Cairo University

Faculty of Computers and Artificial Intelligence

CS251

Software Engineering I

CS251

Intro.to Software Engineering

GoFo - "Go Football"

Software Requirements Specifications

Version 0.0

June2021

Contents

CS251: Phase 2 –
Project:GoFo - "Go Football
Software Design Specification

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Team

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Document Purpose and Audience

The purpose

The purpose of this document is to present a description of the GoFootball System. This system helps to book football playgrounds. It serves the players and playground owners. This document will explain features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate, and how the system will react to external stimuli by many by identifying the use case model, Functional and non-Functional Requirements...etc.
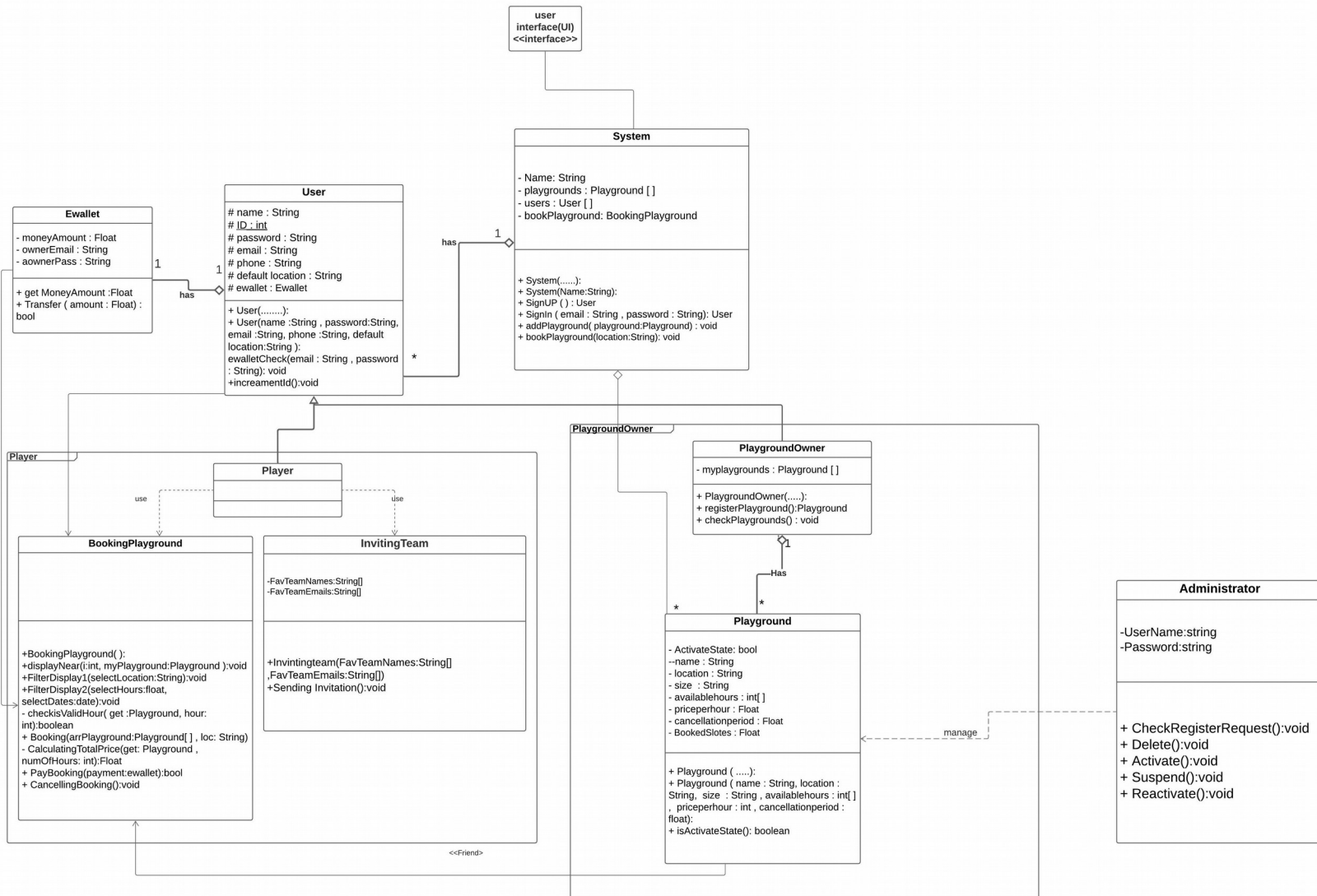
The Audience

This document is intended for both the clients and all the stakeholders like the developers of the system, testers, and project managers it could also include stakeholders in other departments, including leadership teams, sales, and marketing.

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System Models

I. Class Diagram(s)

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II. Class Descriptions

Class ID	Class Name	Description & Responsibility
1.	System	This class has two attributes users of class User and playgrounds of class Playgrounds , two methods / it responsible for letting player , playground owner sign in or sign up one the
2.	User	This class has seven attributes ,class user and owner inherit from it / it responsible for enter user information
3.	BookingPlayground	This class is responsible for letting player booking playground (choosing the suitable time slot) and it help him displaying all available playgrounds(by location or date) and then let him pay (by calculating total price) and it also allow him to cancel the booking if needed. Having 2 attributes and 8 methods
4.	InvitingTeam	This class is responsible for creating a favorite team then it allows player to invite them Having 2 attributes and 2 methods
5.	PlaygroundOwner	This class has seven attributesand two methods, inherit from class user / it responsible for register Playground and check the owner Playgrounds
6.	Playground	This class has seven attributes/ it responsible for enterplaygrounduser information
7.	Ewallet	This class has three attributes , two methods / it responsible forshow the amount of money in the ewallet or transfer money
8.	Administrator	This class is responsible for creating a favorite team then it allows player to (Delete ,suspend ,deactivate,reactivate) playground Having 2 attributes and 5 methods

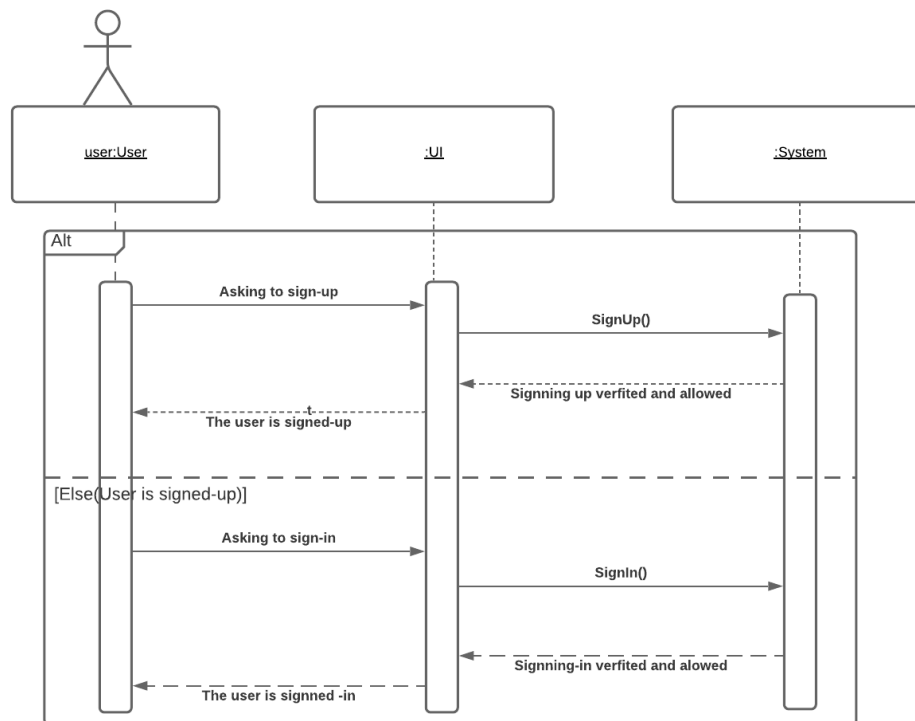**CU – FCAI – CS251 Introduction to Software Engineering – 2020 - Software Design Specifications**
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III. Sequence diagrams

1- User signing-in and signing-up

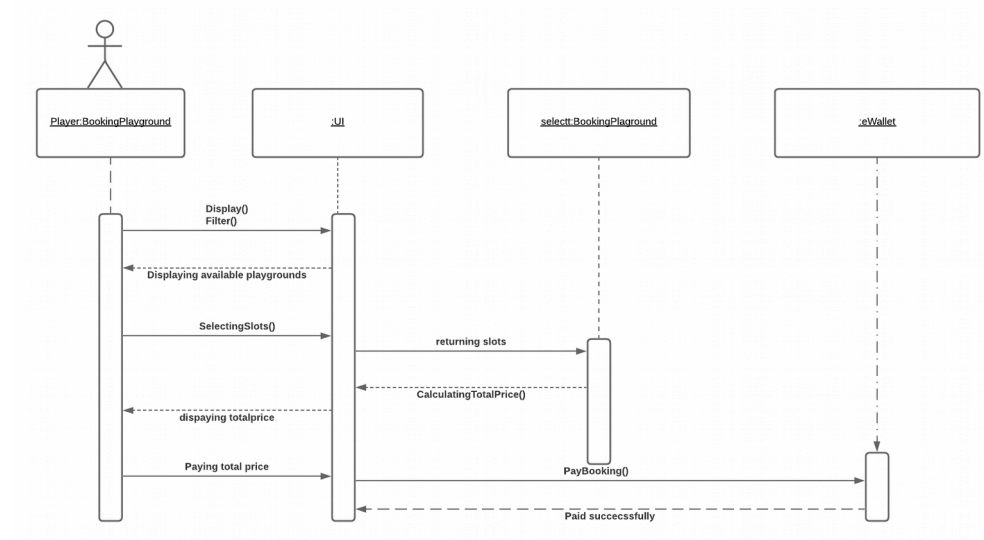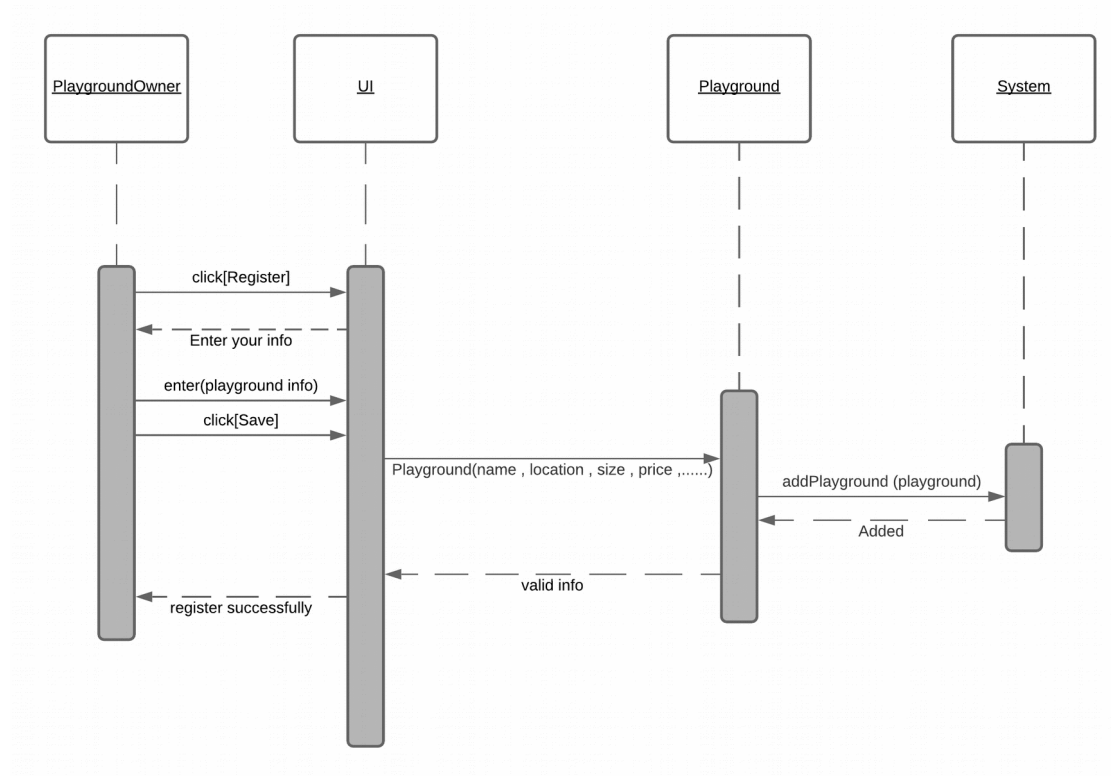**CU – FCAI – CS251 Introduction to Software Engineering – 2020 - Software Design Specifications**
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2-Booking playground

3- Register Playground

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4- Suspend ,Reactivate ,Delete Playground

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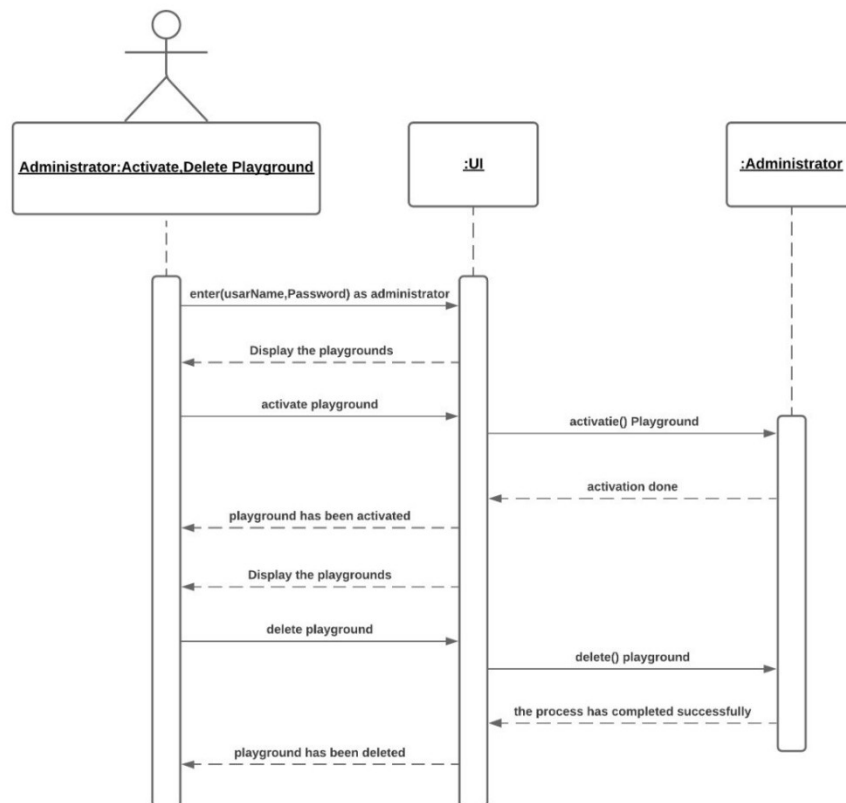
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Class - Sequence Usage Table

Sequence Diagram	Classes Used	All Methods Used
1. User signing-in and signing-up	User –UI-System	Sign-up Sign-in
2. Booking playground	BookingPlayground-UI-ewallet	-DisplayNear(defaultLocation:User:void - FilterDisplay1(selectLocation:String):void -FilterDisplay2(selectHours:float,selectDates:date):void -SelectingSlots(TimeSlots:float) -CalculatingTotalPrice():Float -PayBooking(payment:ewallet):bool
3. Register playground	PlaygroundOwner Playground System	Playground() addPlayground()
4. Suspend ,Reactivate ,Delete Playground	Administratoe -UI	Activate() delete()

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IV. State diagram

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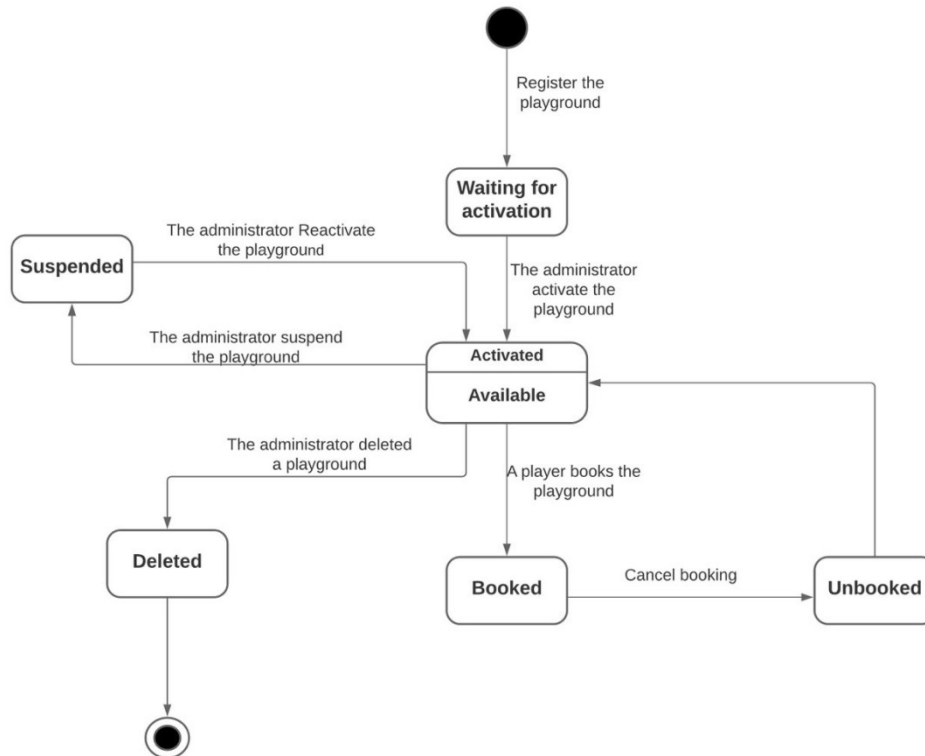
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Tools

- **Lucid chart online tool**

Ownership Report

Student	Items created
Huda Mohamed Ramadan	Class diagram (User- PlaygroundOwner - Playground- System – Ewallet -) Sequence diagram(3)
SamahMostafa Hussein Mahmoud	Class diagram (Administrator) Sequence diagram(4)
Aya-tullahEssam el-dienmohammedkhedr	Class diagram for player(Booking playground – inviting team) Sequence diagram(1,2)

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