JAVA-PROJECT

TURF-EASE

TurfEase – Real-Time Turf Booking Application

Project Overview

TurfEase is a Java-based, feature-rich application designed to **simplify turf bookings for sports facilities**. It provides a seamless experience for both users and turf managers (admins) by combining a real-time booking system with a modern, user-friendly interface.

With TurfEase, users can:

- Browse **all types of turfs** (football, cricket, badminton, etc.) available for booking.
- Book slots **in real time** with instant availability updates.
- View their **booking history** and manage (cancel/reschedule) bookings easily.
- Opt for **self-booking**, so offline bookings by users are also reflected in the system immediately.

Turf managers (admins) can:

- Manage **their own turf** with full control (multiple admins supported, but each admin manages only one turf).
- View, edit, or cancel bookings for their turf.
- Ensure **real-time slot availability** for all users.

TurfEase is built to simulate a **real-world turf booking app**, providing a professional and fully functional platform for sports enthusiasts and turf owners alike.

Features

User Features:

- **User Registration & Login**
- Browse available turfs by type
- Real-time **slot availability**
- Book, view, or cancel bookings
- Self-booking to reflect offline bookings for others

Admin Features:

- Manage turf availability and booking records

- Edit bookings (change slot/time)
- Cancel bookings
- Full control over their own turf
- Real-time visibility of user bookings
- Self-booking to reflect offline bookings for others

General:

- Multiple admins supported
- Each admin assigned to only one turf
- Fully designed like a **real-world application**
- Seamless UI experience with **image-rich dashboards** for both users and admins

Team Members

- **Hadi** – Project Leader
- **Abhijith** – Backend & Database
- **Maazin** – Frontend & UI
- **Alok** – Testing & Deployment

Tech Stack

- **Java** – Core application development
- **MySQL** – Database for storing turfs, bookings, users, and admins
- **VS Code** – IDE for development
- **GitHub** – Version control and collaboration

Project Phases

1. **Phase 1 & 2:** Design Documents & Requirement Analysis – *Completed*
2. **Phase 3:** Prototype & Core Module Development – *Completed*
3. **Phase 4:** Final Implementation & Testing – *Completed*

Running the Application

To run TurfEase locally:

1. Make sure you have **Java JDK** installed.
2. Open the project in **VS Code** or any Java IDE.
3. Navigate to the `src` folder.
4. Run `Main.java` to start the application.

Why TurfEase?

TurfEase is designed to provide a **professional, real-time turf booking solution** that mimics industry-standard applications. It is ideal for sports enthusiasts who want hassle-free bookings and turf managers who need complete control over their facility.
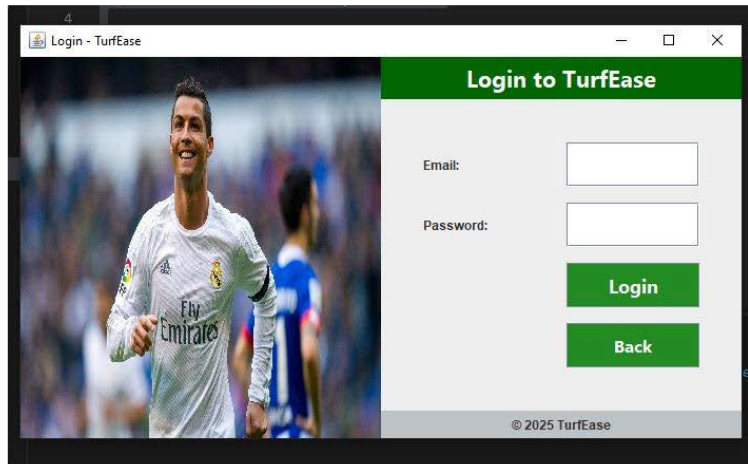
With TurfEase, booking sports slots becomes **easy, efficient, and transparent**, making it a must-have for modern sports facilities.

FIRST OPENING PAGE OF APP //SPLASH SCREEN
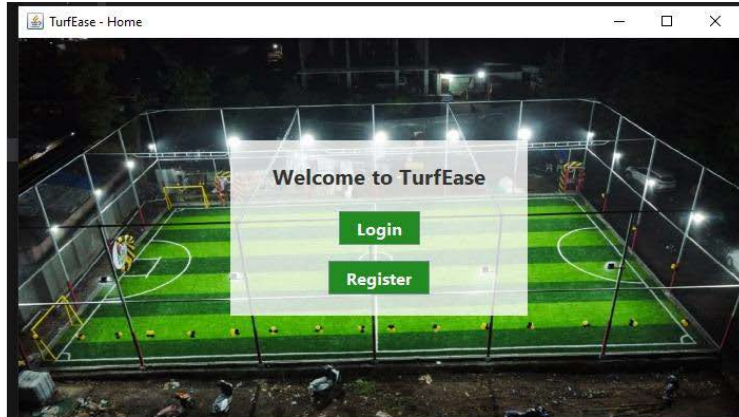
HOME PAGE WHERE WE CAN LOGIN AND REGISTER

HERE USER CAN REGISTER ,
ADMIN REGISTRATION ALL IS IN
BACKEND(DATABASE WE
CREATE FOR THEM)

USER CAN LOGIN HERE
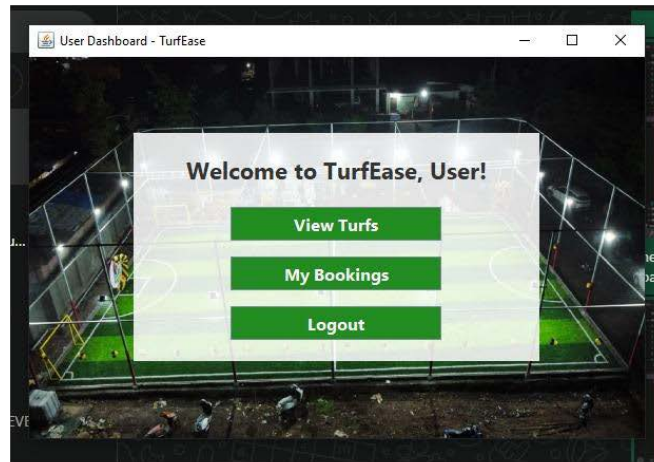
USER DASHBOARD WHERE WE CAN VIEW TURFS , VIEW MY BOOKINGS AND LOGOUT
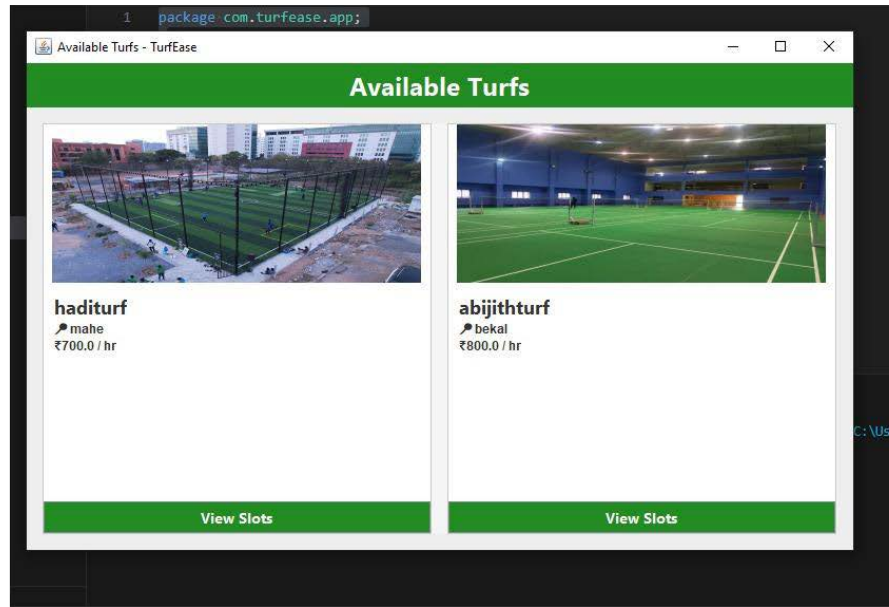
SHOWING AVAILABLE TURFS
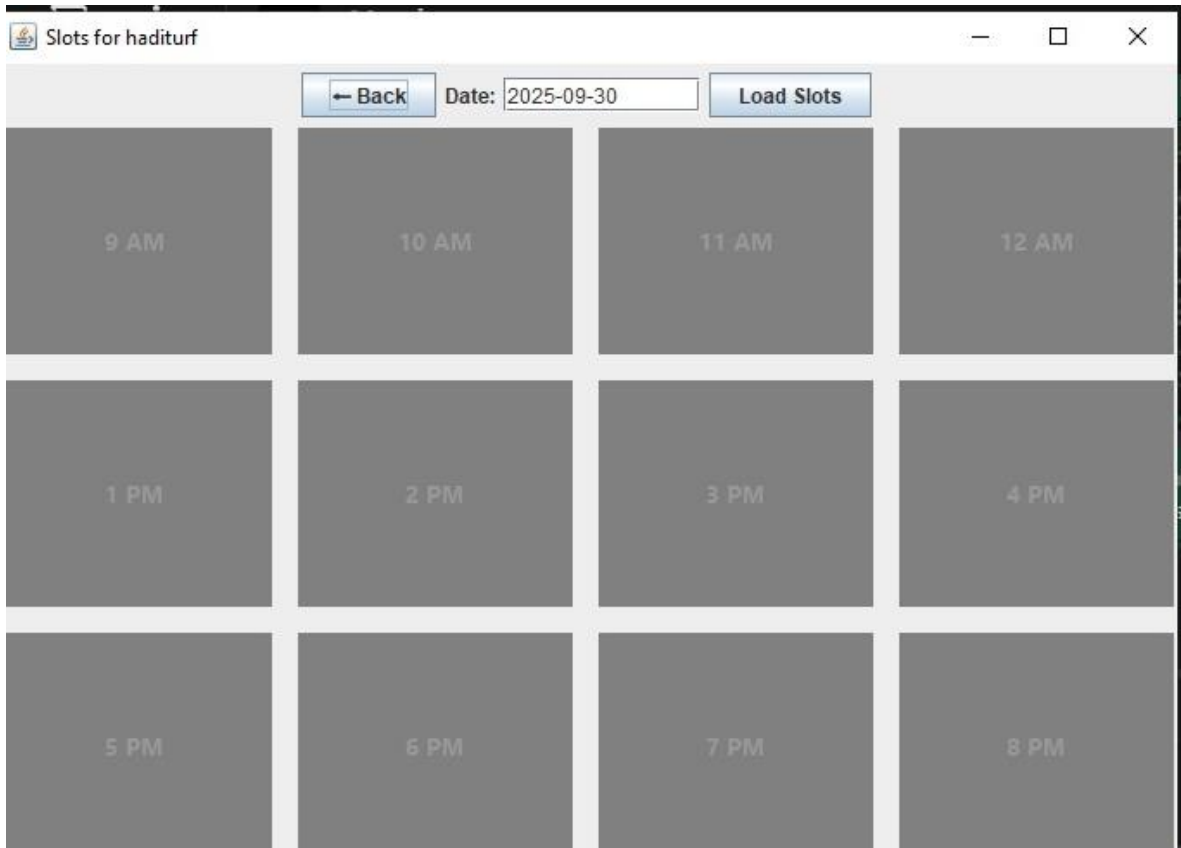
CHOOSING HADI'S TURF BUT
TIME IS OVER SO ALL
SLOTS CLOSED]
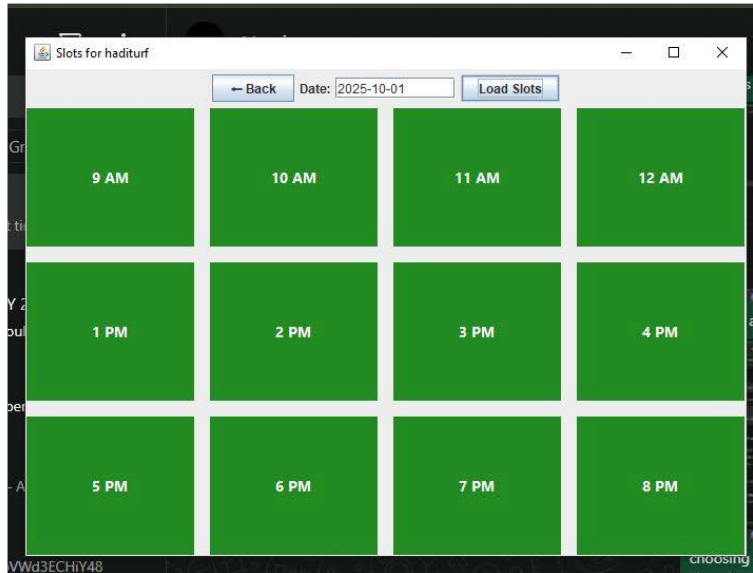
SHOWING SLOTS FOR NEW DAY
WE CAN CHOOSE WHICHEVER
DAY IF AVAILABLE IT SHOWS
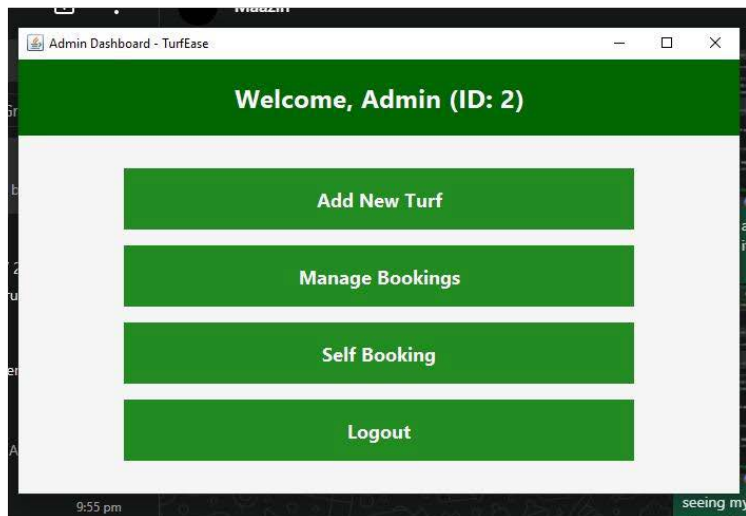GREEN OTHERWISE RED IF
BOOKED ALL ARE REAL TIME
AVAILABILITY
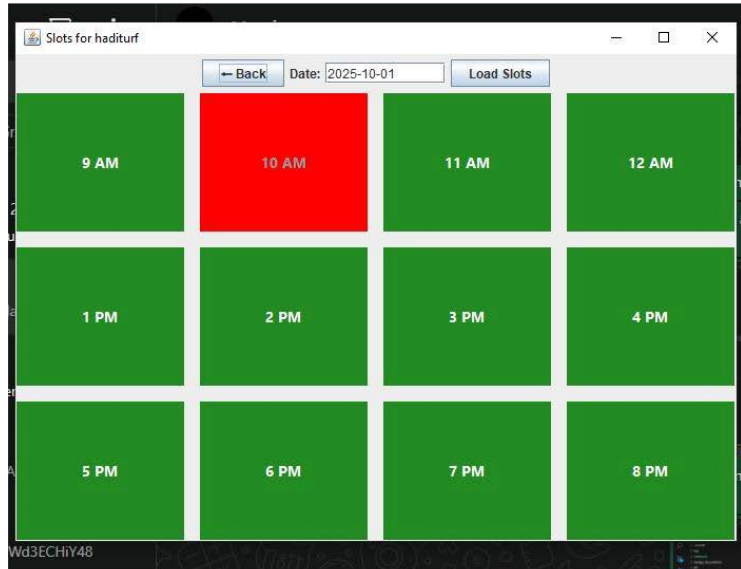
BOOKING A SLOT BECOMING RED
IF ANOTHER USER LOGIN THEY
SEE IT AS ALREADY BOOKED -
REAL TIME AVAILABILITY

SEEING MY ALL PREVIOUS BOOKING IF NEEDED WE CAN CANCEL THE BOOKING AND AUTOMATICALLY THE SLOT BECOME AVAILABLE AGAIN

ADMIN DASHBOARD WHERE EACH ADMIN CAN CONTROL THEIR OWN TURF , ONLY ONE TURF FOR EACH ADMIN SO HE CANNOT ADD A NEW TURF . CAN MANAGE BOOKINGS, CAN DO SELF BOOKING IF ANYONE CAN CAME OFFLINE AND BOOK CAN DO IT HERE AND IT BECOME SYNCED AUTOMATICALLY AND OTHER ONLINE USERS CAN SEE IT ALREADY BOOKED, LOGOUT OPTION.

MANAGE BOOKINGS OF ADMIN WHERE HE CAN CANCEL THE BOKING AND IF THE USER NEED TO EDIT THE BOOKING THE ADMIN CAN EDIT THE SLOT TO A NEW TIME OR NEW DATE

SELF BOOKING PAGE . ALL ARE AUTOMATICALLY SYNCED