Cairo University  
Faculty of Computers and Information



**CS251**

**Software Engineering I**

GOFO

Software Design Specifications

Contents

[Team 3](#_Toc40625000)

[Document Purpose and Audience 3](#_Toc40625001)

[System Models 4](#_Toc40625002)

[I. Class Diagram(s) 4](#_Toc40625003)

[II. Class Descriptions 5](#_Toc40625004)

[III. Sequence diagrams 5](#_Toc40625005)

[Class - Sequence Usage Table 8](#_Toc40625006)

[IV. User Interface Design 9](#_Toc40625007)

[Tools 9](#_Toc40625008)

[Ownership Report 9](#_Toc40625009)

# 

# Team

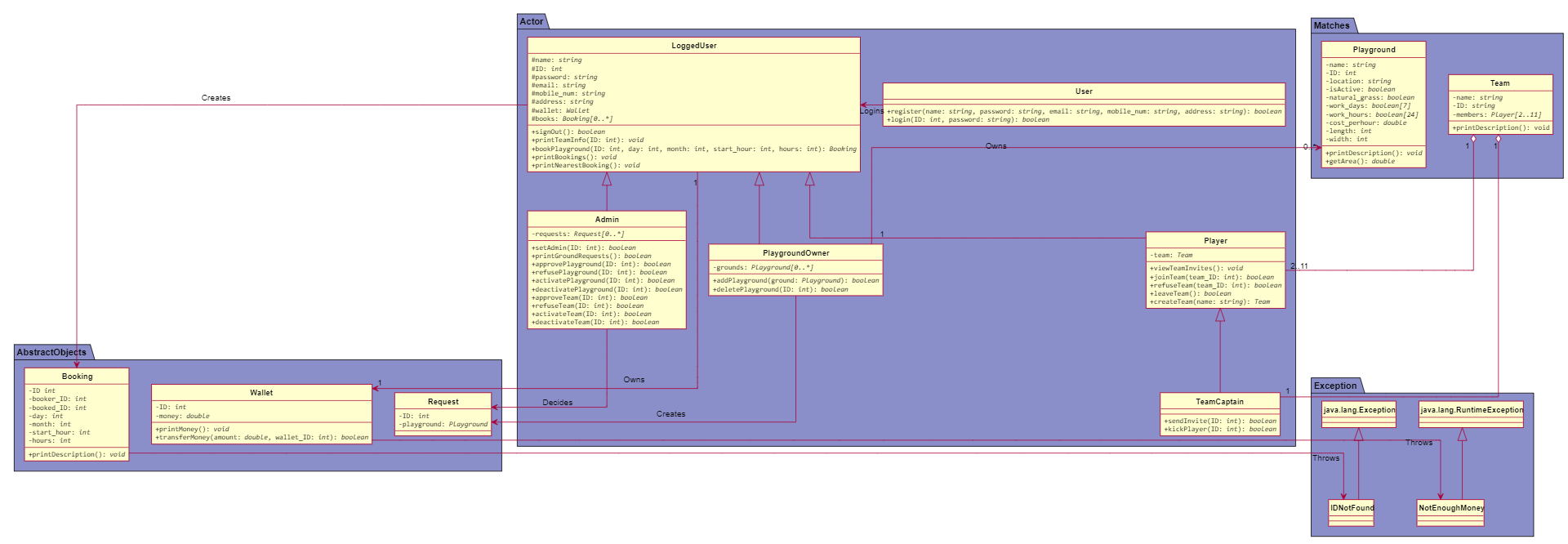
|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Name** | **Email** | **Mobile** |
| 20180250 | Mahmoud Ashraf | [ma5027300@gmail.com](mailto:ma5027300@gmail.com) | 01102488789 |
| 20180304 | Nader Fikry | [naderfikry245@gmail.com](mailto:naderfikry245@gmail.com) | 01097632795 |
| 20180193 | Fady Emad | [fadyemad14705@gmail.com](mailto:fadyemad14705@gmail.com) | 01203732443 |

# Document Purpose and Audience

* This program helps players to find and book football fields without wasting much time and effort.
* This document describes the shape, structure and design of the program through models.
* There are two main audiences in the program first, the player who wants to book football fields second, is the playground owner who wants to provide playgrounds fields.

# System Models

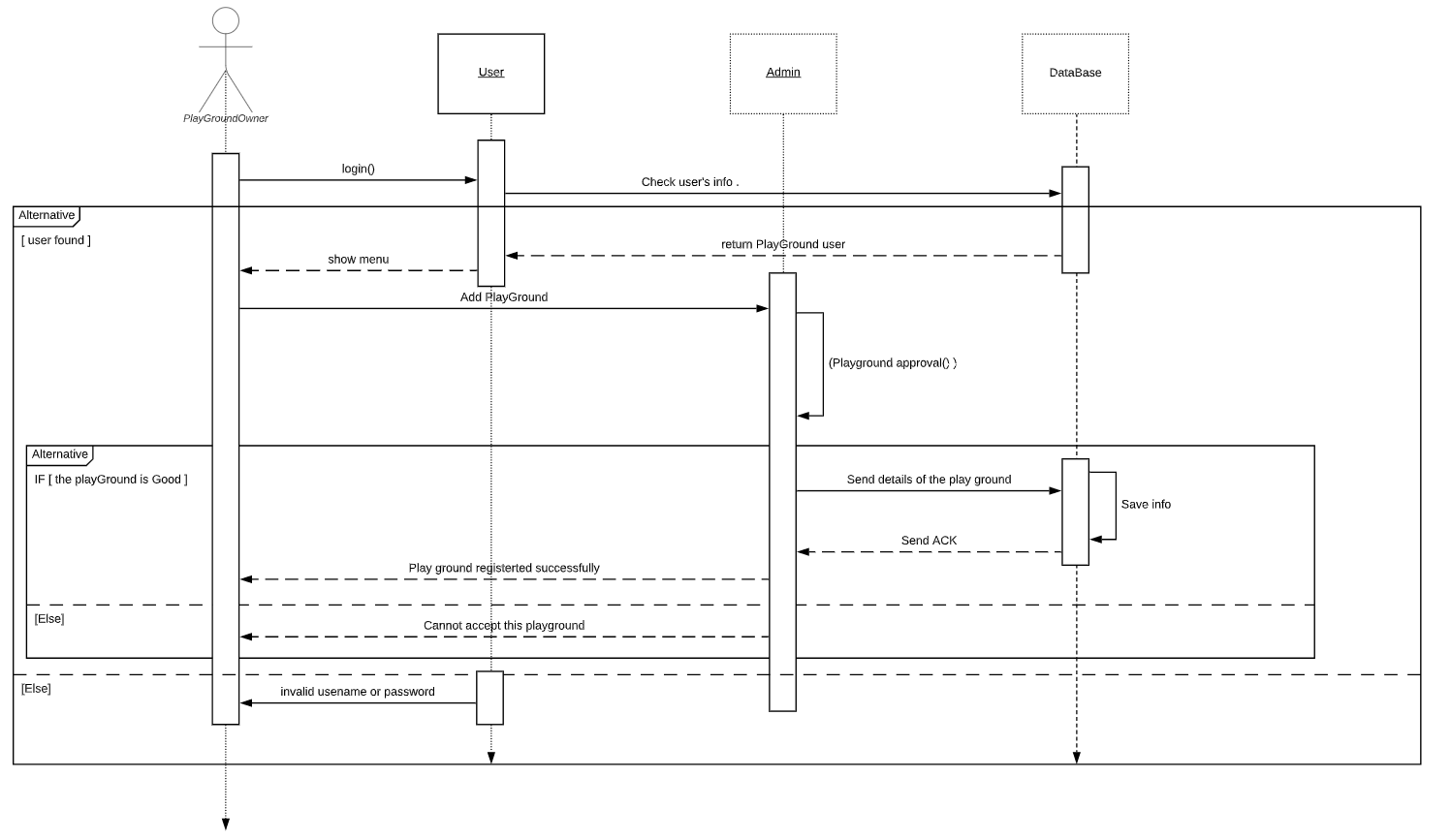
## Class Diagram(s)

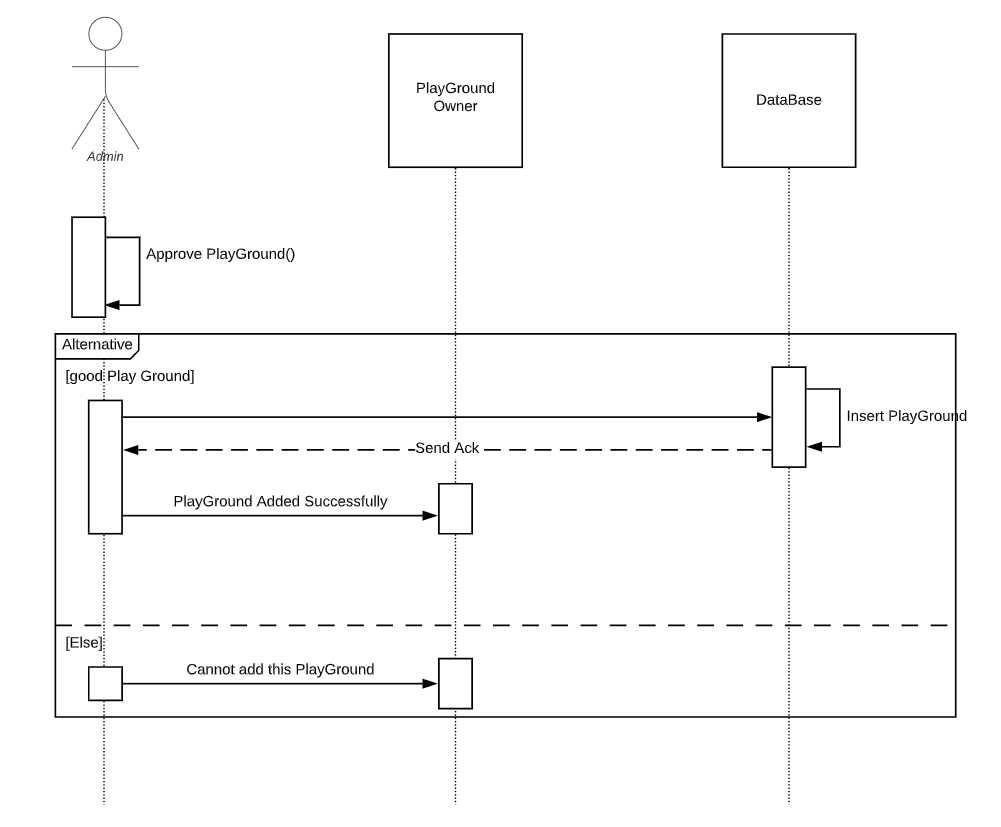


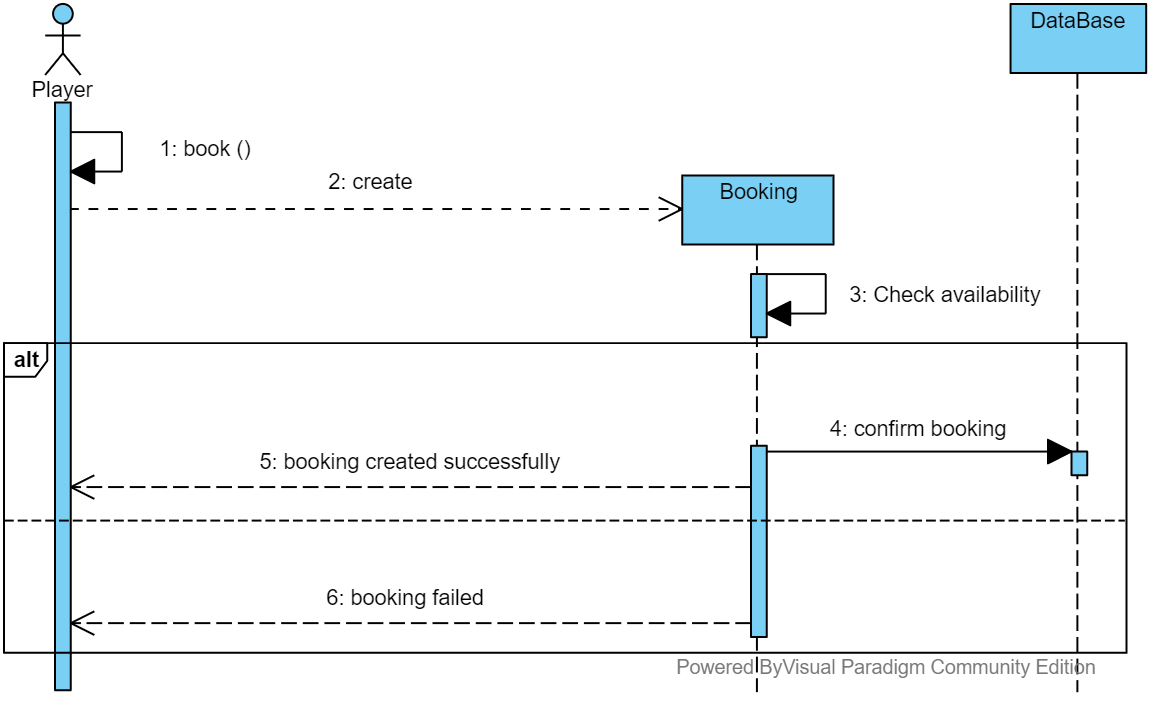
## Class Descriptions

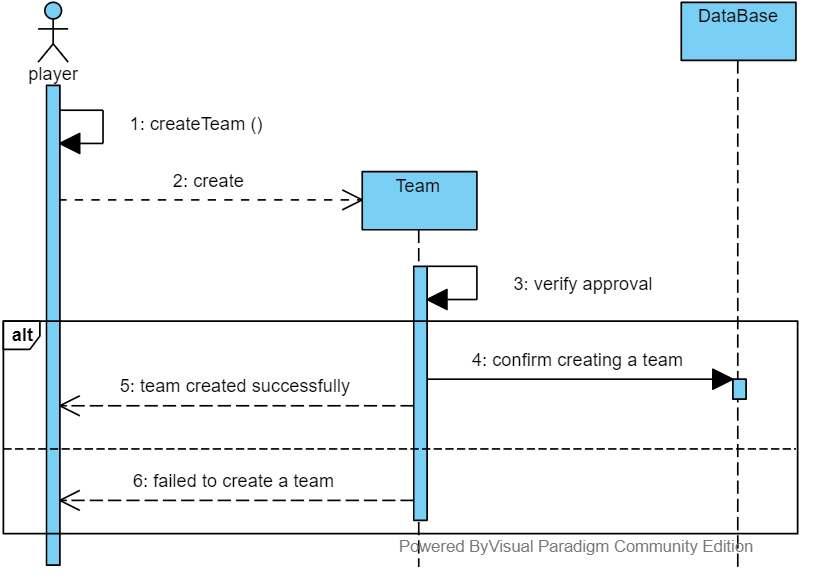
| **Class ID** | **Class Name** | **Description & Responsibility** |
| --- | --- | --- |
| 1. | LoggedUser |  |
| 2. | Admin |  |
| 3. | Player |  |
| 4. | PlaygroundOwner |  |
| 5. | User |  |
| 6. | TeamCaptain |  |
| 7. | Playground |  |
| 8. | Team |  |
| 9. | Booking |  |
| 10. | Wallet |  |
| 11. | Request |  |

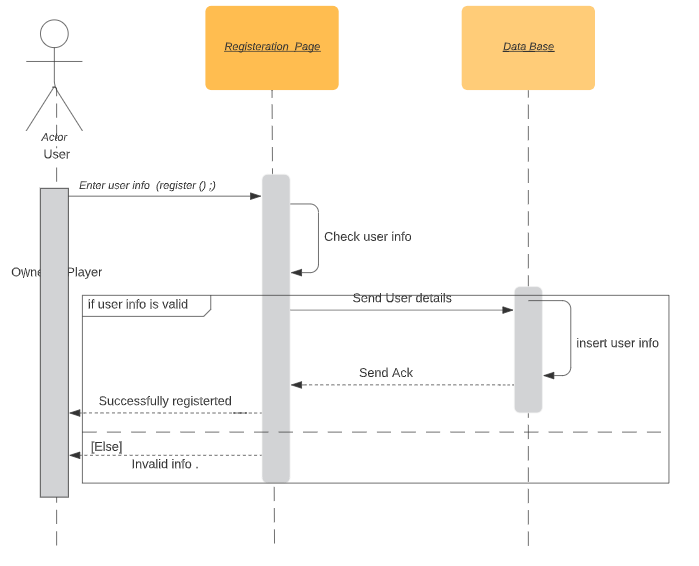
## Sequence diagrams

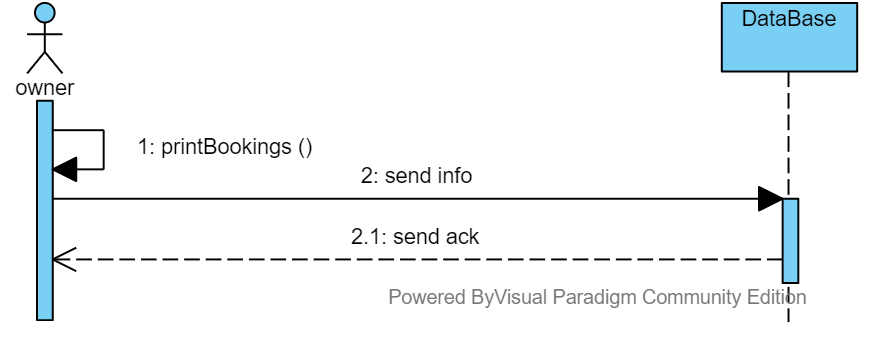












### Class - Sequence Usage Table

| **Sequence Diagram** | **Classes Used** | **All Methods Used** |
| --- | --- | --- |
| 1. Add Playground | Admin  User | login() |
| 1. Approve Playground | PlaygroundOwner | approvePlayground() |
| 1. Book a Playground | Booking | book() |
| 1. Create team | Team | createTeam() |
| 1. Register user | User | tegiser() |
| 1. View playing hours | PlaygroundOwner | printBookings() |

## User Interface Design

|  |  |  |
| --- | --- | --- |
| **Screen ID** | **Screen Name** | **Screen / Wireframe Description** |
|  |  |  |

# Tools

* **Visual-Paradigm**
* **Mocqus**
* **Lucidchart**
* **PlantUML**

# Ownership Report

|  |  |
| --- | --- |
| **Owners** | **Item** |
| Mahmoud Ashraf |  |
| Nader Fikry | Three sequence diagrams, SDS document,  Implementation of Abstract Objects package. |
| Fady Emad |  |