

# Easy Online Parking System

**Ms.Taksha Ganapathy K<sup>1</sup>, Mr. Manjunath Kamath<sup>2</sup>**

<sup>1</sup>II semester, Department of business administration Sahyadri college of engineering and managementMangalore

<sup>2</sup>Assistant Professor, Department of business administration Sahyadri college of engineering and managementMangalore

## **Abstract:**

Due to the proliferation in the number of vehicles on the road, traffic problems are bound to exist. This is due to the fact that the current transportation infrastructure and vehicle parking facility developed are unable to cope with the influx of vehicles on the road. To alleviate the aforementioned problems Easy Online Parking System will be developed.

The main aim of this project is to provide the user with the parking space for their vehicle irrespective of the fact that weather they know or don't know the location properly they are currently searching for parking space. There are lots of unused places owned by the people which can be utilized for this purpose.

A website application is developed in such a way that it works in any browsers. The website offers the most convenient way to park the vehicles. It provides privilege for the owners to sign in and provide details about the place they own and the users will have privilege to sign in and access the nearest and safest available parking place in their location as per their requirements like distance, cost and time. The users get to contact the owners of the place directly and book the space for their vehicle. This helps in keeping the city clean and organized. Hence the parking problem in cities can be reduced. We will be using html for the front-end design and java script for the back-end design.

**Keywords:** Easy online parking, website application, HTML, Java script

## **Introduction:**

India is developing at a very rapid speed today resulting in great urban expansion. It has some of the world's most populous metropolitan areas like New Delhi, Hyderabad, Bangalore etc. With continuous expansion of these cities, the problem of parking spaces is also increasing. The problem is very simple- the increase in the number of cars is indirectly proportional with the available parking areas. The increased number of cars on the road does not match with the parking areas that cities hold. As the population grows more rapidly, the community is required to keep abreast of the development of the world itself, with the rapidly increasing community can also affect the number of vehicles becoming increasingly urban. The factor causes the desire of the community to get ease in carrying out their daily activities to encourage the rapid advancement of technology. At present the problem of parking in urban areas is the topic most widely discussed by the general public. An unregulated tariff structure leads to a scarcity of parking spaces. In Indian metros,

parking is either free or minimally priced which is not regulated for many years. For example, In Sarojini Nagar in Delhi, parking price is about Rs.20 per hour with a standard fee of Rs.100 for 24 hours, making parking even cheaper. But why is unregulated or low tariffs even a problem? This is because low priced or free parking encourages the people to get their own cars on the road thus leading to an increased number of cars on roads which have fewer parking spaces.

Vehicle parking is a problem that is often encountered in metropolitan cities, dealing with the problem of finding a vehicle park at a place where each vehicle takes a long time to find an empty parking space. Parking is a separate problem experienced by many places, from lack of space, increasing number of vehicles each year, or lack of staff and systems that handle it. The manual parking system is no longer an effective solution to overcome parking problems. One of the causes of parking problems is the lack of information on empty parking spaces known to visitors, so that drivers have difficulty in parking their vehicles. Many visitors have to queue long enough to get parking tickets, sometimes even waiting in line is not necessarily able to get a parking space. This certainly has the effect of loss in terms of the time spent queuing for a park in the cities.

Residential areas always face a problem of less parking space mainly because of two reasons- Increased population which leads to increased number of cars and the construction of parking spaces. The construction of parking is generally unfit for the total numbers of cars available in a particular residential area. Transportation systems in urban areas, as well as the use of the number of vehicles in the transportation system that increased in finding parking spaces.

Problems with parking lots are an important concern in terms of occupation, traffic problems have increased which cannot be denied, thus requiring a way to reduce traffic to automate the parking system by giving users prior information. By introducing a parking management system using an online application can solve the problem of parking in cities.

Creating a web-based information system that aims to provide use for visitors so it is useful, when visitors use it to provide information on the availability of parking places on time so that they can book a secure parking place anytime and from anywhere, save time and effort, and pay electronics. The internet is an information medium used by almost all institutions, organizations, businesses and individuals in introducing or promoting products or services. With a site can build and support relationships with consumers through the internet can provide up-to-date information, and others.

Parking systems were developed in such a way that users could order their parking spaces via registering into the website and requests for the free space. The provision of information about the parking management information system is expected to be able to curb and make parking more orderly and increase security in parking management. Proposing a new smart parking system for the urban environment in the form of information from the application can provide optimal parking space based on the driver's cost function which combines distance to destination and parking fees.

The pricing scheme is integrated with the proposed system in which parking price is dynamically adjusted in response to the relationship of demand, supply and congestion level.

Upon receiving parking prices, drivers make their reservations to maximize their benefits according to the utility function. Easy Online Parking System increases the revenue for service providers, provides service differentiation for users with different needs, alleviates traffic congestion caused parking searching and reduces the amount of traffic searching for parking. Being able to accurately direct a driver to an available space has many environmental benefits; it reduces CO2 emissions, noise and other pollutants.

**Problem Statement:**

Lack of parking spaces in metropolitan cities.

**Objectives:**

- The main aim of this project is to decrease the time consumed by the person manually searching for the parking spaces in the places unfamiliar to him and to automate it to make it easier.
- To eliminate the unnecessary movement of vehicles across the filled parking space in a city. Many times, we can see in public places like malls and shopping centers there are traffic jams due to unnecessary movement of vehicles searching for parking spaces in the area that is already filled. This project helps in reducing these unnecessary movements of vehicles across busy areas to reduce the traffic jams.

**Easy payment system:**

All have been delayed at some or the other point waiting to pay for the parking bill in commercial buildings like malls and movie theaters. This application reduces your time as the payments are done using the UPI ids and other apps like Google pay and Phone pay.

**Literature Review:**

(1) Online Car Parking Management System OCPMS - Synopsis of the Paper The issue of obtaining unoccupied parking spaces in congested regions and the challenges experienced by drivers in finding parking places are discussed in the article. – The suggested remedy is an online parking reservation system that enables customers to see several parking lots and book a spot in advance, preventing last-minute difficulty. - Users can access real-time parking information, protection, and guidance through the system. - With the help of the smart parking system, traffic congestion and the inadequacy of the current transportation and parking infrastructure to accommodate the growing number of vehicles would be addressed.

(2) Summary of the Paper Licensed Under Creative Commons Attribution CC BY Online Parking System - The paper discusses the problem of traffic congestion caused by increasing numbers of vehicles and the burning of oil due to the search for parking spaces. - It highlights the need to modify materials used for personal and commercial purposes and introduces a new smart parking system that is more economical and eco-friendlier. - The paper presents the working performance and implementation of the smart parking system, as well as the

analysis of its reliability. Different modules are implemented in the parking management app, including a user interface module, communication module, function module, and parking space controller module. - The smart parking technology is considered a key solution to parking space problems, long queues, and other parking issues in urban areas.

(3) Review of the Paper Online Parking Reservation Services - The difficulty of parking in metropolitan locations and the ensuing traffic congestion are discussed in the article. In order to overcome these concerns, it emphasizes the necessity of parking monitoring and suggests the idea of a smart parking ticket system. – The system includes a web-based management system that uses sorting algorithms, automated analytics, valet service, and efficient parking space distribution. – In addition to video sensors for security and vehicle identification, the system also needs a fully functional website for users and managers. It also alluded to potential future developments, such as multi-car concurrent systems and enhanced website functionality and security.

(4) Paper's Executive Summary PARKING SMART SYSTEM - The study suggests a smart parking system to alleviate the difficulties with parking cars in metro areas caused by the increasing density of people and vehicles. - The method makes use of a mobile application for operators to identify users and charge them while enabling them to find and reserve parking spaces. - Through the Android app, users may reserve parking spaces using either online or offline payment methods. Additionally, they have the option to revoke reserved timeslots, with a refund of the money less cancellation fees. - The suggested approach intends to reduce users' time by making it simple to locate and reserve parking spaces while also assisting parking owners in keeping track of available spaces.

(5) Online Parking System Paper Synopsis - In order to eliminate the burden of looking for open places, the article suggests a brand-new online parking system that enables users to reserve parking spaces in advance. The system offers security, real-time parking navigation, and parking data distribution. - The suggested system's objective is to lessen traffic congestion brought on by parking space searches, which minimizes air pollution, fuel consumption, and costs time and money. Existing parking technologies have flaws, like the requirement for several sensors or invasive installations. These issues will be addressed, and parking management will be optimized, using the suggested online parking system.

(6) Summary of the Paper Online Vehicle Parking Reservation System - The paper discusses the implementation of an online vehicle parking reservation system to improve the existing system and address challenges faced by Peoples Park Kyebando. - The objectives of the study include improving the current car parking reservation system, addressing safety concerns, reducing congestion and collision, and saving time during parking activities. - The current system used by Peoples Park Kyebando is a paper-based system, which leads to data safety issues, physical struggle for parking, wastage of time, and difficulty in monitoring profits.

(7) Summary of Online Based Parking System - The online based parking system is a smart and eco-friendly solution for managing parking spaces in a city. It aims to provide time-saving facilities and a safe and secure environment using certified data and the latest inventions. - The system is automatic and includes car detection, messaging to customers, and GPS technology to determine vacant or filled spaces in the parking area. It is more economical than traditional parking systems and is connected to owners and staff through SMS. - The smart parking system is part of the larger concept of a smart city, which utilizes modern technology to improve urban life.

(8) Summary of Intelligent Parking System based on Cloud using IoT – Cloud computing and IoT are combined to develop an enhanced intelligent parking system that helps users find parking spaces using a smartphone application. The system suggests the nearest available parking slot and allows users to make payments through the application. It operates on a wireless network and utilizes cloud computing for storing real-time data and managing user information. The system aims to improve the probability of successful parking and minimize user waiting time. It can be used in autonomous cars to find and occupy vacant spaces, contributing to optimized parking, reduced traffic, and enhanced user experience. Benefits of Intelligent Parking System - The intelligent parking system offers various benefits, including optimized parking, reduced traffic, reduced pollution, enhanced user experience, integrated payments and POS, increased safety, real-time data and trend insight, decreased management costs, increased service, and brand image. The system has the potential to significantly influence the future of parking, especially with the arrival of automated vehicles. Smart cities are already exploring self-parking vehicles, specialized AV parking lots, and robotic parking valets. Additionally, the concept of intelligent parking can be extended to include the status of electric vehicle charging stations. Challenges with Existing Parking Systems - Existing parking systems face challenges such as difficulty in finding parking slots, time wastage, and inadequate parking space. Inductive loop detectors, commonly used in parking systems, have installation and maintenance issues.

(9) Summary of the Embedded Based Smart Car Parking System using Shared Memory - The paper proposes a smart car parking system using shared memory in embedded systems to address the parking issues faced in shopping malls, theatres, and other crowded areas. - The system utilizes two parking slots with shared memory accessed by users, implemented using UTLP KIT and programmed in Eclipse IDE with Ubuntu as the operating system. - Users can retrieve their vehicles by entering the allocated slot number through a keypad, and the vacant slot becomes available for the next user.

(10) Summary Ingenious Car Parking System using IoT in Commercial areas – The paper proposes an expert system that identifies free parking slots in a parking area and reserves them for parking. It aims to reduce human effort and improve payment accuracy compared to manual methods. Vehicle identification is done using RFID, free slot detection is done using IR sensors, and payment calculation is based on parking time. - The system utilizes IoT

technology to optimize parking area usage and control traffic in the city. It provides accurate real-time status and historical analytics reports. The existing system lacks automation and RFID technology for parking slots, resulting in manual identification and calculation of parking fees. The use of IR sensors helps detect free slots, and the information is transmitted via a Wi-Fi module to an Arduino board for display in a mobile app and LED screen.

(11) Summary of A study of remotely booking slot for vehicle using Internet of Things - The paper proposes a system that utilizes IoT and cloud-based technology to provide smart car parking facilities in smart cities. - The system uses RFID technology and suitable IoT protocols to minimize human interference and reduce costs. - A Raspberry Pi is used as a mini-computer in the system, along with a suitable path methodology to calculate the shortest distance between the user and available parking spaces, reducing the users waiting time. - The system also includes the practice of remotely booking a parking slot through an Android application, providing a hassle-free and instantaneous parking experience for car drivers. - The proposed system aims to decrease the average waiting time for parking, reduce the number of cars struggling to find parking spaces, and save users time, money, and reduce pollution.

(12) Summary of On-Street Parking Reservation and Toll Management System – The proposed project is a smart on-road parking management system that allows users to book parking spots alongside roads, overcoming the problem of unavailability of parking in commercial areas. - The system provides a web-based reservation system where users can view available parking spaces and book slots. - After booking a slot, the customer receives two OTPs to their registered email address, which are validated at the gate for entry and exit. - The system efficiently detects empty parking slots and updates the information on the webpage.

### **System requirement specification:**

Structured collection of information that embodies the requirements of system or a detailed statement of the effects that a system is required to achieve. Client requirements include functional requirements and non-functional requirements.

### **Client Requirements Functional Requirements**

A functional requirement defines a function of a system or its component. A role is described as a set of inputs, behavior, and outputs. Functional requirements may be calculations, technical details, data manipulation, and processing. The methods of the system are as follows.

#### 1. Parker,

- Registration
- Login
- Find slot
- Send request to the owner
- Enter the duration

- Prepay/Postpay
- Logout

## 2. Owner,

- Registration
- Login
- Upload details of his space
- Receives the user parking request
- Accept or decline the request
- Receives the payment
- Logout

### **Non-Functional Requirements**

Non-Functional Requirement (NFR) specifies the quality attribute of a software system. They judge the software system based on Responsiveness, Usability, Security, Portability and other non-functional standards that are critical to the success of the software system.

- Maintainability

Maintainability is the ease with which a product can be maintained in order to:

- ❖ Correct defects or their cause,
- ❖ Repair or replace faulty or worn-out components without having to replace still working parts,
- ❖ Prevent unexpected working condition,
- ❖ Maximize a product's useful life,
- ❖ Maximize efficiency,
- ❖ Reliability and safety,
- ❖ Meet new requirements,
- ❖ Make future maintenance easier, or
- ❖ Cope with a changed environment.

- Portability

Software portability may involve

- ❖ Transferring installed program files to another computer of basically the same architecture.
- ❖ Reinstalling a program from distribution files on another computer of basically the same architecture.
- ❖ Building executable programs for different platforms from source code; this is what is usually understood by "porting".

- Usability

The primary notion of usability is that an object designed with a generalized users' psychology and physiology in mind is, for example:

- ❖ More efficient to use—takes less time to accomplish a particular task
- ❖ Easier to learn—operation can be learned by observing the object
- ❖ More satisfying to use

- Reliability

The objectives of reliability engineering, in decreasing order of priority, are

- ❖ To apply engineering knowledge and specialist techniques to prevent or to reduce the likelihood or frequency of failures.
- ❖ To identify and correct the causes of failures that do occur despite the efforts to prevent them.
- ❖ To determine ways of coping with failures that do occur, if their causes have not been corrected.
- ❖ To apply methods for estimating the likely reliability of new designs, and for analyzing reliability data.

- Consistent uptime

The new system will be able to stay up and running at least 98% of the time. Any downtime would be due to maintenance or upgrades. This downtime also includes any potential failures/crashes.

- Load and concurrency

The system must be able to serve at least two thousand users concurrently without crashing.

- Dealing with large quantities of data

The developed system will have to deal with large quantities of data and a large number of users accessing the data at once. The large quantity of data includes timetable information and data retrieved from the database by many users at the same time.

- Familiar Interface

The new system will have an interface that shares some of the feel of the old system so that users who are familiar with the old system will not have trouble adjusting to the new system.

- Real-time Feedback

The new registration system should display the student's timetable and show the changes made to it in real-time as the student adds and drops courses.

- Focused Layout

The new system will reduce the potential for confusion by having a focused layout. This means that it will display information that is relevant to the current task and conversely, leave out irrelevant information.

- Web Accessibility

The new system will be compatible with screen readers to assist the visually impaired. This means that screen readers should interpret the displayed text into speech and should not output anything that does not correspond to displayed text.

- Effective Recovery

The system must effectively recover from a crash within ten minutes. Effective recovery means that the data is still in a consistent state accurate to 1 minute before the system crashes when the system returns.



## System Specification

### Hardware Requirements for both Android and Web Application

A hardware requirement list is often accompanied by a hardware compatibility list, essentially in the case of operating system.

- Processor : Core i3 and above
- Hard Disk : 40 GB.
- RAM : 4 GB(min)

### Software Requirements for Android application

Software requirements deals with defining software resources requirements and prerequisites that need to be installed on the computer to provide optimal functioning of an application.

- Operating System : Windows 7 and above
- Application Server : Apache
- Front End : HTML, CSS, Javascript
- Server side Script : Java
- Database : Mysql.

### Software Requirements for Android application

- Operating System : Android
- Application Server : Firebase
- Front End : XML
- Server side Script : Java
- Database : Nosql(firebase).

## System analysis:

### Introduction

Feasibility study is the process of determination of whether or not a project is worth doing. Feasibility studies are undertaken within tight time constraints and normally culminate in a written and oral feasibility report. The contents and recommendations of this feasibility study helped us as a sound basis for deciding how to precede the project. It helped in taking decisions such as which software to use, hardware combinations, etc.

The following is the process diagram for feasibility analysis. In the diagram, the feasibility analysis starts with the user set of requirements. With this, the existing system is also observed. The next step is to check for the deficiencies in the existing system. By evaluating the above points, a fresh idea is conceived to define and quantify the required goals. The user consent is very important for the new plan. Along with, for implementing the new system, the ability of the organization is also checked. Besides that, a set of alternatives and their feasibility is also considered in case of any failure in the proposed System. Thus, feasibility study is an important part in software development.

### Technical Feasibility

Technical feasibility determines whether the work for the project can be done with the

existing equipment, software technology and available personnel. Technical feasibility is concerned with specifying equipment and software that will satisfy the user requirement. This project is feasible on technical remarks also, as the proposed system is more beneficiary in terms of having a secure system with new technical components installed on the system. The proposed system can run on any machines supporting Windows and Internet services and works on the best software and hardware that had been used while designing the system so it would be feasible in all technical terms of feasibility.

### **Economic Feasibility**

Economic feasibility determines whether there are sufficient benefits in creating to make the cost acceptable, or is the cost of the system too high. As this signifies cost benefit analysis and savings. On the behalf of the cost- benefit analysis, the proposed system is feasible and is economical regarding its pre-assumed cost for making a system. During provides the best operational impact for the end-users may also be the most expensive and therefore, the least economically feasible.

### **Operational Feasibility**

Operational feasibility criteria measure the urgency of the problem (survey and study phases) or the acceptability of a solution (selection, acquisition and design phases).

Operational feasibility is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. The operational feasibility assessment focuses on the degree to which the proposed development project fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture and existing business processes. To ensure success, desired operational outcomes must be imparted during design and development.

### **Existing System**

- Maria Waqas proposed “Smart Vehicle Parking Management System using Image Processing”. This project focused on developing a parking management system based on image processing to detect vacant parking slot in an area where automated systems are not installed. Camera images of the parking area are subjected to image processing algorithm which marks virtual slots in the area and extracts occupancy information to guide the incoming drivers about availability and position of vacant spaces.
- Usman K proposed “Real Time Vehicle Parking System Using Mobile Application”. This is aimed to provide easier way to book the vehicle parking slot. This application is secured due to login authentication of Admin. This application includes two modules that are Admin and user. Each module will be given with unique login id and password after which they can access the information accordingly.
- Satish V. Reve proposed “Management of Car Parking System Using Wireless Sensor Network”; this structure has altogether the infrared radar nodes which intellects the rank of the vehicle gap besides transference of the facts to the AVR controller and it

demonstrates the facts on the led display intended for the customer.

### **Disadvantages**

- Once the system is corrupted all the images will be lost.
- Security and privacy issues.
- Cost of maintenance.

### **Proposed System**

Proposes a system for parking reservation in a private parking field in an urban metropolis. The proposed system design can be used to eliminate unnecessary time consumption to find an empty parking slot. By this system we address the problem raised by previous studies that shows 15 to 25 percent of fuel wastage in vehicles stuck in traffic is caused by wondering around for finding parking slots. In this system the reservation is done by the user using online smartphone application. Hence the user find's the empty parking slot and can reserve parking slot as per their preference using an android application through internet access.

Check-In and Check-Out will be handled in a rapid manner simultaneously authenticating users to avoid long queues causing traffic jam. Thus making it convenient for the user to set their own likely parking slot based on the time increasing the efficiency of land and traffic management in an urban metropolis area.

### **Advantages**

- Allows drivers to select the most convenient parking space under their budget constraints.
- Reduce parking stress.
- Reduce search traffic on streets.
- Consumption of less fuel.
- Cost and time efficient solution.

### **System Design:**

It is simply the design of system. It implies a systematic and rigorous approach to design an approach demanded by scale and complexity of many systems problem.

### **High level DesignFlow Chart**

A diagram of the sequence of movements or actions of people or things involved in the system.

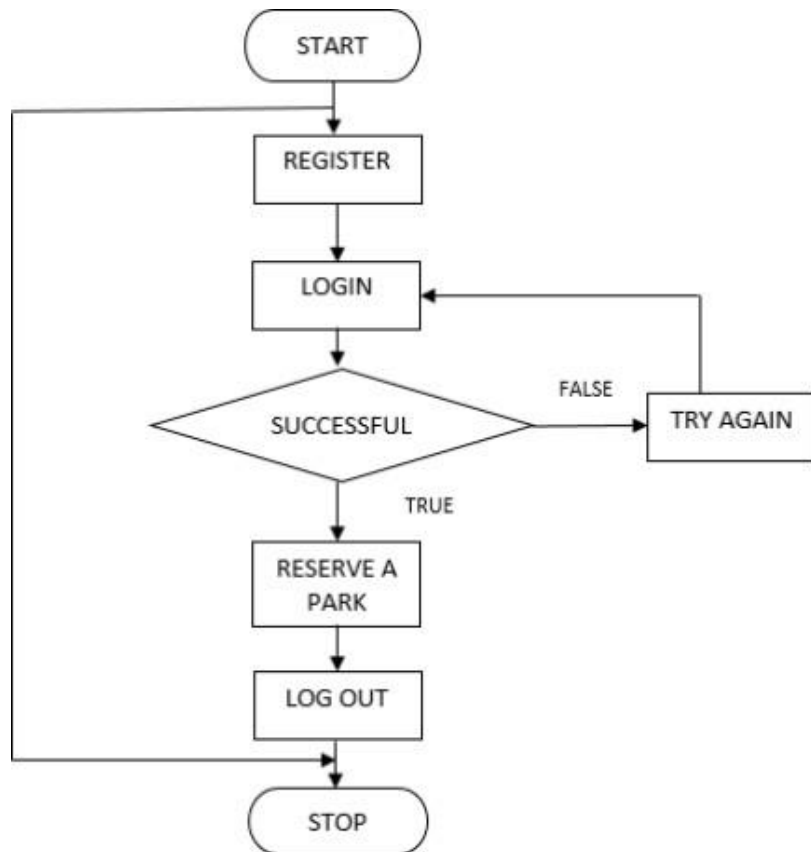


Fig 1 Flow chart of the client side

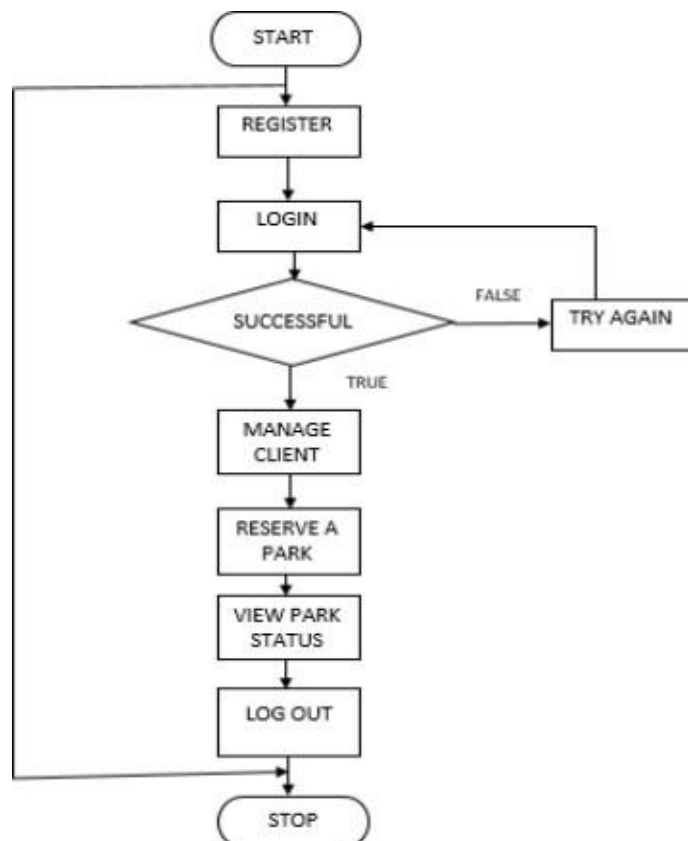


Fig 2 Flow chart of the system admin side:

**Sequence Diagram:**

A sequence diagram or system sequence diagram shows process interactions arranged in time sequence in the field of software engineering. It depicts the processes involved and the sequence of message exchanged between the processes needed to carry out the functionality. Sequence diagrams are typically associated with use case realizations in the architectural view model of the system under development. Sequence diagrams are sometimes called event diagrams or event scenarios. For a particular scenario of a use case, the diagrams show the events that external actors generate, their order and possible inter- system events. All systems are treated as a black box, the diagram places emphasis on events that cross the system boundary from actors to systems.

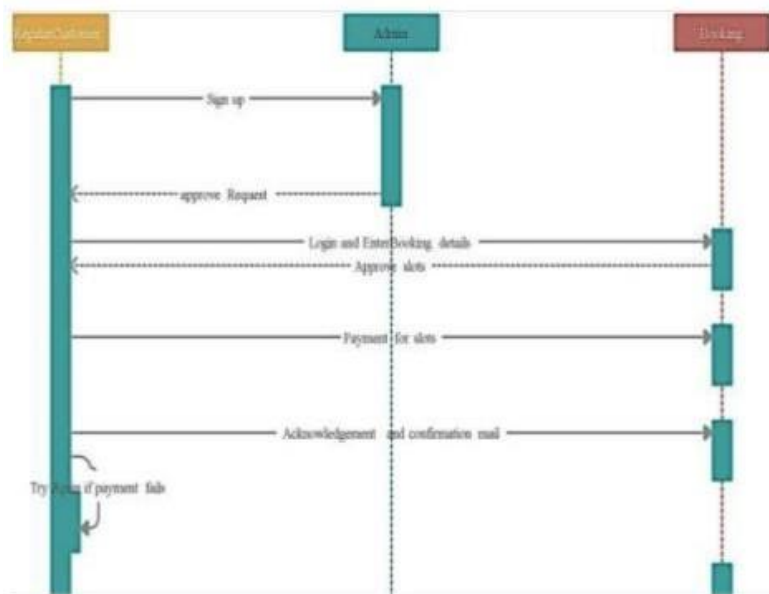


Fig 3 Sequence Diagram of Parking System

**5.1.3 Use case Diagram**

A use case diagram in the Unified Modeling Language (UML) is a type of behavioral diagram defined by and created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases. The main purpose of a use case diagram is to show what system functions are performed for which actor. Roles of the actors in the system can be depicted.

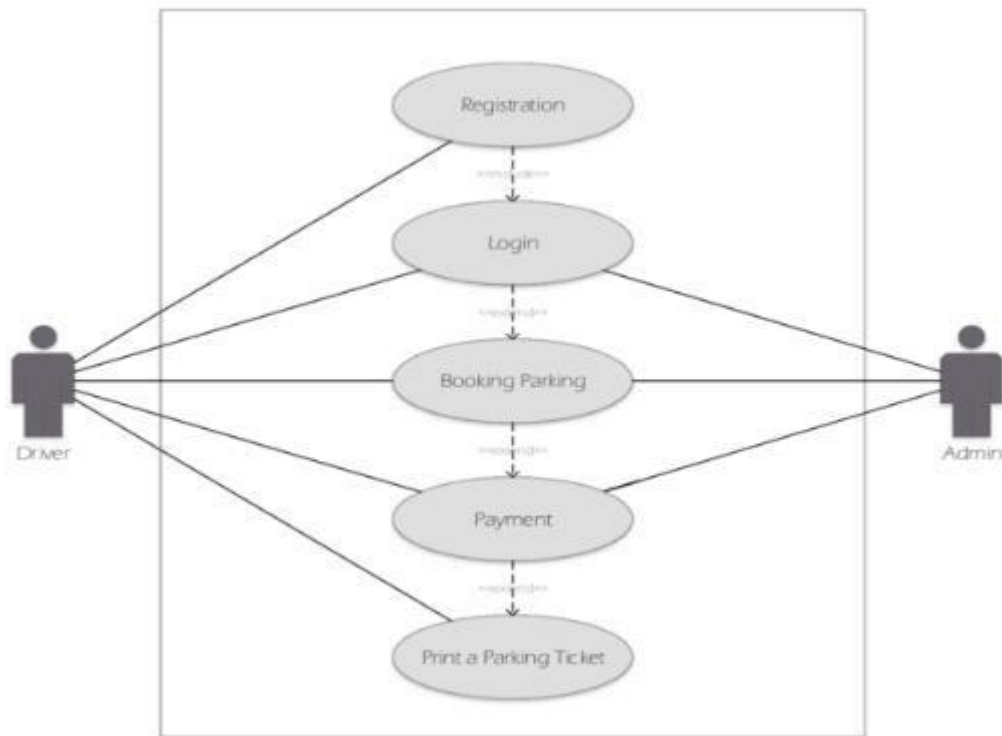


Figure 4 Use case Diagram

### Implementation:

#### Description

- An application is developed in such a way that it works the Smartphone's. The application offers the most convenient way to park the vehicles.
- It provides privilege for the host to sign in and provide details about the place they own.
- The client will have privilege to sign in and access the nearest and safest available parking place.

#### Wireframing

- Wireframing reduces the overall cost of the project. During this process, this can easily adapt or change the interactions of page with 0 budget spent on graphic design, coding, and programming.
- Clear visualization of what every element and screen will do. It is much easier to specify the action visually with wireframes rather than only a word document.
- Wireframes protects from unwanted surprises. Proper wireframing makes it easy to avoid that problem of software development.
- Enables testing with target audience. Feedback can be received from potential customers the better.

#### Designing the graphics

The goal of a graphic designer is to catch the user's attention emotionally and support their smooth user experience. Secondly, the designer's goal is to create a visual consistency across the whole project. It is very important is to have a font size that is legible and

buttons have to be purposeful and clear as to what will happen when clicked. Create enough space between elements - especially on mobile - some people can have really huge fingers.

```
<?php session_start(); error_reporting(0);
include('includes/dbconnection.php'); if(isset($_POST['login']))
{
$adminuser=$_POST['username'];
$password=md5($_POST['password']);
$query=mysqli_query($con,"select ID from tbladmin whereUserName='$adminuser' &&
Password='$password' ");
$ret=mysqli_fetch_array($query);if($ret>0){
$_SESSION['vpmsaid']=$ret['ID']; header('location:dashboard.php');
}
else{
echo "<script>alert('Invalid Details.');

```

**Methodology**

In the proposed scheme, the system consists of three levels, including sensing layer, communication layer and cognitive server’s layer. Fig 6.1 shows the system framework.

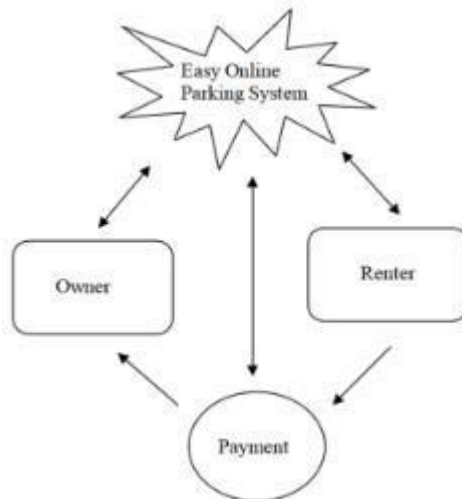


Figure 6.1 Methodology Structure

- The Owner registers their space in the website by providing their location and secure facilities available and cost is displayed accordingly.
- The Renter gets registered to the website and enter the location where they want to park.
- Choose from the options given to you for the parking lot of your choice.
- Click on ‘Book’ once you have selected the parking space for rent.
- You can select the preferred time and date of your choice.

- This system provides an additional feature of cancelling the bookings.
- User can cancel their books space anytime.
- Choose your preferred choice of payment and pay.
- Subscription plans are also provided for a week and month.

**Test Case:**

**Table 7.4 Test case for Parker**

TEST ID	INPUT	OUTPUT	DESCRIPTION
1	Enter Name,Contact no,Email, Password and user to sign up	Successful	Enters to the sign in page
2	Enter Name,Contact no,Email, Password and user to sign up	Unsuccessful	Displays Error message
3	Enter Email and Password	Successful	Enters the dashboard
4	Enter Email and Password	Unsuccessful	Please enter the correct email and password

**Table 7.5 Test case for Owner**

TEST ID	INPUT	OUTPUT	DESCRIPTION
1	Enter Name,Contact no,Email, Password and user to sign up	Successful	Enters to the sign in page
2	Enter Name,Contact no,Email, Password and user to sign up	Unsuccessful	Displays Error message
3	Enter Email and Password	Successful	Enters the dashboard
4	Enter Email and Password	Unsuccessful	Please enter the correct email and password

**Conclusion**

In this Project Online vehicle parking reservation system improves the existing system since we are in computerized world. The new system enables the user of the system (Parker) to reserve a parking slot through online and this reduces the waste of time of the clients looking where to park on road, increase the safety of the vehicle.

The goal of Easy Online Parking is to reduce the time taken and the hassle factor of locating an available parking space. Being able to accurately direct a driver to an available space has



many environmental benefits; it reduces CO2 emissions, noise and other pollutants.

### Scope for further research:

In future work, it is intended to enhance the performance and take safety measures with the help of more advance technologies. In case of parking at a non-designated spot, there are chances of the vehicle getting towed or fined for incorrect parking. However, with Easy Online Parking, Vehicle can be left at a parking slot, worry-free. Provides cashless payment options. Easy Online Parking System doesn't just save the time and give vehicle safety, it is also quick and easy to book parking with the help of this application. Parking space can be reserved in advance by making a cashless payment. With everything going digital in this technology-driven world, finding a vehicle parking area in the desired place efficiently with just a few simple clicks is possible through Easy Online Parking System.

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