**Online Parking Booking System**

**ABSTRACT:**

In cities where the population is at its peak and the roads are all messed with vehicle's and long traffics. In such over increasing population it becomes a difficult job to find a parking spot for our vehicle. We came up with an idea where users can logon to our Web Application and find the ideal parking spot. Our project Online Parking Booking system is developed in Java, MYSQL. With this the users save's both time as well as fuel. The user can easily view the parking availability on the web application and drive straight to the spot without wasting any time. Users can view the pricing details for parking their vehicles. In this project the user can able to park the vehicles according to their time slot and also the admin who manages all these parking will be very easy to manage all these. With such a system the parking authorities can easily manage their parking spaces efficiently.

**EXISTING SYSTEM:**

* In metropolitan cities where the population is at its peak and the roads are all messed with vehicle’s and long traffics. In such over increasing demand for vehicle’s it becomes a difficult job to find a parking spot for our wheels. Due to this people are forced to haphazardly park their vehicle wherever they find space, which results in traffic offence like illegal, haphazard double or angular parking.
* In the existing system the parking management were all made in Manual mode, so it’s unable to make the process easy and smooth.
* The existing system of parking management does not consider the parking timing slots where they can give bigger confusions and not efficiently utilized the space.

**DISADVANTAGES OF EXISTING SYSTEM:**

* Manual Works.
* Everything is paper work.
* User cannot able to select the desired location, date or time.
* More manual hours are needed for checking the spaces available.
* It is tedious to manage historical data on which date and time the booking has been done

**PROPOSED SYSTEM:**

* The proposed project is an Online 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 unnecessary 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. Users can even make payment online.
* 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.

**ADVANTAGES OF PROPOSED SYSTEM:**

* Users can get learn about parking areas for particular locations.
* It saves user time in search of parking space available in such a long parking area.
* The system provides a graphical view of the parking spaces.
* User can pay online on the spot and confirm their space.
* It excludes the need of human efforts for managing parking spaces.
* Cost-effective.
* The proposed system provides better information for the users of this system easily they can see the available slots and book from anywhere without facing any difficulty.
* The proposed system does not require any physical presence during booking.
* The proposed system has good authentication so only authorized person can able to login and book it.

**SYSTEM ARCHITECTURE:**

LOGIN

USER

Book Parking Slot

DATABASE

Enter Parking Schedule

View Booking Details

View User Details

Update parking cost

ADMIN

**MODULES:**

* User Login
* Admin Login
* Parking Availability
* Automatic Cost calculation

**MODULES DESCSRIPTION:**

**User login:**

Users have to first register themselves to login into the system. In the registration of user page should be filled with the details of Name, Data of Birth, Email ID, Gender, Phone Number, Address and Password. After clicking sign up, the user registration will be made successful. With the details of registration made, the user login should be done. Checking the authorization, the user will be logged in to the system. After logging it, the user can able to see the Parking Cost, Book Parking, Your Booking details.

**Admin Login:**

The system is under supervision of admin who manages the bookings made. Once after the admin logged it, the admin can see the parking cost, View User details and View Bookings. Only the admin has the privilege of modifying the parking cost. Also admin can view the user details. And also the admin can view the complete booking details with the cost etc.

**Parking availability**

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. User cannot select the slot if the booking is already done by some other earlier.

**Automatic cost calculation:**

The system calculates the total cost incurred for parking based on the time that user has asked for booking. In the user login, the option: Book Parking is available. In this the user enters the details of Date, time, and parking hours. After entering the details, the hours are calculated automatically and the final amount is displayed. The user no need to calculate the amount and enter it manually.

**SYSTEM REQUIREMENTS:**

**HARDWARE REQUIREMENTS:**

* System : Pentium i3 Processor
* Hard Disk : 500 GB.
* Monitor : 15’’ LED
* Input Devices : Keyboard, Mouse
* Ram : 4 GB

**SOFTWARE REQUIREMENTS:**

* Operating system : Windows 10.
* Coding Language : JAVA.
* Tool : Netbeans 8.2
* Database : MYSQL

**REFERENCE:**