CS251

Software Engineering I

Project Name

Software Design Specifications

Version X.X

Team Names and Emails

Month & Year

CS251: Phase 2 – <Team Name>
Project: <Project Name>

Software Design Specification

Contents

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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 | 2

CS251: Phase 2 – <Team Name>
Project: <Project Name>

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Team

ID	Name	Email	Mobile
20190401	Mark Samir Fawzy	20190401@stud.fci-cu.edu.eg	01276638330
20190196	David Ayman Youssef Morcos	davidmorcos3720@gmail.com	01146144261

Document Purpose and Audience

- This document is to help the developers and the clients to understand the system and its purpose. Its about a method for helping developing an efficient system.
- This document targets the developers and the clients, where it is an intermediary between developers and clients, to help developers understand the system and to help clients express their needs of the system.

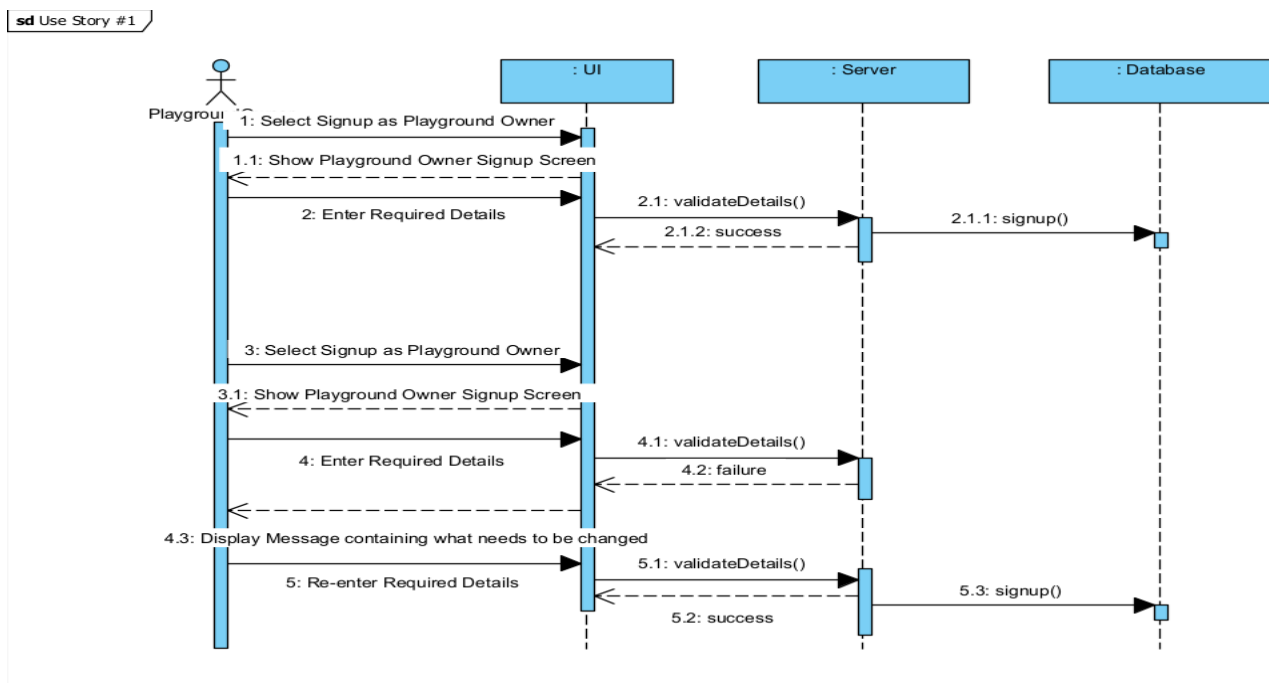**CU – FCAI – CS251 Introduction to Software Engineering – 2020 - Software Design Specifications**
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Software Design Specification

System Models

I. Class Diagram(s)

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Software Design Specification

II. Class Descriptions

Class ID	Class Name	Description & Responsibility
1. P1	Player	This class describes the players that reserve playgrounds.
2. PG	Playground	This class describes playgrounds available to be reserved by players.
3. EW	Ewallet	This class describes the user's e-wallet (whether he is a player or a playground owner) that is used to reserve a playground.
4. RE	Reservation	This class describes the reservations the players have on a certain playground, including information like it's date and time.
5. PO	PlaygroundOwner	This class describes the playground owners who can add and manage playgrounds.
6. AD	Admin	This class describes the admin managing the app/website, including their privileges and permissions.

III. Sequence diagrams
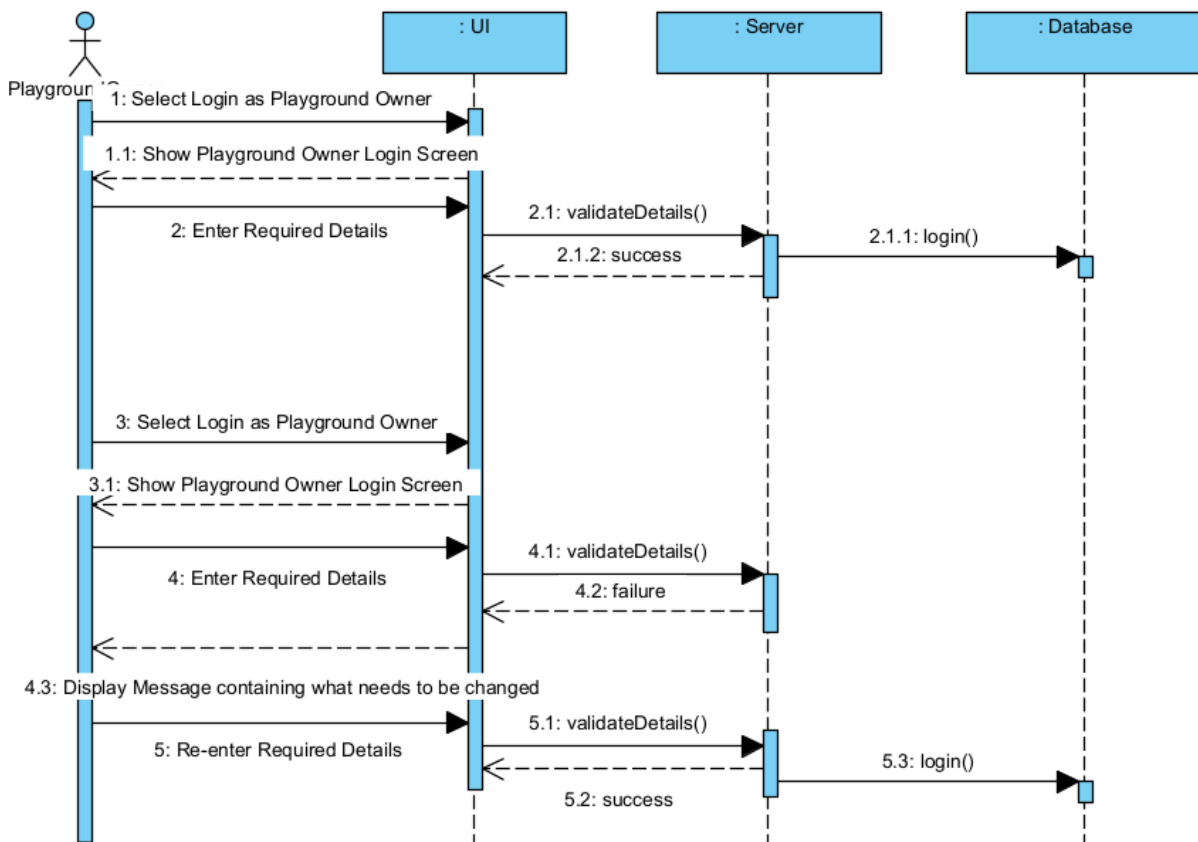
Sequence Diagram #1: Playground Owner Signup

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Sequence Diagram #2: Playground Owner login

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Software Design Specification

Sequence Diagram #3: Add/edit a playground

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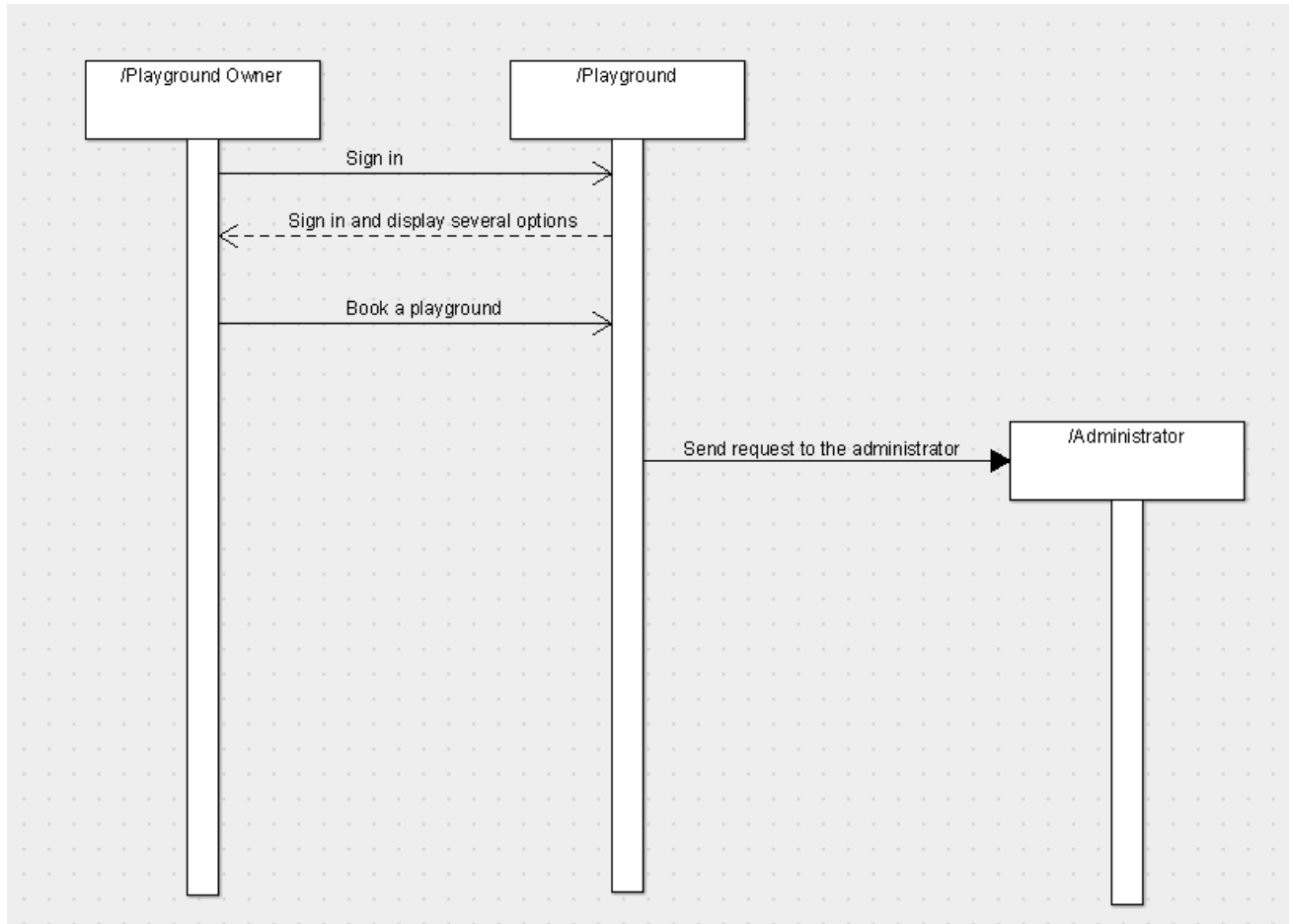
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Sequence Diagram #4: Player reservation

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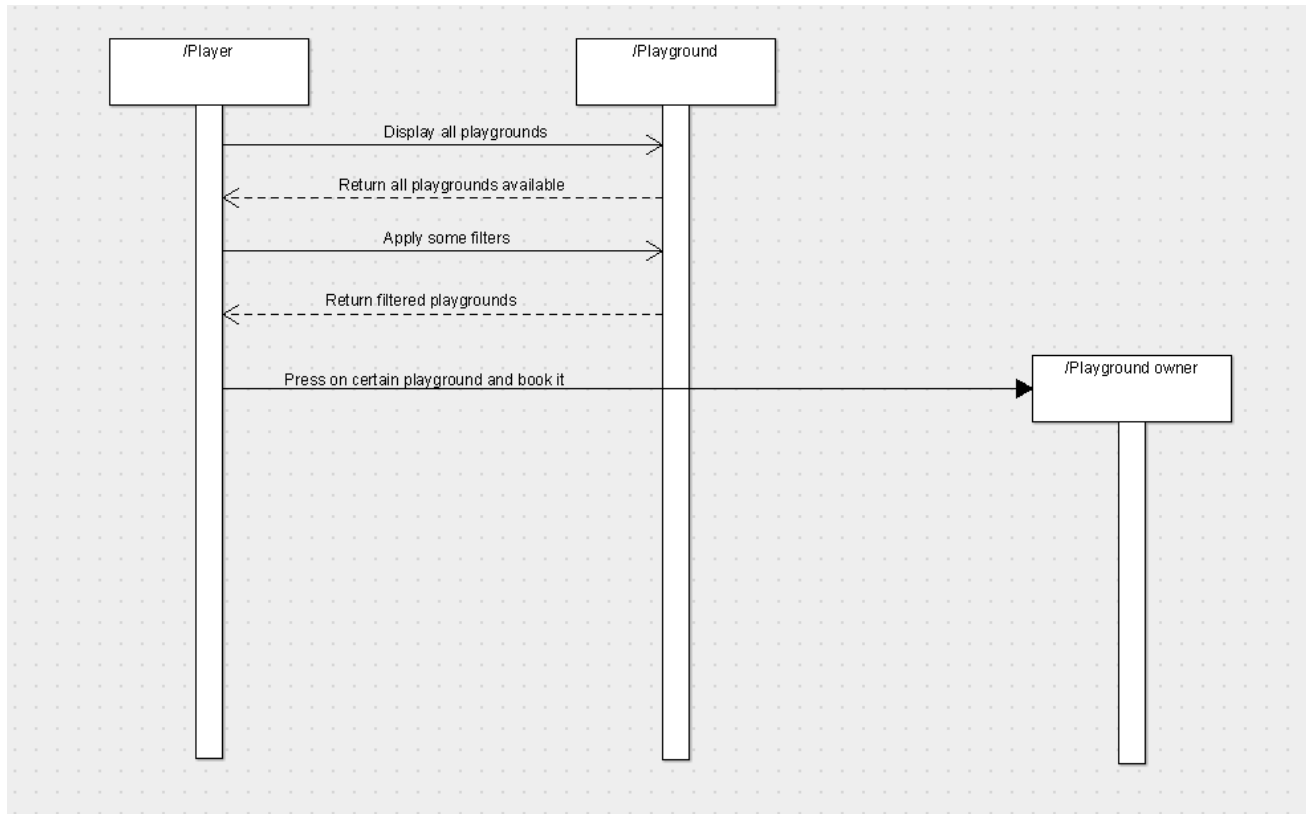
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Class - Sequence Usage Table

Sequence Diagram	Classes Used	All Methods Used
1. Playground Owner Signup	Interface UserMenu Class PlaygroundOwner	Method validateDetails() Methods signup()
2. Playground Owner Login	Interface UserMenu Class PlaygroundOwner	Method validateDetails() Methods login()
3. Add/edit a playground	PlayGround, PlaygroundOwner, Administrator	Login()/signup() setName(string n) setLocation(string loc) setStatus(Boolean stat) setPlaygroundOwner(PlaygroundOwner pgo) setHours(string st)
4. Player reserve a playground	Player, Playground, PlaygroundOwner	Login()/signup() Reserve(playground p)

IV. State Diagram

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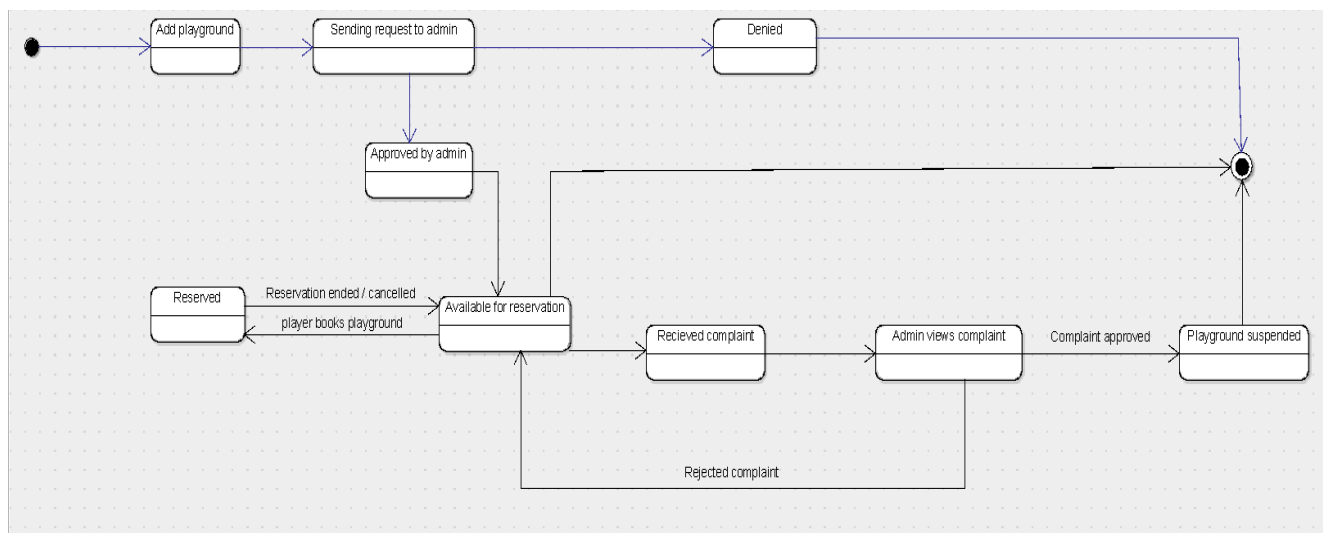
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Tools

- **ArgoUML.**
- **Visual-Paradigm.**

Ownership Report

Owners	Item
Mark Samir	Part of class diagram. Sequence diagrams 3,4. State diagram.
David Ayman	Part of class diagram Sequence diagrams 1,2. 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 | **10**