Cairo university
Faculty of computers and artificial intelligence
Intro To Software Engineering – CS251

GOFO

Software Design Specifications

Version 1.0

Name	E-mail	Phone
Ahmed Abd El-Halim Ahmed	ahmed.haliem14@gmail.com	01152730326
Ahmed Badr Shaban	ahmedbadrr417@gmail.com	01100486283
Sara Adel Basha	sara2019232@gmail.com	01113537288

June, 2021

CS251: Phase 2
Project: <GOFO>

Software Design Specification

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

Software Design Specification

Team

ID	Name	Email	Mobile
20190232	Sara Adel Basha	sara2019232@gmail.com	01113537288
20190045	Ahmed Abd El-Halim Ahmed	ahmed.haliem14@gmail.com	01152730326
20190019	Ahmed Badr Shaban	ahmedbadrr417@gmail.com	0 110 048 6283

Document Purpose and Audience

- This document describes the Software Requirements Specifications for a project Called "GoFo".
- The project is a Booking System for Football playgrounds and the document describes the process which takes place inside the System.
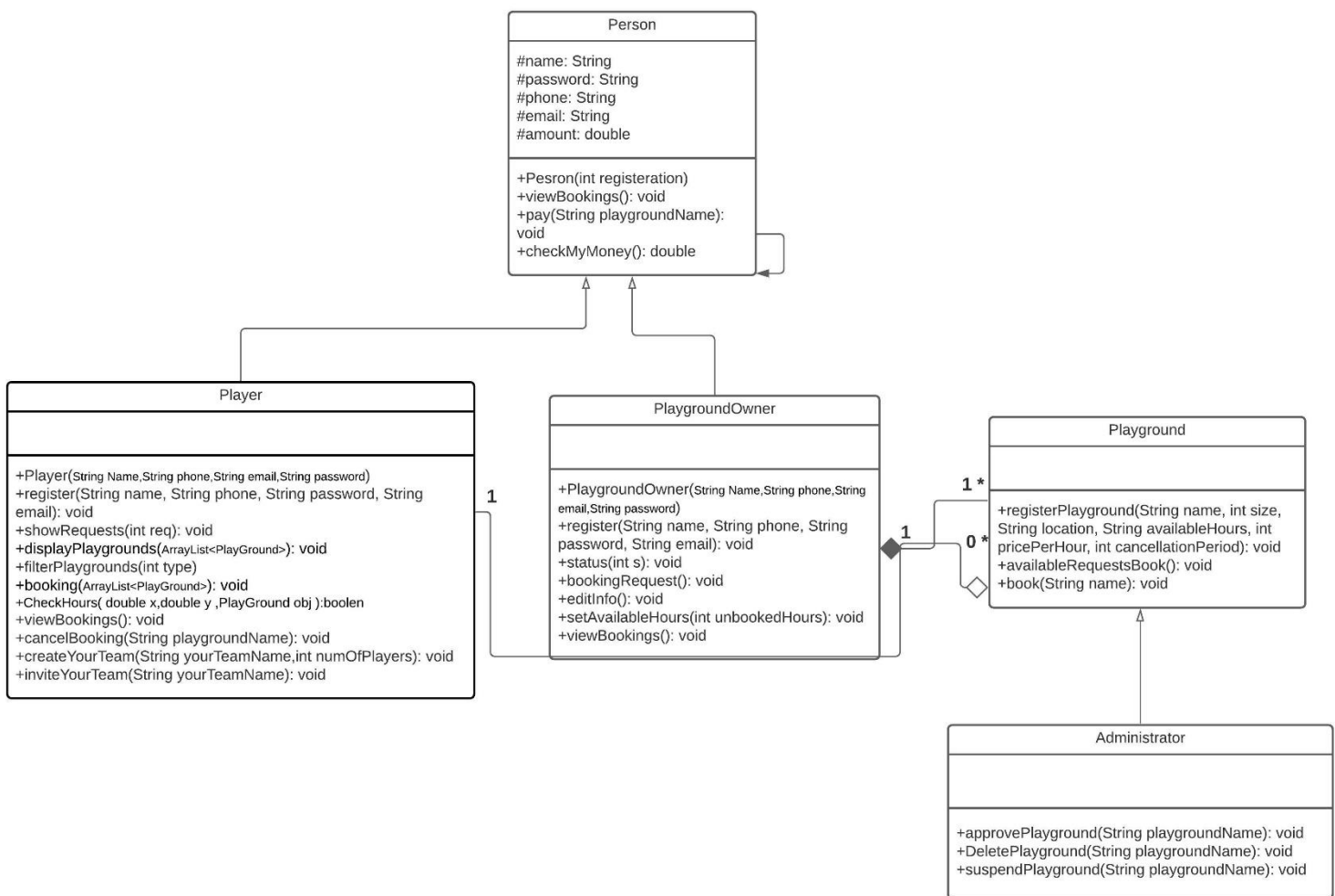- Playgrounds owners are the target audience

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 **| 3**

CS251: Phase 2
Project: <GOFO>

Software Design Specification

System Models

I. Class Diagram(s)

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 | 4

CS251: Phase 2
Project: <GOFO>

Software Design Specification

II. Class Descriptions

Class ID	Class Name	Description & Responsibility
1.	**Person**	-This class is responsible for registering people in the system, whether it is a player, or playground., and creating an account for them, and is also responsible for displaying any booking made for any person who already has an account. also this class responsible for each person's private portfolio, paying the owner, and displaying each person's own financial account • The main function in this class: -Register () -view booking () -pay () -check MyMoney ()
2.	**Player**	-This class is inherited from class person when a player is registered in the system, class player will be responsible for all the functions which available to the player, such as [displaying the nearby playgrounds and filtering them according to the available playgrounds and booking the appropriate playground at the right price or canceling the booking, and he can also invite his friends to see the booking and he can also create his favorite team] • The main function in this class: -Display playgrounds () -filter playground () -Book playground () -view booking () -create your team () -invite your team ()

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 | 5

Software Design Specification

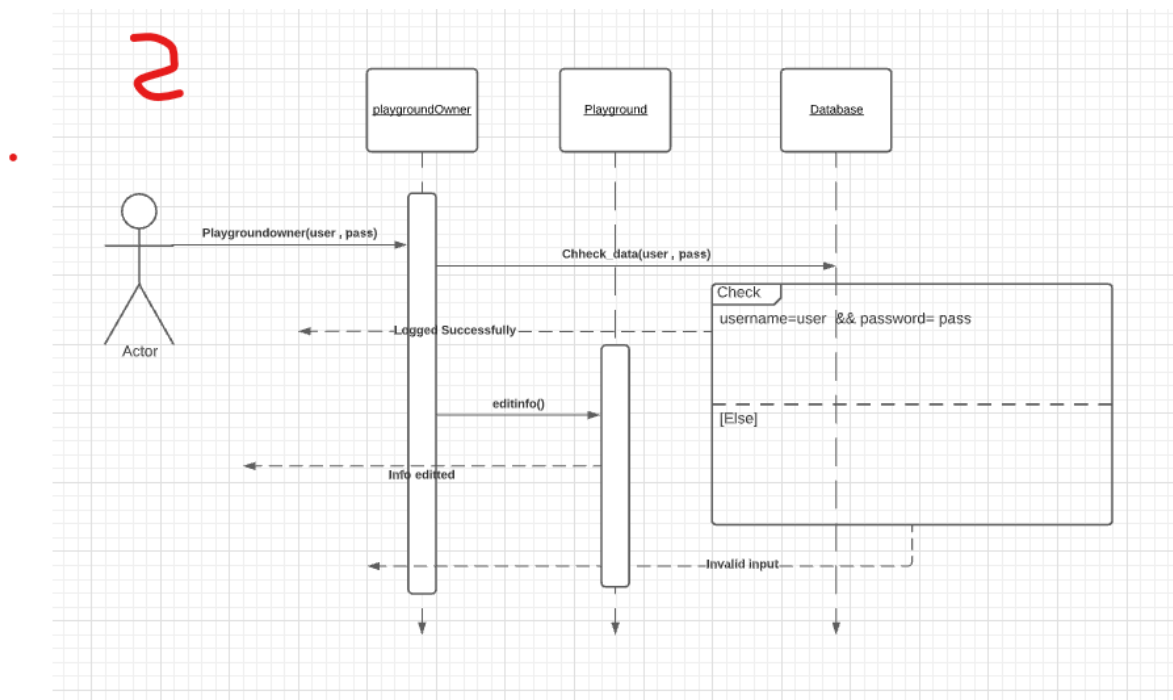|		
3.	**Playground owner**	- This class is inherited from the class person When a playground is registered in the system, the class playground owner will be responsible for all the functions available to him, such as modifying his playground data and entering the hours available for booking in the playground • The main function in this class: -status () -Editinfo () -set avaliableHours () -view booking ()
4	**Playground**	-This class is a composition with a playground owner class so it can't register a playground without a registered playground owner in the system. -This class is responsible for entering all data about the playground such as the price per hour and display all available hours for booking • The main function in this class: -Register Playground () -Price PerHour () -Available RequestsBooks ()

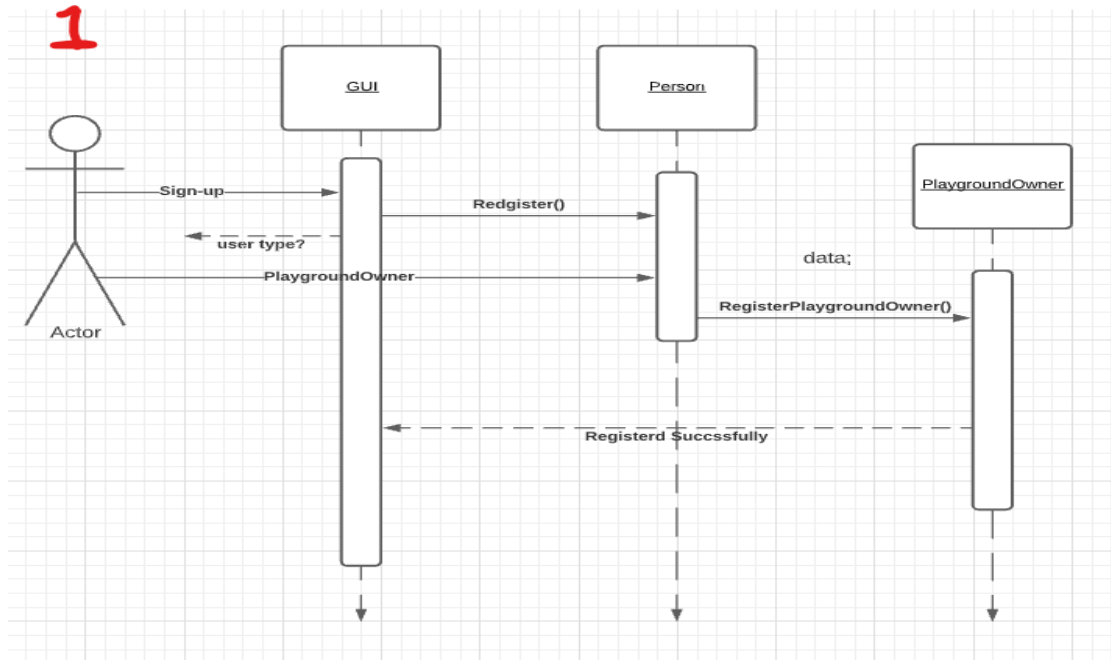CU – FCAI – CS251 Introduction to Software Engineering – 2020 - Software Design Specifications
Prepared by Mostafa Saad and Mohammad El-Ramly V1.0
Edited by Mohamed Samir, Updated to V2.0 by Mohammad El-Ramly 10/4/2020 and V3.0 25/5/2021 | 6

CS251: Phase 2
Project: <GOFO>

Software Design Specification

III. Sequence diagrams

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 | 7

CS251: Phase 2
Project: <GOFO>

Software Design Specification

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 | 8
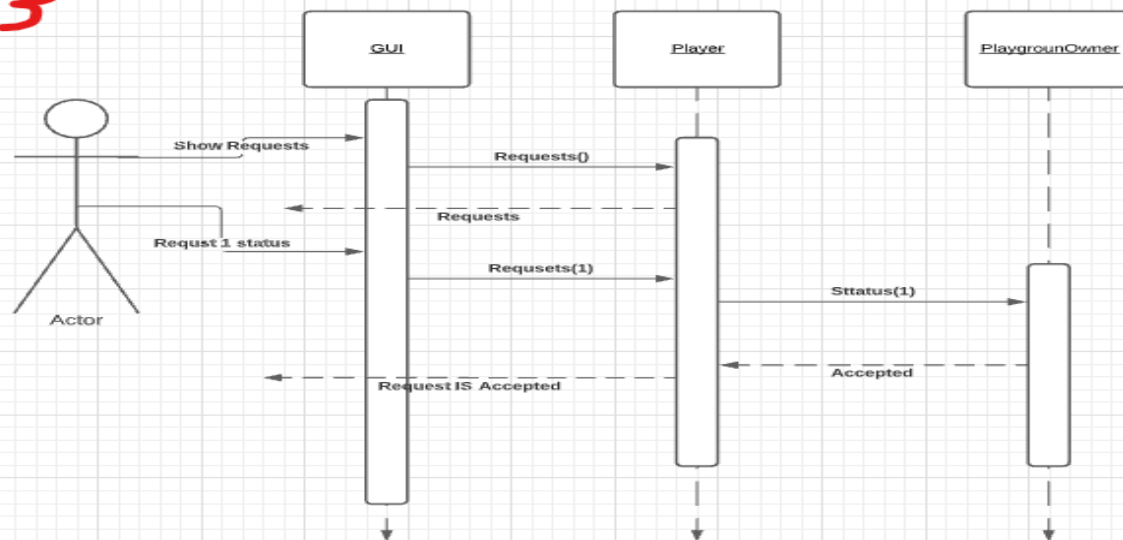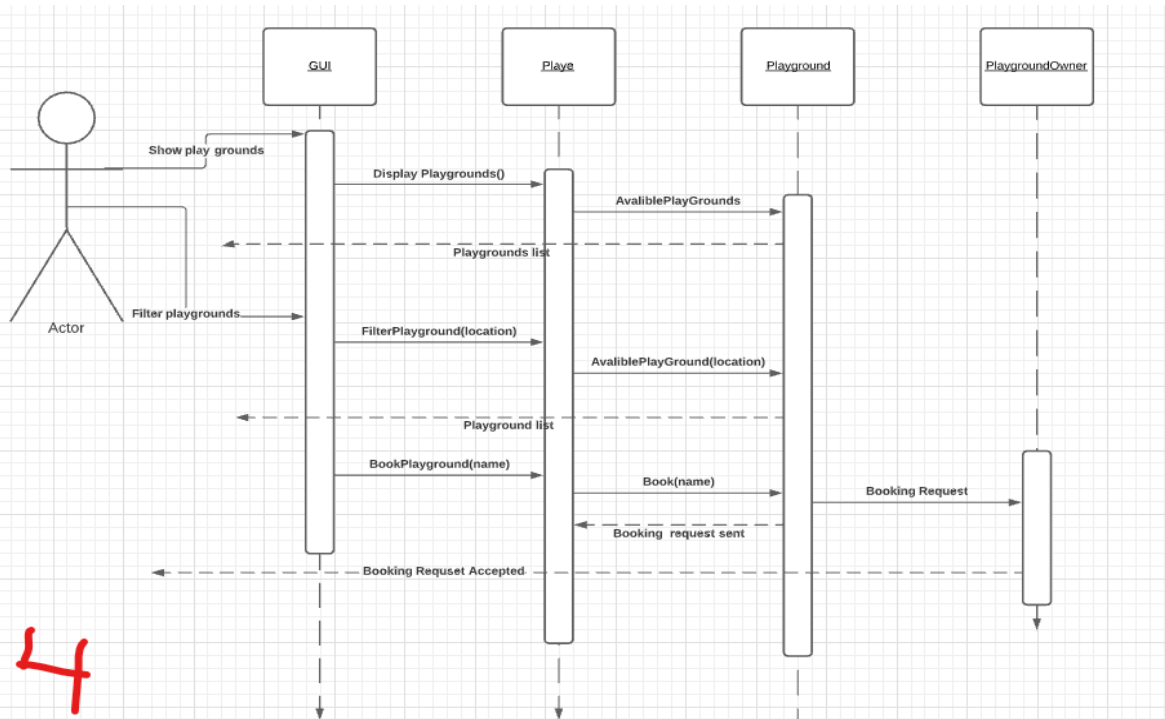
CS251: Phase 2
Project: <GOFO>

Software Design Specification

Sequence Usage Table

Sequence Diagram	Classes Used	All Methods Used
1. Sign up	Class person Class Player or Class Playground Owner	Register () Register player () or Register playground owner ()
2. Edit playground	Class Playground owner	Editinfo ()
3. Player check requests 'status	Class Player Class Playground Owner	-show request () -statues ()
4. Book playground	Class Player Class playground Class playground owner	Display playground () Filter playground () Book () Available RequestsBooks () Book (name) Booking request ()

State Diagram

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 | 9
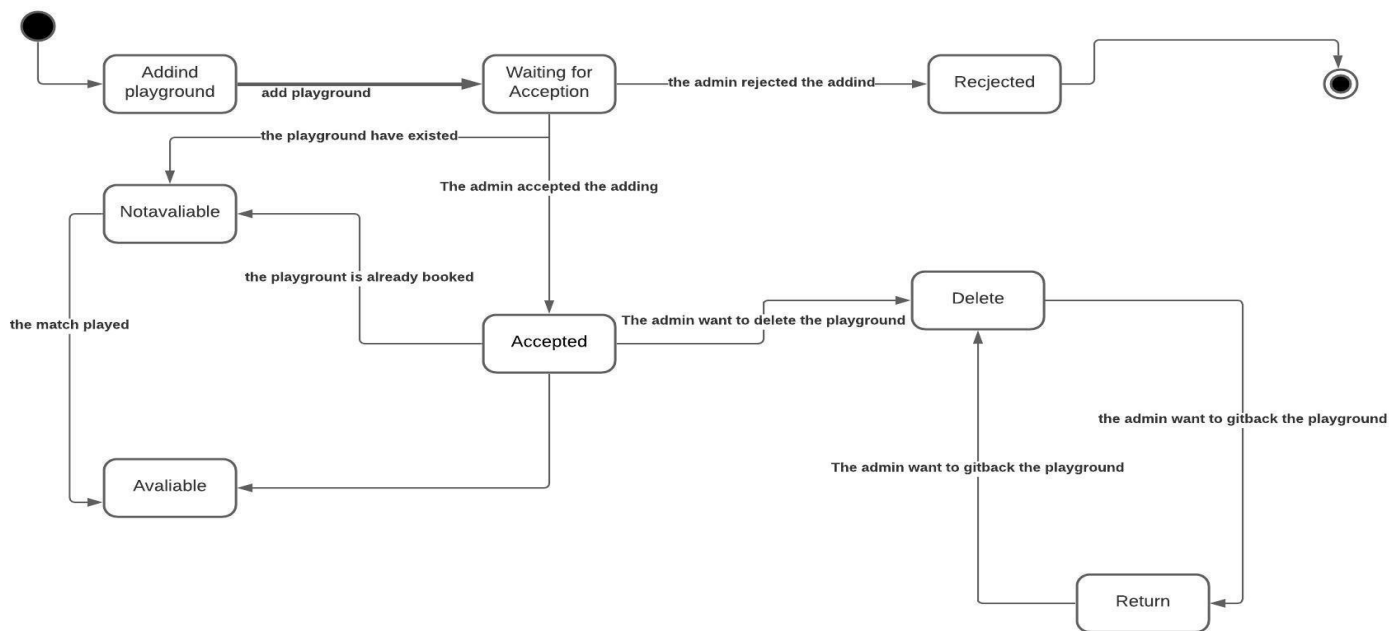
CS251: Phase 2
Project: <GOFO>

Software Design Specification

Tools

- **Lucidchart**

Ownership Report

Item	Owners
Sara Adel Basha	class description & sequence usage table & State Diagram
Ahmed Badr shaban	Sequence diagrams
Ahmed Abd El-Halim Ahmed	class diagram

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   **| 10**