

Parking Management System

The proposed project is a smart parking booking system that provides customers an easy way of reserving a parking space online. It overcomes the problem of finding a parking space in commercial areas that unnecessarily consumes time. Hence this project offers a web based reservation system where users can view various parking areas and select the space to view whether space is available or not. If the booking space is available then he can book it for specific time slot. The booked space will be marked yellow and will not be available for anyone else for the specified time. This system provides an additional feature of cancelling the bookings. User can cancel their booked space anytime. Users can even make payment online via credit card. After making payment users are notified about the booking via email along with unique parking number.

Modules:

- **Admin Login:** The system is under supervision of admin who manages the bookings made.
- **User login/registration:** Users have to first register themselves to login into the system.
- **Three Parking areas:** The system will provide users with three parking areas of different locations.
- **Parking availability check:** User can click on spaces to view the availability. If the space is already booked it will be marked yellow and the available ones will be seen in normal color.
- **Parking booking online for date and time:** Users can book parking space for their required date and time.
- **Automatic cost calculation:** The system calculates the total cost incurred for parking based on the time that user has asked for booking.
- **Parking cancellation:** User may even cancel their bookings by login into the system anytime.

- **Email on successful parking booking:** When user is successful in parking the space, system sends a confirmation and 'thank you' email regarding the space booked.
- **Feedback:** The system has a feedback form, where user can provide feedback into the system.

User side functionality:

- Book parking space
- Cancellation
- Receipt Print
- Feedback
- Recharge Account

Admin side functionality:

- Administers parking booked
- Cancellation
- View User Data
- Feedback view and reply

Languages :

HTML, CSS, JS, Node JS

Applications:

- The project can be implemented in commercial areas for employee parking.
- It can be utilized by companies and organizations (hospitals, schools, colleges) to automate their parking system.
- The system can also be used in public places for public parking like in malls, station, and so on.