

SPORTIGO - TURF BOOKING SYSTEM

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ABSTRACT

The Turf Booking System is a software application designed to facilitate the reservation and management of sports facilities, such as football fields and cricket courts. This system allows users to conveniently browse available time slots, make reservations, manage bookings, and handle administrative tasks related to sports facility usage. The system aims to enhance user experience, optimize resource utilization, and facilitate efficient coordination among all stakeholders involved in the sports facility booking process.

Key Features

- User Registration and Authentication
- Facility Listing and Availability
- Booking Confirmation and Notification
- User Profile and History
- Reporting and Analytics
- Payment Integration
- Tournaments slot allocation
- User Reviews and Ratings

Modules:

User:

Regular users are individuals seeking to book turf facilities either football or cricket. The system provides them with an intuitive interface to browse available turf slots, check real-time availability, make reservations, and receive confirmation. Users can also view pricing information, cancel or modify bookings, and receive notifications regarding their reservations.

- **View Turfs:** Each turf will be visible to the user with its complete details(including images ,extra facilities,medical aids etc)
- **View slots:** Users can browse through a comprehensive list of available turfs. They can filter the search based on the location,game type,budget, available slots etc.

- **Reservation:** Users can initiate a reservation by selecting their desired turf with an available slots. The module checks availability in real-time and confirms the reservation.
- **Cancellation:** Users can Cancel the Reserved slots within a specific time given by the turf provider.
- **Payment Integration:** Users can securely make online payments using various payment methods. The system integrates with payment gateways to ensure seamless transactions.
- **Booking Management:** Users can view and manage their reservations, including modifying dates, cancelling bookings (subject to cancellation policies), and checking reservation status.
- **Communication:** Users can communicate with the turf providers.
- **User Profiles:** Users can create and manage their profiles, which may include personal information, preferences, and past booking history.

Admin Module:

Administrators oversee the overall functioning of the turf booking system. They have access to an admin dashboard that allows them to manage turf provider registrations, verify and update facility details, resolve disputes, and ensure compliance with system guidelines. Administrators play a crucial role in maintaining the system's integrity, resolving issues, and ensuring a positive experience for all users

- **Owner Management:** Administrator can add, edit, and remove turf providers from the inventory.
- **Verification of turf providers, users & club user**
- **Reporting and Analytics:** The module generates reports on turf rental statistics, revenue, occupancy rates, and more. These insights aid in making informed business decisions.
- **User Management:** Administrators can manage user accounts, including registrations, login credentials, and access permissions. They can also assist users with any issues they encounter.

Club user:

Sports clubs often require facilities for hosting tournaments and matches. The system caters to these entities by offering specialized functionalities such as bulk booking options, customizable scheduling for tournaments.

- **Registration & login using club certificate**
- **View various turfs available**
User can view turf details including pricing for bulk booking
- **Booking for tournament registration**
Club user can book their slots for minimum a day or more before filling
- **Cancel booking according to turf providers cancellation policy**

Turf Provider:

Turf providers manage the physical sports facilities available for booking. The system enables them to list their turfs, set pricing and availability, and maintain an up-to-date schedule. Providers can also monitor booking requests, accept or reject reservations based on availability, and efficiently manage their resources. This digital platform reduces manual administrative tasks and minimizes scheduling conflicts.(Turf registration is done by the admin by verifying the licence Manually)

- **Turf Registration with license certificate**
- **List turf details:** Owners can list their turf including turf specifications, availability, and rental rates. This expands the variety of turf slots for customers.
- **Add special price for club (bulk booking)**
- **Pricing and offers:** Turf provider can set and adjust rental rates based on factors such as timings, seasonal variations. They can also configure rental policies, including cancellation policy.
- **Communication:** Users can interact with the turf provider.
- **Confirm bookings:** Turf provider accept the bookings done by the users(club user or normal user)
- **Payment confirmation**

Additional technologies to be used:

****Real-time Notifications with WebSockets:****

Implement real-time notifications using WebSockets to provide users with instant updates about booking confirmations, changes, and reminders. This enhances user engagement and improves the overall user experience.

****Augmented Reality (AR) for Facility Preview (Optional):****

Integrate AR features that allow users to get a virtual preview of the sports facility they're interested in booking. Users can view the layout, condition, and amenities of the facility through their mobile devices.

****Machine Learning for Facility Demand Prediction:****

Utilize machine learning algorithms to predict demand for different time slots and facilities based on historical booking data. This can help facility managers optimize resource allocation and pricing strategies.

Mini Project: Turf Booking System

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Main Project: Turf Booking System

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Technologies implementation:

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SOFTWARE SPECIFICATIONS:

Front End: html,css

Back end: Python django

REFERENCES:

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

<https://www.playspots.in/>

Natural System Study at Sporthood Highrange sports,kanjirappally