Parking Lot Management

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Prime College

A Project Submitted to

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Place

Month/ year

# Student’s Declaration

This is to certify that we have completed the Project entitled “Parking lot management” under the guidance of “Manoj Giri” in partial fulfillment of the requirements for the degree of Bachelor of Information Management at Faculty of Management, Tribhuwan University. This is my original work and we have not submitted it earlier elsewhere.

Date:

Signature

Name:

# Acknowledgment

# Executive Summary

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# Abbreviations

# Chapter 1: Introduction

## Introduction

A vital component of urban infrastructure is efficient parking lot management, which addresses the issues created by the growing number of automobiles in our cities while making the most use of the limited space available. The increasing number of people living in cities and owning cars has made it more important than ever to find creative ways to improve parking operations. In addition to improving a city's general mobility, a well-managed parking lot also helps to lower traffic, improve air quality, and boost customer happiness. This introduction looks at the many aspects of parking lot management and the essential elements that are vital to making the most of this vital urban resource.

Using technology to increase convenience and efficiency is the foundation of any effective parking lot management system. Developments in technology enable more precise occupancy tracking, which improves planning and efficient use of available space. Furthermore, these advancements open the door to the application of dynamic pricing schemes, which maximize income production for cities and parking facility operators.

## Current situation of the organization

## Issues/ Problems in the organization

## Objectives of the report

1. To minimize traffic congestion by providing accurate information about the available parking spaces and guiding vehicles to the nearest available spot.
2. To generate dynamic pricing according to the time reserved.

## Scope and limitation

**Scope**

1. Vehicle owner can see the available slots by logging in to the system.
2. Data-backup

**Limitation**

1. Vehicle owners have to depend on the admin for information about the parking space.
2. Cannot search on the basis of dates.
3. Have to be logged in to make admin.

## Methodology of the Study

### Analysis of the problem

### Data Collection and Analysis

### Tools used

* Frontend
  + HTML
    - User Interface Design
    - Layout of pages
    - Displaying records
    - Forms and user inputs
    - Hyperlinks and navigation
  + CSS
    - Layout and Design
    - Styling elements
  + Bootstrap
    - Customized alerts and notifications
    - Pre-styled components
  + JavaScript
    - Input Validation
    - User notifications and alerts
* Backend
  + PHP
    - User Authentication and Authorization
    - Database Interaction
    - Handling Payments
    - Content Delivery
    - Notifications and Communication
  + MySQL
* Admin Data Storage
* Update Data Storage
* Vehicle Data Storage
* Session Management

# Chapter 2: analysis of activities done and problem solved

## Analysis of Current Situation

## Requirement Analysis

### Requirement Collection methods

### Functional Requirements of the system

### Non-functional requirements of the system

## System design

### System architecture

### UML Class Diagram

### Sequence Diagram

### Activity Diagram

### Database Schema

### Component Diagram

### Deployment Diagram

## System Implementation

## System Testing

# Chapter 3: discussion and conclusion

## Discussion

## Conclusion

## Lessons Learnt

## Recommendation

# Reference

# Appendix