Cairo University

Faculty of Computers and Artificial Intelligence

CS251

Software Engineering I

Project Name

Software Design Specifications

Version 1.4

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6 & 2021

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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   **| 2**

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Team

ID	Name	Email	Mobile
20190329	Abdallah Mohmad Abdullatif	abdallahemohmad2002@gmail.com	01150345103
20190462	Mohamed Essam Said Hanafi	m.essam20190462@gmail.com	01115182838
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Document Purpose and Audience

This document is used as a model for the class diagram of the system and describes the sequence diagram of the most important four user stories and a Playground state diagram to show the developer the different states it can be in.

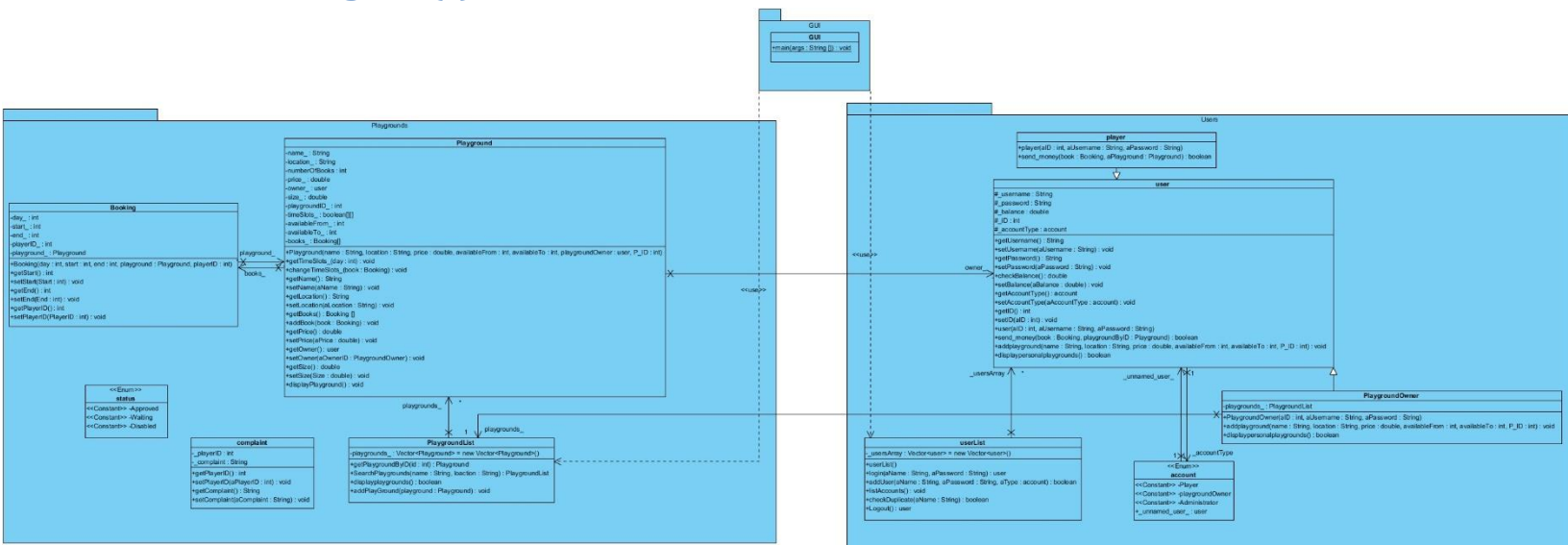The target audience are CEO, Developers, project manager, and the customer

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System Models

I. Class Diagram(s)

II. Class Descriptions

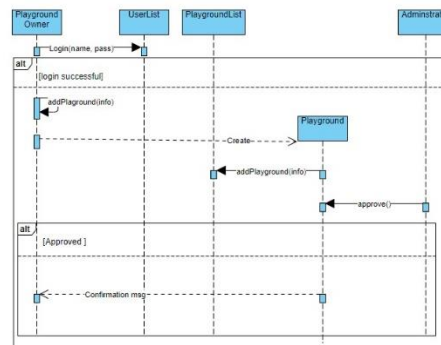| Class ID	Class Name	Description & Responsibility
1.	User	The simple user of the system Has the ability to sign and log in and has the eWallet features
2.	User list	List all the accounts in the stored in the database with name and password and search for them when logging in or add a new account
3.	Player	display all playgrounds, filter playgrounds by hours and date selected, see all requested and its status and if it pending, cancel it within cancelation period, can see all teams that need players and can join to them, can create his team and store their names and emails, can also see all his books when and where it is and can send invitation via email, player id
4.	Playground owner	register a playground and add its name, its location, its size, the available hours, the price per hour, see all information about his playground, and can edit on this information, see all requests with its details and can approve it or refuse it, see all the books information like what's teams booked and playgrounds their booked, times was booked and empty hours, the playground owner id.
5.	Administrator	checks if information given about playground is true then activate it delete any playground that get many double books or complaints from players, review playgrounds.

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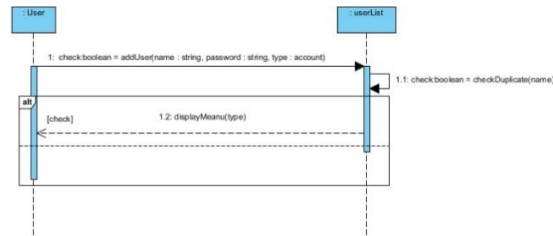| Class ID	Class Name	Description & Responsibility
6.	Playground	A playground in the system, it has the name of the playground, the images of the playground, the playground owner id, schedules, location, price, list of complaints, status of the playground
7.	Playground list	Lists all the approved and awaiting approval playgrounds and search in them by location and date and name
8.	Complaint	When a player makes a complaint on a playground has two attributes player ID and the complaint

III. Sequence diagrams

Add playground

Book Playground

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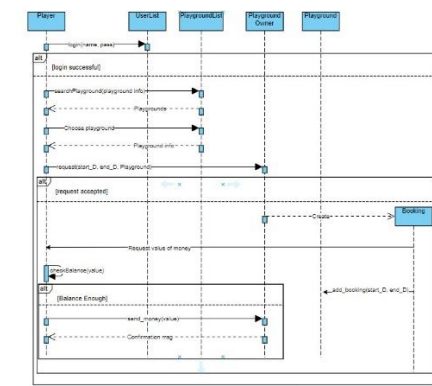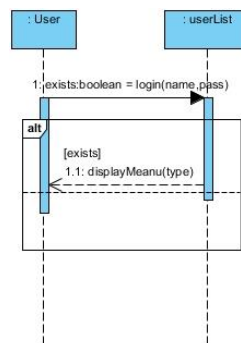
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Sign up

Log in

Class - Sequence Usage Table

Sequence Diagram	Classes Used	All Methods Used
1. Book A playground	Class Player Class User List Class Playground List Class Playground Owner Class Playground	Method Login Method search Playground Method send money Method add booking Method Check balance Method request
2. Add playground	Class search Playground Owner Class User List Class Playground List Class Playground Class Administrator	Method add Playground Method login
3. Sign up	Class User Class user list	Method add User Method check Duplicate Method display Menu
4. Log in	Class User Class User List	Method login Method display Menu

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IV. State Diagram
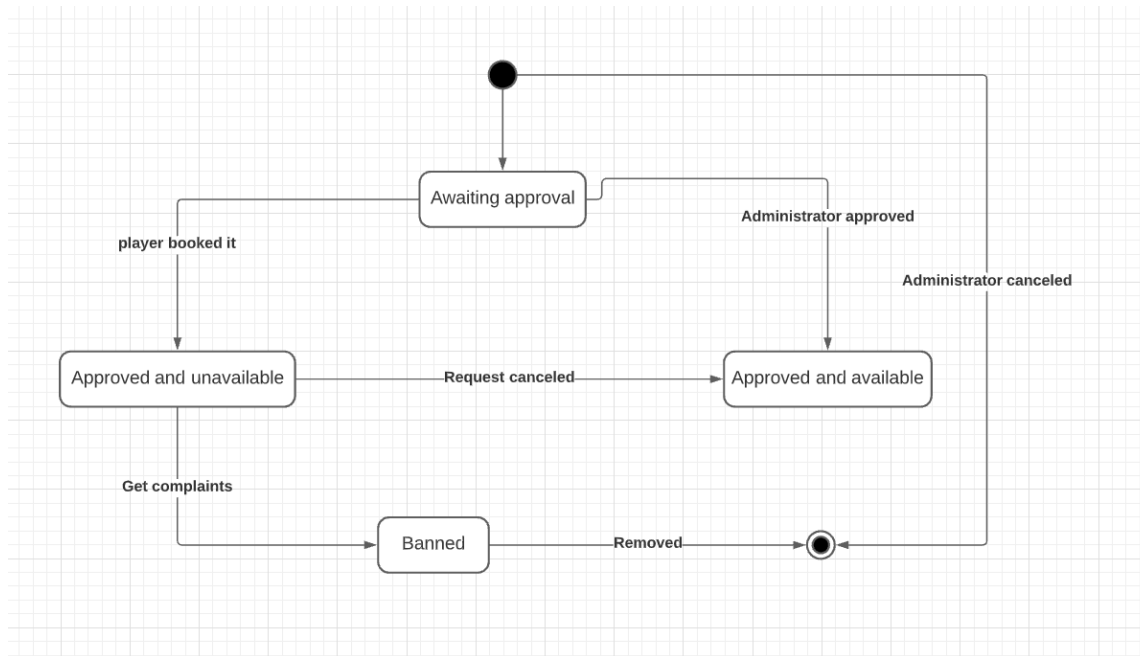
Tools

ArgoUML, Visual-Paradigm, online Visual-Paradigm, IntelliJ, Eclipse

Ownership Report

Item	Owners
Abdallah Mohmad Abdullatif	Class Diagram, Class Descriptions, Document Purpose and Audience, Users Package, Javadoc
Mohamed Essam Said Hanafi	Sequence diagrams, Sequence Usage Table, GUI, Playground Package, Javadoc
Ahmed Ragab Eissa Elsayed	State Diagram, Playground Package, Javadoc

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