

IQRA University, Islamabad, Chak Shahzad

Project Proposal

(SCOPE DOCUMENT)

For

Frustal Field Reservation System

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4-Week Progress Report for Futsal Field Reservation System

Date: [20-03-2025]

Submitted By:

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Supervisor:

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Project Title:

Futsal Field Reservation System

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 four screenshots of the web application's authentication interface, arranged in a 2x2 grid. Each screenshot shows a login or sign-up form with a dark blue background and white text.

- Top Left: LOGIN AS TEAM**
 - Buttons: LOGIN AS GROUND OWNER, LOGIN AS TEAM
 - Form fields: Email (teamtest00@gmail.com), Password (masked with dots)
 - Buttons: LOGIN, Don't have an account? [Sign up](#)
- Top Right: LOGIN AS GROUND OWNER**
 - Buttons: LOGIN AS GROUND OWNER, LOGIN AS TEAM
 - Form fields: Email (teamtest00@gmail.com), Password (masked with dots)
 - Buttons: LOGIN, Don't have an account? [Sign up](#)
- Bottom Left: SIGN UP AS GROUND OWNER**
 - Buttons: SIGN UP AS GROUND OWNER, SIGN UP AS TEAM OWNER
 - Form fields: Your Name, Email Address, Password, Confirm Password, Phone Number, Ground Name, Ground Location
 - Buttons: Submit, Already have an account? [Log in](#)
- Bottom Right: SIGN UP AS TEAM OWNER**
 - Buttons: SIGN UP AS GROUND OWNER, SIGN UP AS TEAM OWNER
 - Form fields: Your Name, Email Address, Password, Confirm Password, Phone Number, Team Name
 - Buttons: Submit

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:

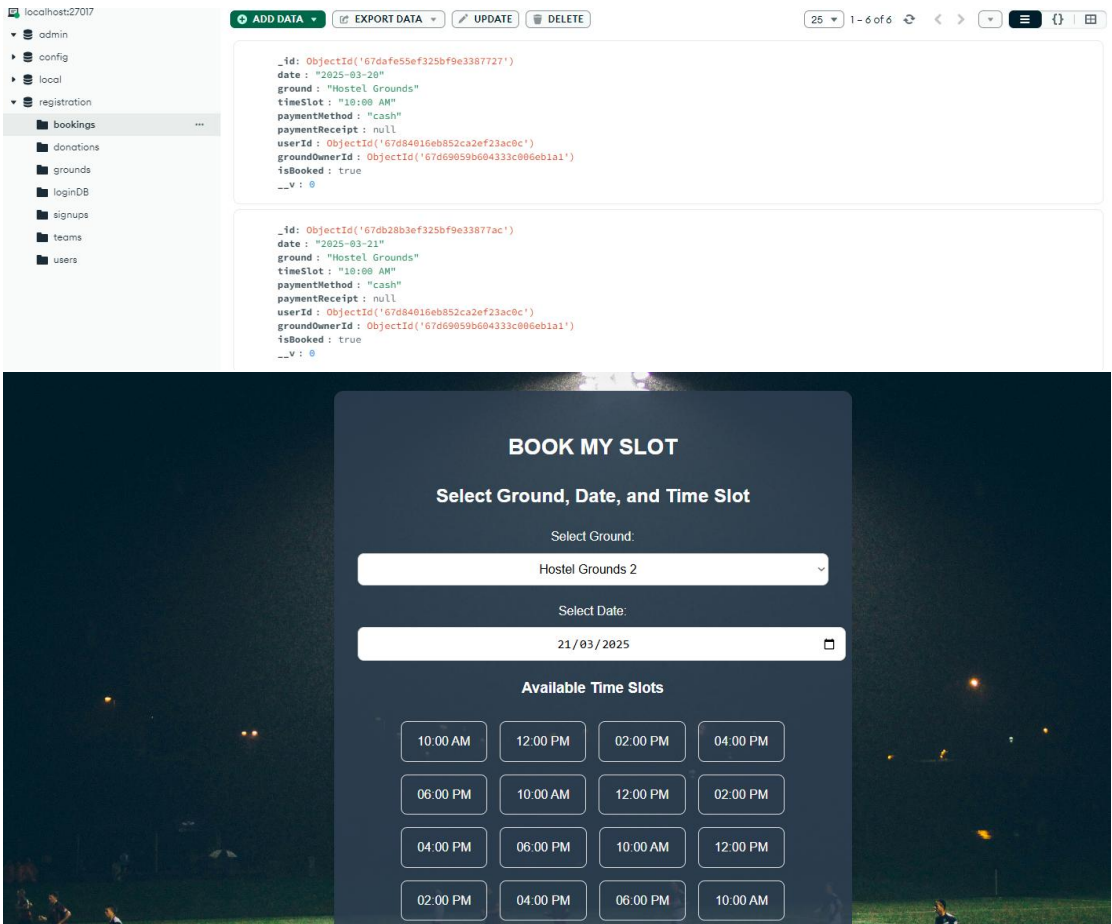
Developed APIs for ground owners to add, edit, and delete grounds.

Booking Module:

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

Notification System:

Added basic booking confirmation messages.



Supervisor Feedback:

Demonstrated the ground booking process.

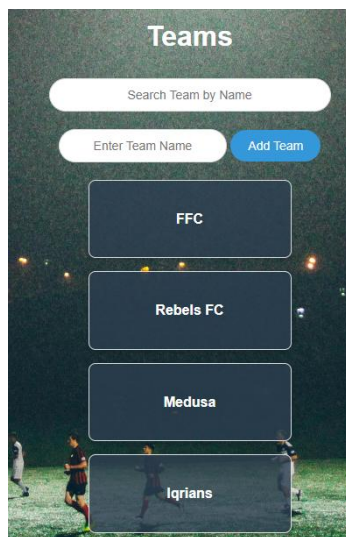
Outcome: Ground booking functionality is operational with validation in place.

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:**

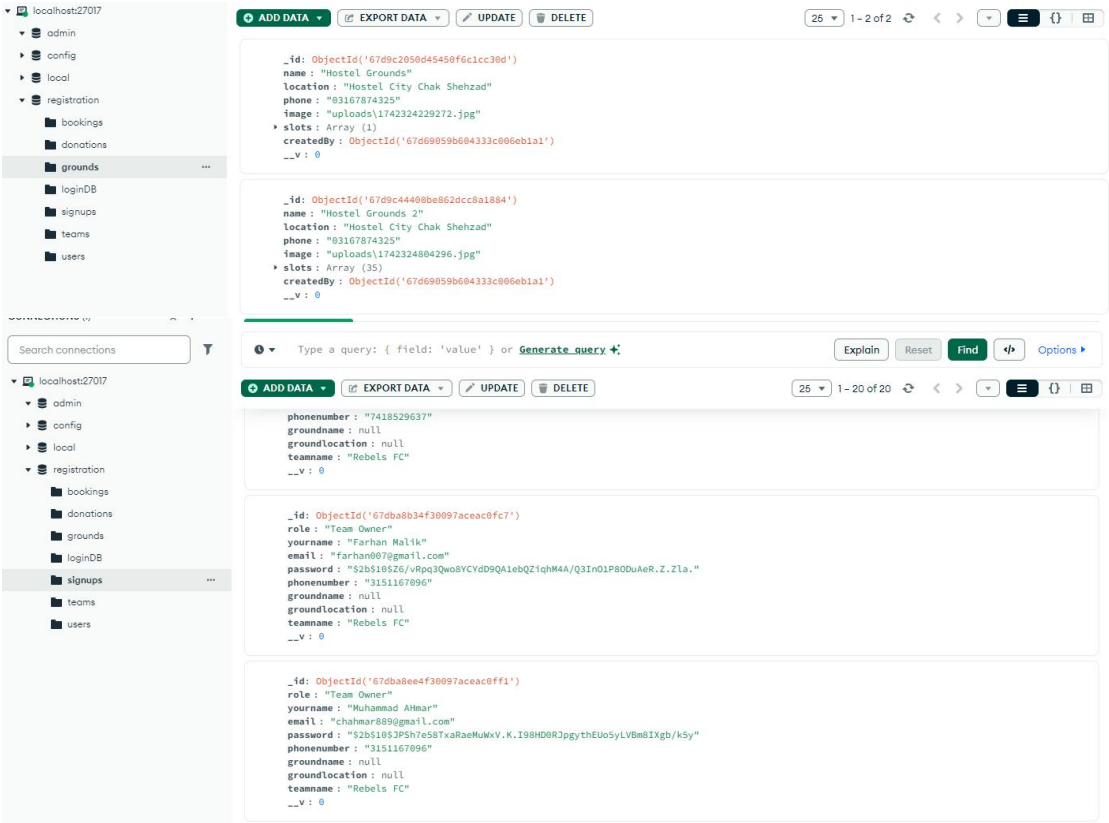
Researched options for integrating an AI-based chat system using NLP.

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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