Cairo University

Faculty of Computers and Artificial Intelligence

CS251

Intro. to Software Engineering

Go Football

Software Requirements Specifications

Version 0.0

No.	Students' names	IDs	Email (@gmail.com)	Mobile
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Team

No.	Students' names	IDs	Email (@gmail.com)	Mobile
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Document Purpose and Audience

The purpose of this document is to build a system that facilitates the process of booking playground for players and enables anyone to search for playground nearby.

This document is intended to facilitate the process of booking, searching and displaying playgrounds for playground owners and aims at a strong and user-friendly system that knows little about technology. This document also will include the requirements that must be implemented to build a complete and integrated system that will serve the purpose of the customer and facilitate user use.

Audience:

- Customer.
- Designer.
- Implementer.
- Project Manager.
- System Supervisor.
- Tester in principle.
- Sample of football lovers to add some features.
- experts (if needed).

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Introduction

Software Purpose

The purpose of the application is to solve the problem of booking football matches to make it easier by searching for the nearest place and choosing the right place in terms of hourly rate or type of playgrounds. This application is used for young people who are interested in playing football in playgrounds for fun hours with their friends.

This system also facilitates owners by adding their playgrounds to the application, and anyone can send a request to book it. One of the most important features of the system is a search feature where a person is located.

Software Scope

This System for project name as Go Football Created to Increasing sports cultures, decreasing all spent a lot of time, transportation cost and effort to go to many playgrounds or call the owners.

The application allows users to:

- searching teams: Searching Nearest Playgrounds and Check appropriate Time, available and affordable.
- sorting teams: sort result's Teams and Check If Teams played Before or Not.
- If team is already played, the system can show details for this team.
- provide e-wallet: it is an electronic payment system used to allow players to pay for the bookings.
- replacing Booking Time: if team want to change Booking Time, they can replace old time by new Time if new time is available.
- cancelled Booking: if this team is in range Deadline system can cancelled The Booking without they lose money but if they out range Deadline they lose 100% from Booking Money and available this time to book from different team.

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Benefits and Goals:

- **This application is very useful for Playground owners and players who love playing football.**
- **The objective of the application is to facilitate the search for the closest and most. suitable playground according to the user's needs.**
- **Enabling user to handle the system easily without binding skills on users.**
- **Easy and simple user interface for all categories.**
- **Online playground booking and payment facilitation.**
- **Seeing players with a lot of playgrounds they might not even know if it's close without this system.**
- **The player's knowledge of the details, dates and evaluation of the playground in the house.**
- **Helps players who do not have a team join one of the teams that is missing.**

This system will be online and have a special database.

This system will be via an application on a server with a large expansion.

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Definitions, Acronyms, and Abbreviations

No.	Abbreviation	Sentence	Definition
1	W	Won	• Represents how many times the team wins.
2	L	Loss	• Represents how many times the team loss.
3	GS	Goals Scored	• Goals scored by the team.
4	Pts	Points	• Points achieved by the team.
5	A	Goals Against	• Number of goals scored in the team.
6	F	Goals For	• Number of goals scored by the team.
7	GD	Goal Difference	• The difference between the number of goals scored and the number of goals Against.
8	FC	Football Club	___
9	FA	Football Association	___
10	Vs	Versus	___
11	FC	Football Club	___
12	SC	Soccer Club	___
13	CB	Center-back	• The person who stops the other team from getting caught in his goalie.
14	GK	Goal Keeper	• The person who handles the balls from the other team and protects his goalie.
15	LB	Left Full-Back	• A person who defends from the left and steps forward to support the attack on the same front.

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16	**RB**	**Right Full-Back**	• A person who defends from the right and steps forward to support the attack on the same front.
17	**LW**	**Left Wing-Back**	• The person attacking from the left side and supporting the attackers.
18	**RW**	**Right Wing-Back**	• The person attacking from the right side and supporting the attackers.
19	**CF**	**Center Forward**	• The attacker whose job it is to score goals and attack the other team.

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Requirements

Functional Requirements

- **Register ():** It's a function that enables people to register in the system, whether it's a player or a Playground Owner.
- **Login ():** It's a function that enables a Playground Owner or player to access his or her own account, which is already registered.
- **ListPlaygrounds ():** To display all the lands in the system with their own details.
- **Search ():** To search for all Playgrounds close to the player.
- **Payment ():** To determine the player's payment method and activate the electronic wallet
- **CheckRange():** Check Range To Cancel Request
- **Book ():** It's a function that enables a player after registration to book a specific playground.
- **myBooks ():** It's a function that shows the user, whether a player or a Playground owner, all the bookings he's made.
- **myRequests ():** It's a function that shows the player all the requests he's made and offers the landowner all the requests the players have sent.
- **calcPrice ():** It's a function that calculates the number of hours booked per hour and the total cost a player has to pay.
- **updateState ():** After requesting a player or Playground Owner for a specific playground, he can make his request by cancelling or deleting it under certain conditions.
- **Invite ():** It's a job that, after booking, the player can invite his team-mates through a specific link.
- **joinTeam ():** If an unfinished team is found, any player can join this team.
- **addPlayground ():** It's a function for a Playground Owner to add playground to their own playgrounds in detail.
- **myPlaygrounds ():** It's a function for a Playground Owner to show all his own playgrounds.
- **removePlayground ():** It's a function that enables an administrator to delete a specific land if any complaints or problems occur.
- **playgroundDtails ():** To provide details of playground and show it for its owner.

- **CancelReguest():** Check By Administrator if playground owner will accept his playground or not and Check By playground owner if player will remove Reguest or not

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Non Functional Requirements

Non-functional requirements describe how the system works (performance, quality , platform, Process, Availability, Recovery, maintainability , reusability , Usability, Reliability, Security, Scalability, Portability).

- **Platform requirements** → May be Software, Hardware or operating System (Server, Windows, Mac, or Linux) it runs different web Application (Chrome , Microsoft Edge) Mobile Application.
- **Software Quality requirements** → constrains on the Design which maintenance User desires and guide him Step By Step to learn How Can He Booking in This System easily, guide him to Recovery.
- **Process requirements** → Actor control his Tasks only, each method have constraints to valid this method. Constraints about nearest location, join Team, searching ….. etc.

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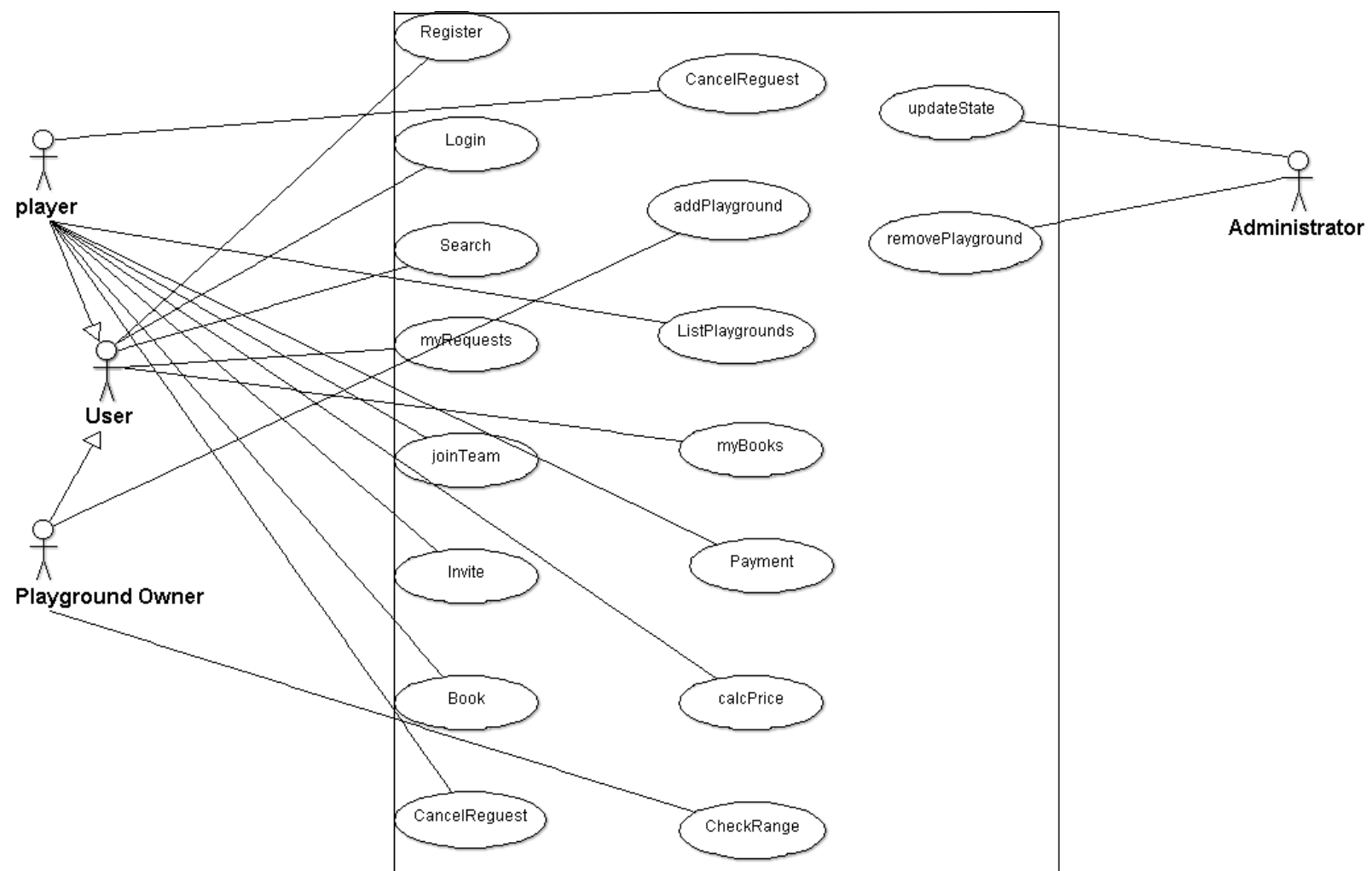| No.	Examples	Details
1	performance	• Payment → electronic ewallet operation will be done within (20) second • Display →display All playground operation will be done within (25) second
2	Scalability	• 10 playgrounds • System should be able to support up to 100 simultaneous game players.
3	quality	• Check Payment → if card is valid or not • Check join→ number of team not be completed
4	platform	• New Platform has new feature
5	Process	• methods have constraints to overcome any mistake
6	Availability	• it provides sportive people
7	Recovery	• Backup Database after editing it with new information and restore it any time • To overcome missing data
8	maintainability	• Editable
9	performance	• Payment → electronic ewallet operation will be done within (20) second • Display →display All playground operation will be done within (25) second
10	Scalability	• 10 playgrounds • System should be able to support up to 100 simultaneous game players.
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13	Process	• methods have constraints to overcome any mistake

Software Requirements Specifications

System Models

Use Case Model

`Administrator` : responsible check playground and decide will remove or not from playground owner.
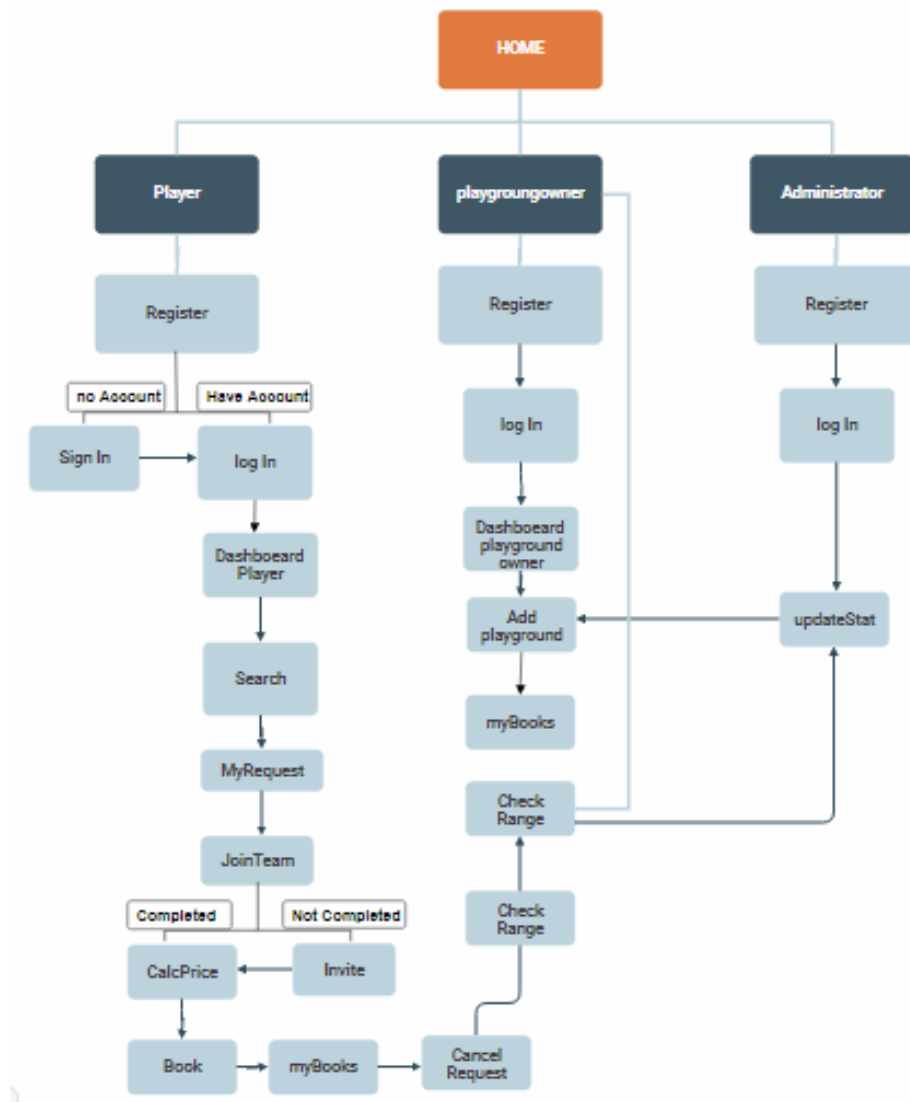
`Player` : Booking Available and Suitable playground.

`Playgroundowner` : Adding his playground and book from different players

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System Navigation Map

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Tools

- **ArgoUML - moqups**

Ownership Report

No.	Students' names	Items he created
1	**Khaled Ashraf Hanafi Mahmoud**	• **Functional Requirements** • **Non Functional Requirements** • **Software Scope** • **Document Audience**
2	**Ahmed Sayed Hassan Youssef**	• **Use Case Model** • **Non Functional Requirements** • **Definitions, Acronyms, and Abbreviations**
3	**Shimaa Reda Saeed Nady**	• **System Navigation Map** • **Non Functional Requirements** • **Software Purpose** • **Document Purpose**