PROJECT REPORT ON

**Parking Management System**

SUBMITTED IN PARTIAL FULFILMENT OF THE

REQUIREMENTS FOR THE AWARD OF THE DEGREE OF

BACHELOR OF SCIENCE INFORMATION TECHNOLOGY

**DESIGNED AND DEVELOPED**

BY

**NITYANAND KANNAN SEAT NO: 4022556**

UNDER THE GUIDANCE OF

**Ms. NARMETA VANITA**

DEPARTMENT OF INFORMATION TECHNOLOGY

**S.I.E.S COLLEGE OF, COMMERCE & ECONOMICS**

**SION (East)-400 022**

**UNIVERSITY OF MUMBAI**

**(2016-2017)**

**UNIVERSITY OF MUMBAI**

**2016-2017**



**SIES COLLEGE OF COMMERCE AND ECONOMICS**

**NAAC Reaccredited “A” Grade ISO 9001:2008 Certified**

**Project Certificate for B.Sc.I.T. Students**

This is to certify that the project entitled Parking Management Systemundertaken by

**Mr. NITYANAND KANNAN SEAT NO: 4022556**

In partial fulfillment of B.Sc.I.T. Degree (Semester VI) Examination had not submitted for any other examination and does not form part of any Other Course undergone by the candidate.

It is further certified that he has completed all required phase of the Project.

**Internal Guide External Examiner Head of Department**

**Content Table**

|  |  |  |
| --- | --- | --- |
| **Sr.no** | **Title** | **Page** |
| **1** | **Introduction** | 6 |
| **2** | **Main Report** | 8-13 |
| **2.1** | **Objectives & Scope** | 9 |
| **2.2** | **Definition of Problem** | 10 |
| **2.3** | **System Requirement Phase** | 11 |
| **2.3.1** System Requirements | 13 |
| **2.4** | **System Analysis Phase** | 14-15 |
| **2.4.1** Information Gathering | 15 |
| **2.5** | **System Planning Phase** | 16-21 |
|  | **2.5.1** Process Model | 17 |
| **2.5.2** Feasibility Study | 19 |
| **2.5.3** Gantt Chart | 20 |
| **2.6** | **System Design Phase** | 22-30 |
|  | **2.6.1** ER Diagram | 23 |
| **2.6.2** Data Flow Diagram | 26 |
| **2.6.3** Class Diagram | 27 |
| **2.6.4** Use Case Diagram | 28 |
| **2.6.5** Activity Diagram | 29 |
| **2.7** | **System Implementation Phase** | 31-40 |
|  | **2.7.1** Cost Benefits Analysis & Economic Feasibilities | 32 |
| **2.7.2** User Interface | 34 |
| **2.7.3** Database Snaps | 39 |
| **2.8** | **Maintenance** | 41 |
| **2.9** | **Testing** | 44 |
| **2.1O** | **Test Reports** | 47 |
| **2.11** | **Conclusion** | 50 |
| **2.12** | **Future Enhancement** | 52 |
| **2.13** | **Annexure** | 54-57 |
|  | **2.13.1** DATA Dictionary | 55 |
| **2.13.2** Bibliography | 57 |

**ACKNOWLEDGEMENT**

I thank the people who were a part of this project in numerous ways, people who gave their unending support right from the stage the project idea was conceived.

The four things that go on to make a successful endeavor are dedication, hard work, patience and correct guidance.

I would like to thank our principle **DR. KINNARRY THAKKAR** who has always been the source of inspiration.

I also thankful to **Mrs. BHAVINI SHAH** our coordinator for all the help she has rendered to ensure the successful completion of the project.

I take this opportunity to offer sincere thanks to **Ms. NARMETA VANITA (your guide name)** who was very much kind enough to give us an idea and guide us throughout our project work.

I also thankful to **Ms. NARMETA VANITA** and **Mrs. VARSHA** **DHANAWADE** for helping us out in Project Documentation.

I thankful to all teaching staff (I.T) who shared their experience and gave their suggestion for developing our project in better way.

Last but not the least i would like to thank all our friends and family and family members for their support, and all others who have contributed to the completion of this project directly or indirectly.

**INTRODUCTION**

**Introduction**

Parking management system for managing the records of the incoming and outgoing vehicles in an parking house

It’s an easy for Admin to retrieve the data if the vehicle has been visited through number he can get that data **.**

Now days in many public places such as malls, multiplex system, hospitals, offices, market areas there is a crucial problem of vehicle parking. The vehicle parking area has many lanes/slots for car parking. So to park a vehicle one has to look for all the lanes. Moreover this involves a lot of manual labour and investment. Instead of vehicle caught in towing the vehicle can park on safe and security with low cost.

Parking control system has been generated in such a way that it is filled with many secure devices such as, parking control gates, toll gates, time and attendance machine, car counting system etc. These features are hereby very necessary nowadays to secure your car and also to evaluate the fee structure for every vehicles entry and exit

The objective of this project is to build a Vehicle Parking management system that enables the time management and control of vehicles using number plate recognition. The system that will track the entry and exit of cars, maintain a listing of cars within the parking lot, and determine if the parking lot is full or not. It will determine the cost of per vehicle according to their time consumption.

**MAIN REPORT**

**2.1 Objectives :**

We can park our vehicle in our own slot by paying.

* Because of that there is no towing problems.
* And our vehicle has been parked as a secure condition.
* There is no risk for vehicle owner for parking the car.
* In case of any damages and problem of vehicle that will claim by parking management.
* As the world is facing many threads daily, robberies are done easily with no track to trace, bomb blasts occur with the use of vehicle, so if a proper system is adopted each and every record can be saved and anyone can be track easily therefore mainly is to make a better and fast software, most important user-friendly
* Maintain records in short time of period.
* Determines the parking area is full or not.
* Enhances the visitor’s experience.

**Scope**:

In the modern age. Many people have vehicles. Vehicle is now a basic need. Every place is under the process of urbanization. There are many corporate offices and shopping centers etc. There are many recreational places where people used to go for refreshment. So, all these places need a parking space where people can park their vehicles safely and easily. Every parking area needs a system that records the detail of vehicles to give the facility. These systems might be computerized or non-computerized. With the help of computerized system we can deliver a good service to customer who wants to park their vehicle into the any organization’s premises.

Vehicle parking management system is an automatic system which delivers data processing in very high speed in systematic manner. Parking is a growing need of the time. Development of this system is very useful in this area of field. We can sell this system to any organization. By using our system they can maintain records very easily. Our system covers the every area of parking management. In coming future there will be excessive need of Vehicle parking management system.

**2.2 Definition of problem:**

* Now a days in parking like valet parking they maintain just with the tokens and they have records the vehicle details in books so that during some critical situations like police enquiry of terrorist car or vehicle roberrer that case it is difficult to find the details of particular vehicle but in this case is easy to find in 1 to 2 seconds
* By parking the vehicle in public place the vehicle can be claimed by towing person but in this case there is no towing problems and no need to give fine for anything we can park our vehicle with securely.