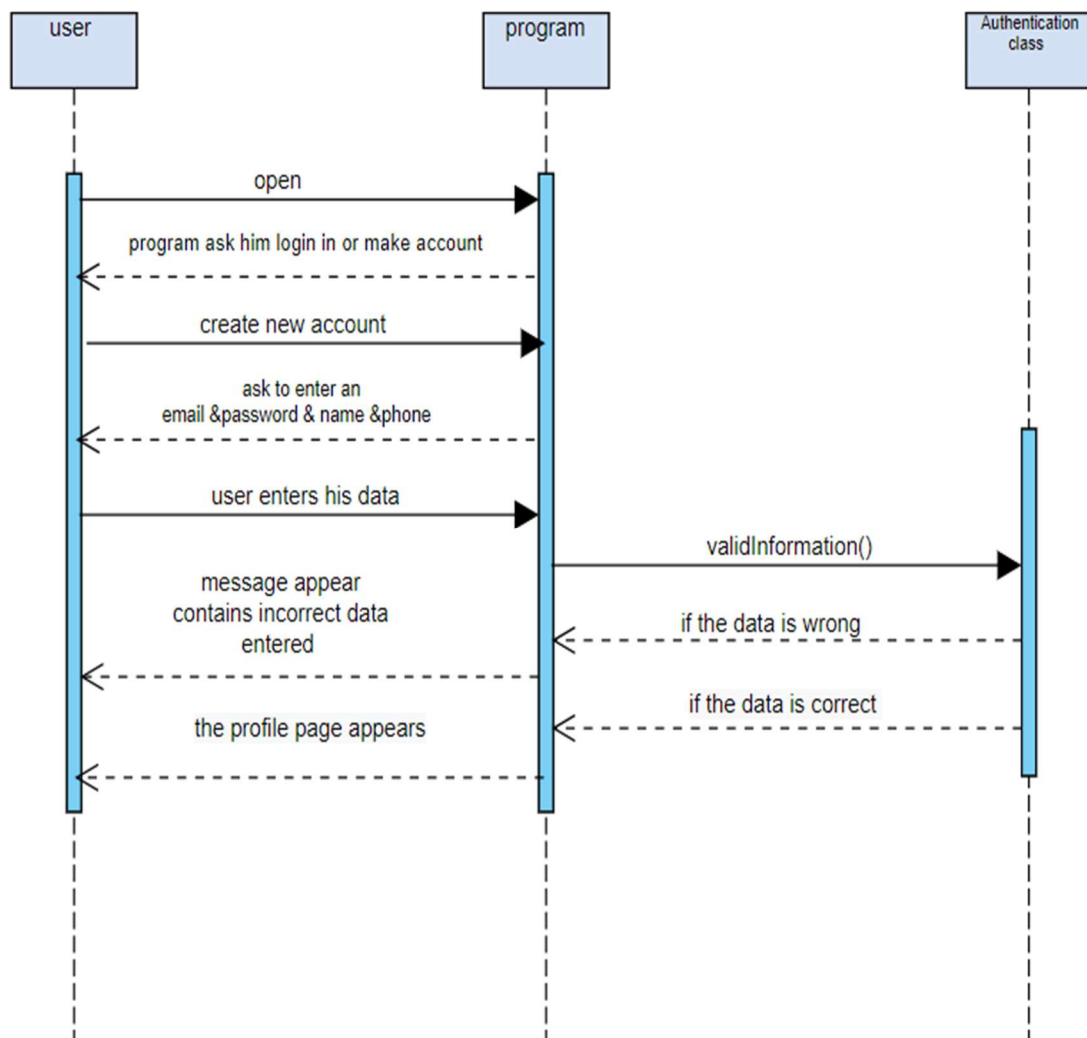| 5	AllInformation	In this class, all information in the system will be specified from all users and all stadiums registered on the system to facilitate the search process when logging in to the account. Search for the account by entering the email and password and going to this class to make sure that the account is present or not.
6	notexistAccount Exception	This is the exception class for returning an error when logging in, sending email and passwords, and searching for them in the allinformatin class, but the account was not found.
7	invaildInformati onException	In the event that the user chooses to create a new account, but when recording the data in the Authentication class, the data does not meet the terms, or the data is wrong, then a class will be created for this exception.

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Edited by Mohamed Samir, Updated to V2.0 by Mohammad El-Ramly 10/4/2020 and V3.0 25/5/2021   **| 7**

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III. Sequence diagrams

1. Create new account

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Software Design Specification

2. E-wallet service
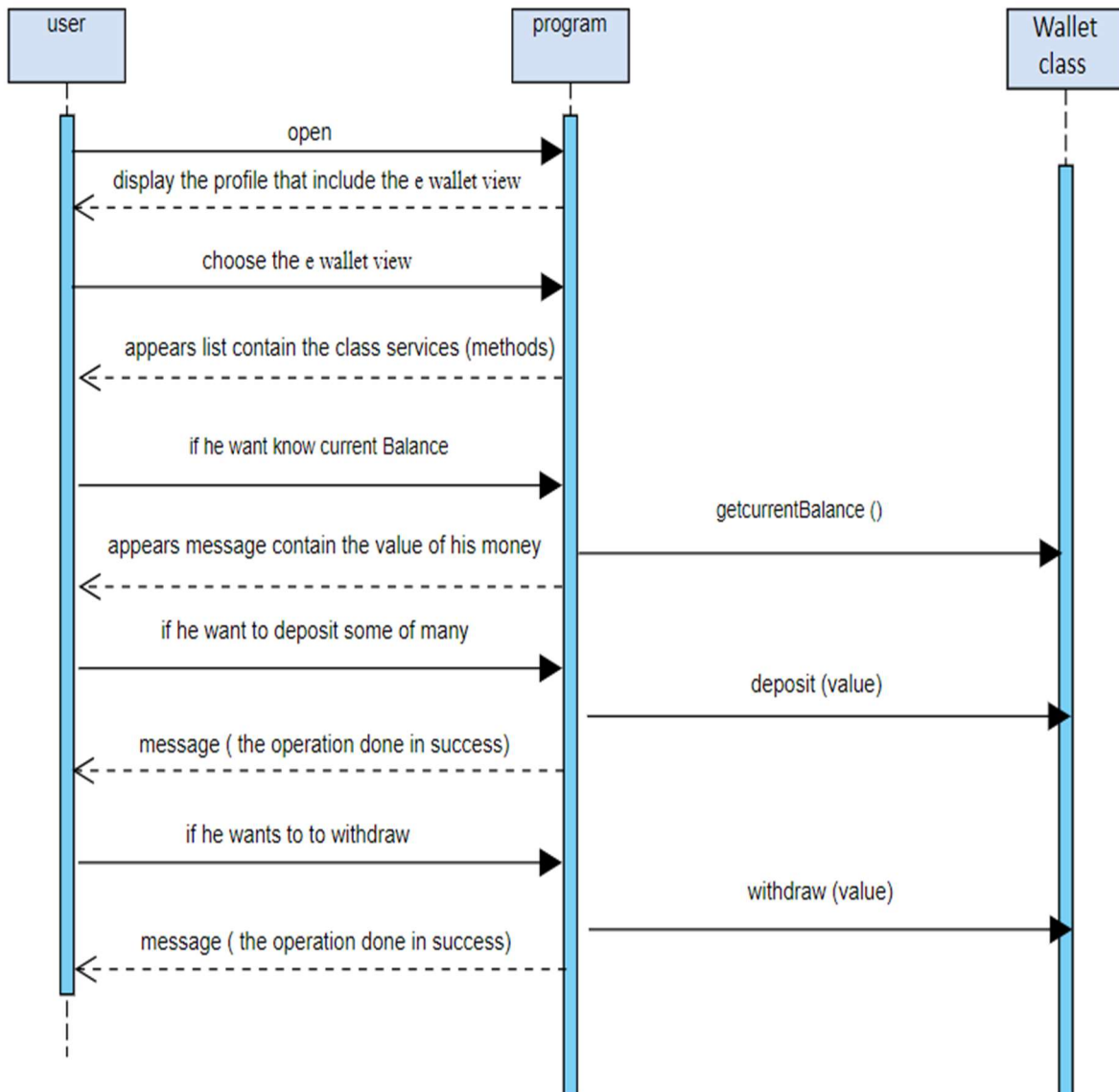
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Edited by Mohamed Samir, Updated to V2.0 by Mohammad El-Ramly 10/4/2020 and V3.0 25/5/2021 | 9

Software Design Specification

3. Register playground

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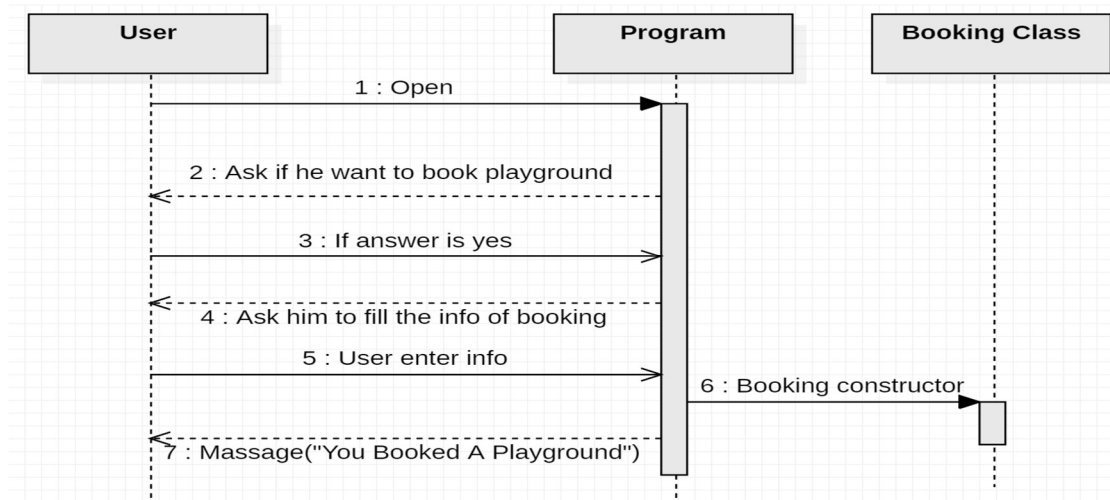**Edited by Mohamed Samir, Updated to V2.0 by Mohammad El-Ramly 10/4/2020 and V3.0 25/5/2021 | 10**
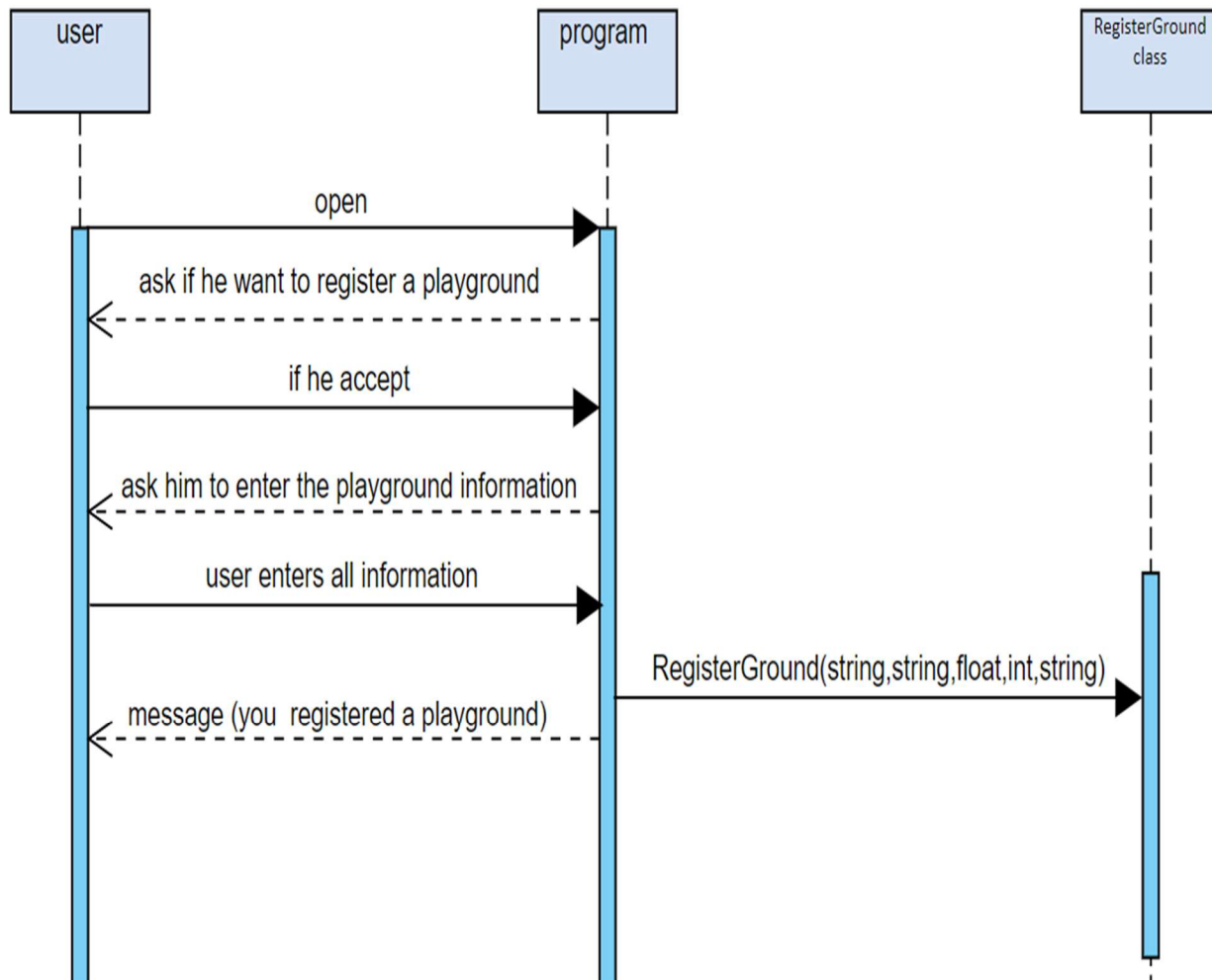
Software Design Specification

4. Booking playground

Class - Sequence Usage Table

Sequence Diagram	Classes Used	All Methods Used
1.Create new account	Authentication class	validInformation()
2.e-Wallet service	Wallet class	getcurrentBalance () deposit(int value) withdraw (int value)
3. Register Playground	RegisterGround class	RegisterGround (string, string,float,int,string, string)
4.Booking Playground	Account class && AllInformation class && Wallet class	ShowallGround() Withdraw(value) deposit(value)

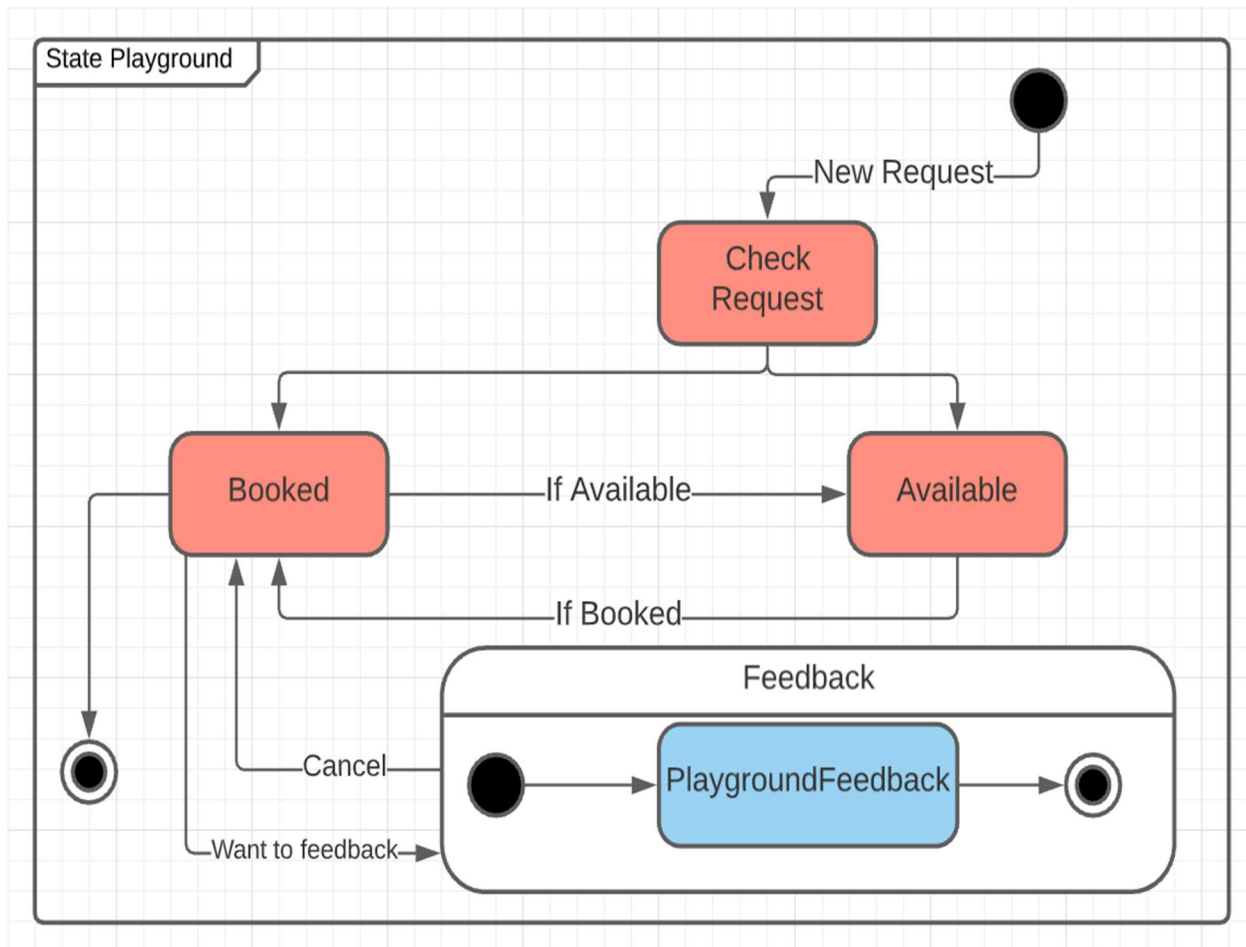**CU – FCAI – CS251 Introduction to Software Engineering – 2020 - Software Design Specifications**
Prepared by Mostafa Saad and Mohammad El-Ramly V1.0
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Software Design Specification

IV: STATE DIAGRAM:

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Edited by Mohamed Samir, Updated to V2.0 by Mohammad El-Ramly 10/4/2020 and V3.0 25/5/2021 | 12

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Project: < Go Football >

Software Design Specification

Tools

- Visual-Paradigm
- StarUml

Ownership Report

Names	Items created
Sondos Emara Gomaa	- Document Purpose and Audience - Class Diagram - Class Descriptions
Nada Omar Fathi Abdelsalam	- Sequence diagrams - Create New Account - Register playground - Wallet-Services - Class-Sequence Usage Table
Mahmoud Mohamed Abd-Elazeem	- Sequence diagrams - Booking Playground - Class-Sequence Usage Table - State Diagram.

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Prepared by Mostafa Saad and Mohammad El-Ramly V1.0
Edited by Mohamed Samir, Updated to V2.0 by Mohammad El-Ramly 10/4/2020 and V3.0 25/5/2021 | 13