

Software Requirements Specification

Turf Booking & Management System

Play Ground

By

Team 1

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1. Introduction

1.1 Purpose

Turf playground are used to play various sports like football, rugby, tennis, cricket, etc. People enjoy playing on the turf, it has vibrant environment and very safe to play. Many school teams and clubs prefer turf playground for practice and training purpose. Sometime it becomes difficult to book turf playground because of timing issue or the slot getting booked previously. The SRS illustrates in clear terms, the system's primary uses.

1.2 Document Conventions

This SRS is written in Times New Roman font with size 12 in normal, and Times New Roman font with size 14 for bullet points. The priorities for higher level requirements are inherited in detailed requirements.

1.3 Intended Audience and Reading Suggestions

This System Requirement Specification is meant for the Project makers, Project overseers, The Website Administrators, Users. The SRS is written in the standard IEEE format. The readers should read the whole SRS sequentially to gain a proper understanding of the project.

1.4 Product Scope

This sports ground booking website is proposed for booking the turf in an easy and efficient way. It has three modules namely, Admin, Manager and User. Admin can login and can add turf locations, assign manager by creating login credentials for manager, add price details for the particular turf, manages turf and view the details of sports venues booking for all locations. Managers assigned by the admin are different for different Turf playground locations. Managers will get login credentials from admin, he/she can login using credentials, he/she can check the rates, view the request for turf booking for the respective location, can accept booking, generate bill and can view the booking history. Users can check the availability of the turf, select timings, fill personal details, can pay by providing bank details or card details and he/she can also see view previous turf booking history.

1.5 References

<https://www.freeprojectz.com/>

2. Overall Description

2.1 Product Perspective

This product is an entirely new product. It is not a component of a larger system. Turf Booking and Management System Windows application supports a number of functions for both the user and Turf management. There are some hardware or software requirements beyond these including, but not limited to, memory or specific software packages that need to be utilized nor software packages that need not be utilized. The Turf Booking and Management system will interact with a credit/debit card processing system in order to process booking from the Application. The system will also interact with the Turf's Inventory database, which records the slot of time available for booking in the inventory.

2.2 Product Functions

The Turf Booking and Management System will provide a number of functions, each is listed below.

- Maintain data associated with the inventory.
- The inventory can also keep track of the availability of slots.
- Maintain records for many users.
- A user can be either a member.
- A user has an email address (unique across all users), password (no restrictions), phone number (no restrictions).
- Anyone may sign up for a user account.
- Allow any user to become a member.
- Show a listing of available turfs.
- Games are to be displayed in order by title.
- Allow users, manager and admin to log in and out of the system.
- Log/record the transaction.
- Allow admin to update Turfs and time slots.
- Admin can view booking done and the user details.
- Allow admin to change Turfs and its rates.

2.3 User Classes and Characteristics

The typical Turf Booking and Management System user is simply anyone that has access to the Windows Application. It is assumed that the user is familiar enough with a computer to operate the application, keyboard and mouse and is capable of browsing to, from and within simple applications.

2.4 Operating Environment

The system will work on any hardware device having an internet connectivity and Windows OS for installation of application. The system will not run-on OS below Windows 8.

2.5 Design and Implementation Constraints

Security is not a concern for this system. The database may store passwords in plain text and there doesn't need to be a password recovery feature nor lockout after numerous invalid login attempts. As such, the system may not work correctly in cases when security is a concern. These cases include those listed above in addition to lack of an encrypted connection when sending credit card information and forcing users to use “strong” passwords. A strong password is a password that meets a number of conditions that are set in place so that user's passwords cannot be easily guessed by an attacker. Generally, these rules include ensuring that the password contains a sufficient number of characters and contains not only lowercase letters but also capitals, numbers, and in some cases, symbols.

2.6 Assumptions and Dependencies

Since the Turf Booking and Management System is accessible through the internet, it is assumed that the end user has a connection to the internet. It is also assumed that the user has a Windows system able to install the application. Client: We have assumed that all of the computer systems are in proper working condition and that the user is capable of operating these system's basic functions including but not limited to being able to power on the system, login and open play ground application, and navigate the application to book the times slots of turfs. Provider: We have assumed that the Turf Booking and Management System will be running on a properly working Windows and database system with an Internet connection that allows this system to perform all communications with clients. Assumptions:

- The admin account's username and password maybe hard coded.
- The admin can be a user.
- Any user can edit their account information.

2.7 Apportioning of requirements

As stated by the user, security is not a concern of this project. As such, it is beyond the scope of this system to encrypt personal user data, encrypt credit card information, prevent unauthorized login attempts, or any other concern of this nature.

3. External Interface Requirements

3.1 System Interfaces

The system will interface with the following two systems:

1. A credit/debit card processing system: The system will access the credit/debit card processing system.
2. The Turf time slot Inventory database: The system will interact with the inventory database via Microsoft SQL Server connection.

3.2 User Interfaces

The system will provide the ability for everyone to access the Turf Booking and Management System via the Windows application. There will be three different user interfaces that will accompany this application: one for the users, one for administrator and one of the managers.

- Users will be only allowed to search Turfs having to with login, all transaction will include booking time slots, or viewing and changing their online account.
- Administrator will have to login to perform any functions. Administrator will be able to add/delete/update turfs to be displayed to the users, and change the information on any turfs as required.

3.3 Hardware Interfaces

- Processor –Core i3 or equivalent AMD
- Hard Disk – 160 GB
- Memory – 4GB RAM
- Monitor

3.4 Software Interfaces

There are no special software interface requirements.

3.5 Communications Interfaces

There are no special communication interface requirements.

4. Other Nonfunctional Requirements

4.1 Performance Requirements

The performance requirements are as follows: -

- System login/logout shall take less than 5 seconds.
- The system should run properly on all windows systems.
- The system should be light and run smoothly.

4.2 Safety Requirements

The safety requirements are as follows: -

- The password should not be visible while typing.
- The system should use a secure connection to connect with the credit/debit card processing system.

4.3 Security Requirements

The security requirements are as follows: -

- The user and admin require a username and password to login into the system.
- The users cannot book time slots without logging in.

4.4 Software Quality Attributes

- Reliability

The average time of failure for the system is less. In the event that the server crashes, the system will take one or two days to be running again.

- Availability

The Turf Booking and Management System will be available 24x7, with the exception of being down for maintenance no more than 3 hours a month. If the system crashes, it should be back up within two days.

- Security

Users will be able to access only their own personal information and not that of other users. Purchases will be handled through a secure server to ensure the protection of user's credit card and personal information.

- Maintainability

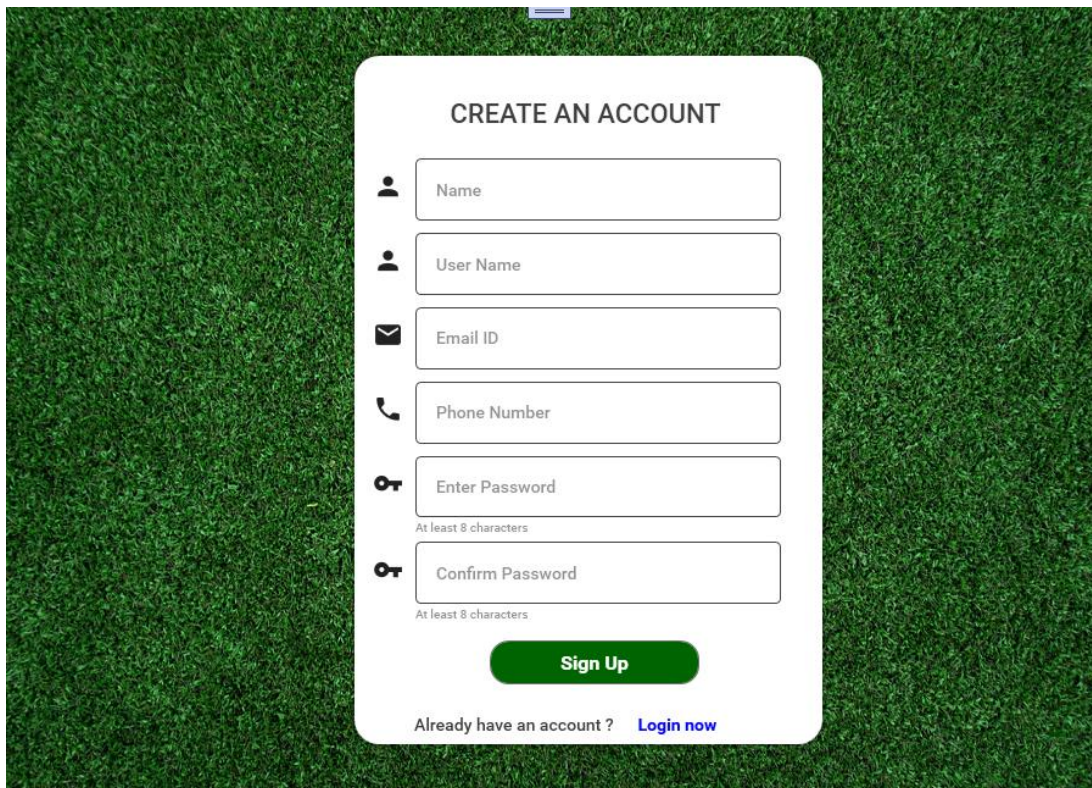
Any updates or defect fixes shall be able to be made on client-side computers only, some patches required by the user.

4.5 Business Rules

The business rules are as follows:


- The administrator can be a user.
- The administrator cannot access the user's personal information.
- The administrator will receive notifications from the credit/debit card processing system to process the booking and confirm payment of booking is received
- Manager can confirm the booking of the turf
- Manager can generate bills as per the rates


User Registration





A user registration form titled "CREATE AN ACCOUNT" is displayed on a green grass background. The form is a white rounded rectangle containing several input fields with icons to their left: a person icon for "Name", a person icon for "User Name", an envelope icon for "Email ID", a telephone icon for "Phone Number", a key icon for "Enter Password", and a key icon for "Confirm Password". Below the password fields, the text "At least 8 characters" appears twice. A green "Sign Up" button is at the bottom of the form, followed by the text "Already have an account ?" and a blue "Login now" link.


CREATE AN ACCOUNT

 Name


 User Name

 Email ID

 Phone Number

 Enter Password

At least 8 characters

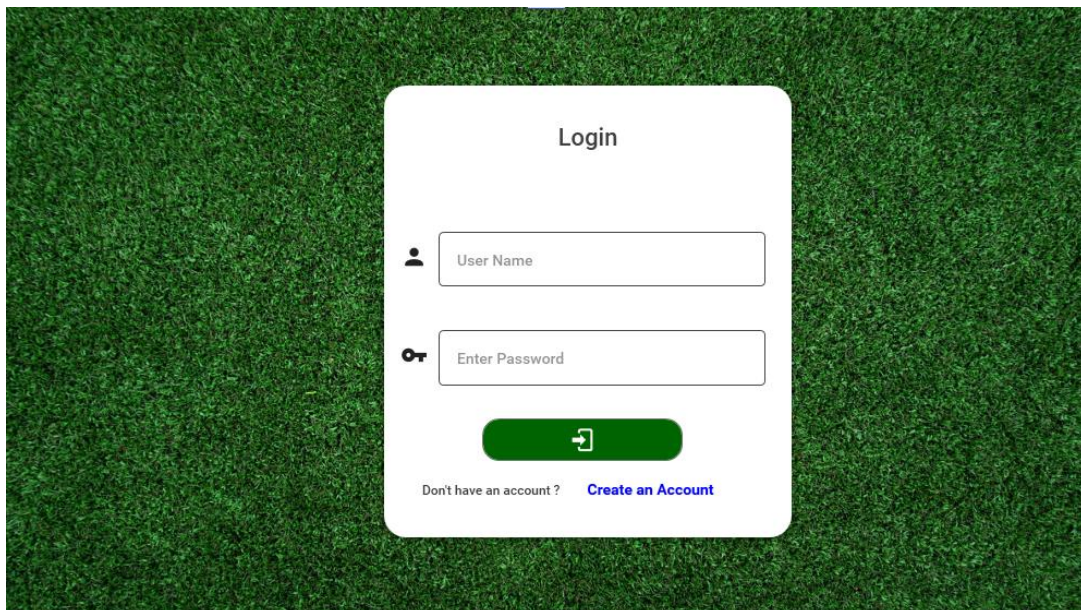
 Confirm Password

At least 8 characters

Sign Up


Already have an account ? [Login now](#)


User Login




A user login form titled "Login" is displayed on a green grass background. The form is a white rounded rectangle containing two input fields with icons to their left: a person icon for "User Name" and a key icon for "Enter Password". A green button with a white login icon is at the bottom of the form. Below the button, the text "Don't have an account ?" is followed by a blue "Create an Account" link.

Login

 User Name

 Enter Password



Don't have an account ? [Create an Account](#)

PlayGround

Search Turfs

Hello, David

Light ModeDark

Browse Image

Personal Details

Name

Email ID

Phone Number

City

State

Zip Code

Save Changes

Change Password

Current Password

At least 8 characters

New Password

At least 8 characters

Confirm Password

At least 8 characters

Update Password

User Log Out

Overview

Bookings

ACCOUNT

Settings

Logouts

Search Turf

Joe Mathew
User

Apply Dark Theme

Logouts

Email

joemathew@gmail.com

LOGOUT

Turf Booking Details - Admin

Overview

Bookings

Users

Turfs

ACCOUNT

Settings

Logouts

Search Users

David Mathew
Admin

Apply Dark Theme

Turf Booking Details

12









This month October

Search Booking by name or title

DATE

DATE

SEARCH

User	Turf Sports	TIME	ACTION
 Ibrahim Yekani	Soccer Turf	05:00PM	<button>VIEW BOOKING</button> ...
 Eboke Kehchi	Soccer Turf	06:00PM	<button>VIEW BOOKING</button> ...
 Kemi Olanigbige	Cricket Turf	08:00AM	<button>VIEW BOOKING</button> ...
 Michael Stuart	Soccer Turf	8:00PM	<button>VIEW BOOKING</button> ...
 Scott Tom	Cricket Turf	09:00PM	<button>VIEW BOOKING</button> ...
 Amira Ahmed	Badminton Turf	04:00PM	<button>VIEW BOOKING</button> ...
 Karamas Paul	Cricket Turf	07:00AM	<button>VIEW BOOKING</button> ...
 Ayo Jones	Badminton Turf	8:00AM	<button>VIEW BOOKING</button> ...

Showing 1 to 8 of 40 items

1

2

3

10

View All Turf Details

Overview

Bookings

Users

Turfs

ACCOUNT

Settings









Logouts

Search Turf

David Mathew Admin

Turf Details

SHOW 12 This month: October Q Search Turf by name or title Add Turf DAY WEEK MONTH

Turf	Type Sports	TIME	ACTION
 Backam Turf	Soccer Turf	09:00PM - 11:00PM	<button>VIEW TURF</button> ...
 Backam Turf	Soccer Turf	09:00PM - 11:00PM	<button>VIEW TURF</button> ...
 Kemi Turf	Cricket Turf	09:00PM - 11:00PM	<button>VIEW TURF</button> ...
 Michael Turf	Soccer Turf	09:00PM - 11:00PM	<button>VIEW TURF</button> ...
 Scot Tom Turf	Cricket Turf	09:00PM - 11:00PM	<button>VIEW TURF</button> ...
 Amling Turf	Badminton Turf	04:30PM - 11:00PM	<button>VIEW TURF</button> ...
 Banabai Pau Turf	Cricket Turf	09:00PM - 11:00PM	<button>VIEW TURF</button> ...
 Ayo Jones Turf	Badminton Turf	09:00PM - 11:00PM	<button>VIEW TURF</button> ...

Showing 1 to 8 of 40 items

< 1 2 3 ... 10 >


Add new Turf - Light Mode

PlayGround

Search Turfs

Hello, David

Light Mode Dark



Click to add Turf Photo

Add New Turf

Turf Name

City

State

Zip Code

Time Slot

Start Time Select Start Time Closing Time Select Closing Time

Type of Turf FootBall

Pricing per Hour

Save Changes

Add new Turf - Dark Mode

The screenshot shows the 'Add New Turf' form in a dark-themed application. On the left, there is a sidebar with icons for home, search, calendar, and a list. The main area features a large green circular placeholder for a turf photo with a button labeled 'Click to add Turf Photo'. To the right is the 'Add New Turf' form with the following fields:

- Turf Name
- City
- State
- Zip Code
- Time Slot (with Start Time and Closing Time dropdowns)
- Type of Turf (set to Football)
- Pricing per Hour

A green 'Save Changes' button is at the bottom right of the form. A yellow plus icon is visible in the bottom right corner of the main area.

View All users - Admin

The screenshot shows the 'View All users' admin page. It features a sidebar with navigation links: Overview, Bookings, Users (selected), Turfs, ACCOUNT, Settings, and Logouts. The main area has a search bar for users and a toggle for 'Apply Dark Theme'. Below the search bar, there are filters for 'SHOW' (8), 'STATUS' (ONLINE), and a search bar for 'Search users by name or title'. A table of users is displayed with columns for 'Add user', 'ALL', 'MAN', and 'WOMEN'. The table contains 8 user entries, each with a profile picture, name, and 'Edit' and 'Delete' buttons. The users listed are: Ibrahim Yelani, Ebuka Kelachi, Kemi Oluogbolu, Michael Stuart, Scott Tom, Amina Ahmed, Banabas Paul, and Ayo Jones. At the bottom, there is a pagination bar showing 'Showing 1 to 8 of 40 items' and a page navigation bar with links for 1, 2, 3, and 10.

Admin Settings

☰

Search Turfs

🔍

👤 Hello, David

⋮


📈

🏠

📅

⚙️

🔗



Browse Image

Personal Details

👤

Name

✉️

Email ID

☎️

Phone Number

Save Changes

Change Password

🔑

Current Password

At least 8 characters

🔒

New Password

At least 8 characters

🔒

Confirm Password

At least 8 characters

Update

+

Admin Log Out

⬅➡

Search users

🔍

👤 David Mathew
Admin

Logouts

☀️ ● Apply Dark Theme

📊 Overview

📅 Bookings

👤 Users

🏟️ Turfs

ACCOUNT

🔍 Settings

🚪 Logouts

Email

admin@gmail.com

LOGOUT

Database Design

