

IQRA University, Islamabad, Chak Shahzad

(Working Progress)

For

Futsal Field Reservation System

By

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4-Week Progress Report for Futsal Field Reservation System

5-

Week 1: Project Initialization and Database Setup

Environment Setup:

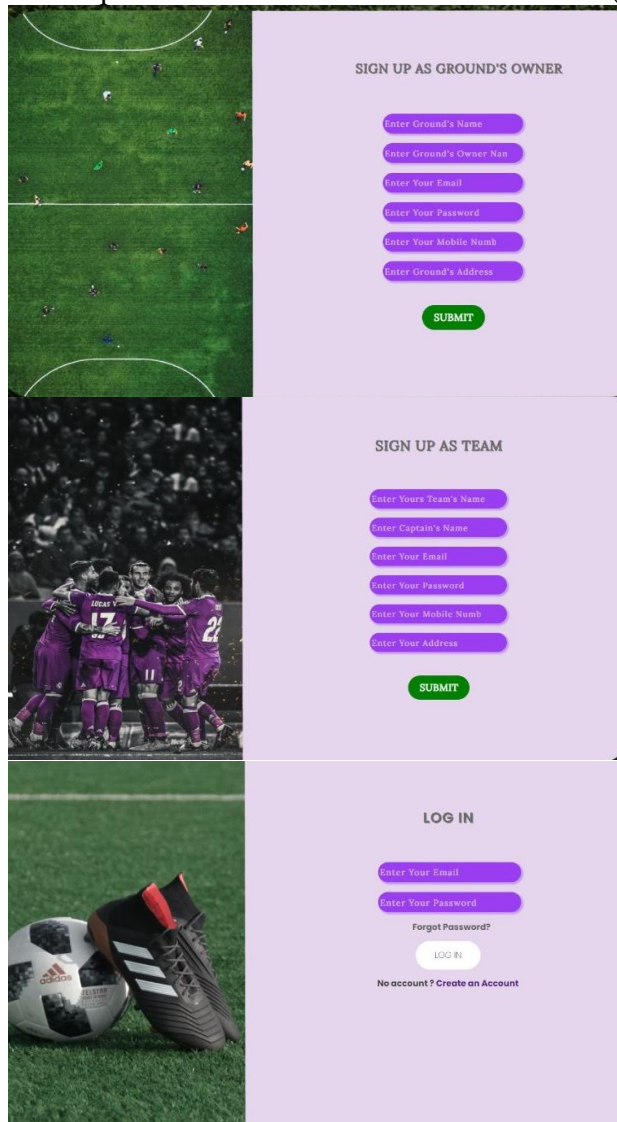
Installed and configured Node.js, Express.js, and MongoDB.

Database Design:

Created schemas for Users, Grounds, Bookings, and Teams using Mongoose.

API Development:

Developed basic routes for user authentication (login/signup).



The image displays three screenshots of the Futsal Field Reservation System's user interface, arranged vertically. Each screenshot shows a form for user authentication or registration, with a corresponding background image on the left side of each form.

- Top Screenshot: SIGN UP AS GROUND'S OWNER**
The background image shows a futsal field with players. The form includes the following fields:
 - Enter Ground's Name
 - Enter Ground's Owner Name
 - Enter Your Email
 - Enter Your Password
 - Enter Your Mobile Number
 - Enter Ground's AddressA green SUBMIT button is located at the bottom of the form.
- Middle Screenshot: SIGN UP AS TEAM**
The background image shows a group of futsal players celebrating. The form includes the following fields:
 - Enter Your Team's Name
 - Enter Captain's Name
 - Enter Your Email
 - Enter Your Password
 - Enter Your Mobile Number
 - Enter Your AddressA green SUBMIT button is located at the bottom of the form.
- Bottom Screenshot: LOG IN**
The background image shows a futsal ball and a pair of shoes. The form includes the following fields:
 - Enter Your Email
 - Enter Your PasswordBelow the password field is a link for "Forgot Password?". A white LOG IN button is located below the form. At the bottom of the form, there is a link: "No account? Create an Account".

Supervisor Review:

Presented the initial setup and authentication flow.

Outcome: Successful database connection and user management implementation.

Week 2: Ground Booking System Implementation

Ground Management:

Developed APIs for ground owners to add, edit, and delete grounds.

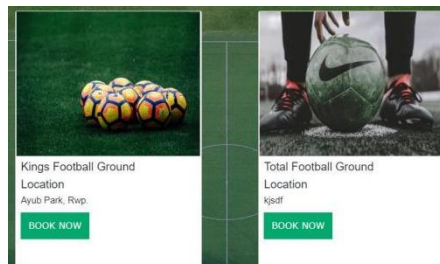
Booking Module:

Implemented real-time ground availability checks and booking confirmation using MongoDB.

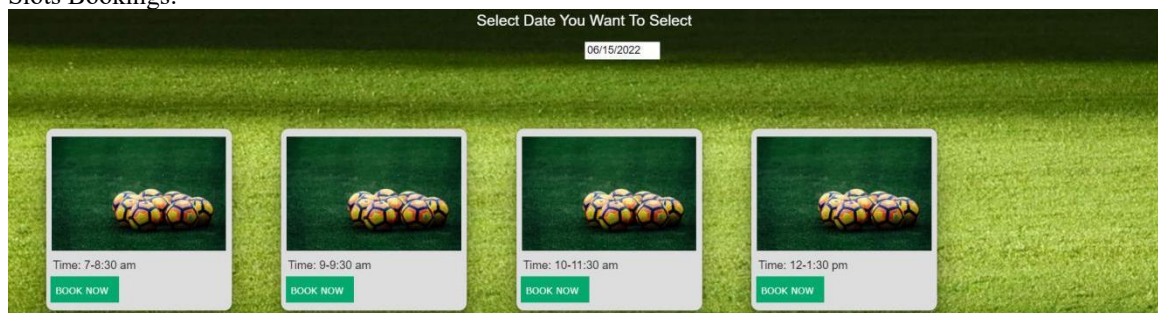
Notification System:

Added basic booking confirmation messages.

Grounds:



Slots Bookings:



Supervisor Review:

Demonstrated the ground booking process.

Outcome: Ground booking functionality is operational with validation in place.

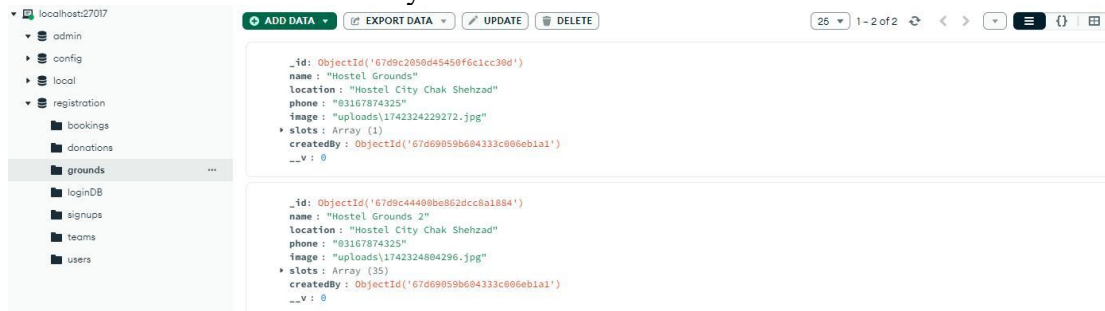
Week 3: Team Data Management

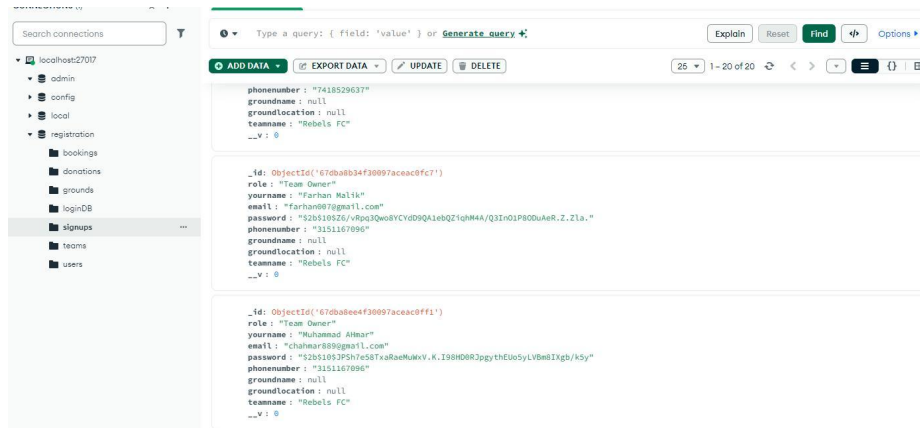
Team Creation:

Added functionality for users to create and manage teams.

Data Storage:

All team information is securely stored in the database.





Supervisor Approval:

Displayed a working demo of the team management module.

Outcome: Team data management

Week 4: Planning for AI Chatbox and Graphical Dashboard

AI Chatbox Planning:

Researched options for integrating an AI-based chat system using NLP. Planned to use Socket.IO for real-time chat functionality.

Graphical Dashboard Design:

Designed a prototype for a dashboard.

Visual representation of booking statistics, user activity, and team performance

Supervisor Input: Discussed and received approval for the AI chatbox and dashboard development.

Outcome: Finalized the plan for the next phase of implementation.

Next Steps:

AI Chatbox Development: Integrate an AI-powered chatbox for smooth communication between ground owners and users.\

Graphical Dashboard Creation: Visualize system data through interactive charts and graphs.

Advanced Notifications: Implement reminders and alerts for upcoming matches and bookings.

Feedback Integration: Apply supervisor's suggestions to enhance user experience.

Conclusion:

Significant progress has been made with the implementation of user authentication, ground booking, and team management. The next phase will focus on enhancing user experience with the AI chat-box and a graphical dashboard.

Prepared By:

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