# 20MCA245 MINI PROJECT

## ABSTRACT

## Turf Booking

**Abstract**

The rise in popularity of sports and recreational activities has led to an increased demand for efficient turf booking solutions. Traditional booking methods, often involving manual processes, can be inefficient and inconvenient. This abstract presents the development of a web-based Turf Booking Application using Python Flask and MySQL, designed to streamline the booking process and provide users with an intuitive platform to book sports facilities. The application targets sports enthusiasts, turf owners, and sports facility managers, offering a user-friendly interface for browsing and booking available turfs, secure user authentication, real-time availability checking, and payment integration. For turf owners and managers, it provides tools to manage bookings, monitor usage, generate reports, and manage user profiles.

The development of the Turf Booking Application involves a comprehensive requirement analysis, categorized into functional and non-functional requirements. The functional requirements for the User Module include functionalities such as user registration and login, viewing available turfs, booking turfs, integrating a payment gateway, and viewing booking history. The Admin Module requires capabilities to manage user accounts, approve or reject bookings, view booking statistics, and handle payments and refunds. For the Owner Module, the necessary functionalities include registering turfs, managing turf availability, viewing booking requests, and updating turf details. Non-functional requirements focus on ensuring security by securing user data and payment transactions, achieving high performance with fast response times for booking and search queries, delivering an intuitive user interface for better usability, and maintaining scalability to handle an increasing number of users and bookings.

The development of the Turf Booking Application will follow the Agile methodology, ensuring iterative progress and flexibility to accommodate changes. The development phase will involve coding the application in iterations, with frequent reviews and testing. Comprehensive testing will include unit testing, integration testing, and user acceptance testing. Once the application is developed and tested, it will be deployed on a suitable server environment.

**Keywords:** Python Flask, Mysql, Agile methodology

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