



A Systematic Review Paper on Online Taxi Booking System using Python

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ABSTRACT

Customers will be able to reserve their vehicles from anywhere in the world due to the Car Rental System. Consumers provide information to this application by filling in their personal information. When a consumer creates an account on the website, he or she can reserve a car. The proposed system is an online system that is fully integrated. It effectively and efficiently automates manual procedures. Customers are aided by this automated method, which allows them to fill in the specifics according to their needs. It contains information on the sort of car they want to hire as well as the location. The goal of this system is to create a website where customers can book their automobiles and request services from anywhere in the world. There are three phases to this car rental system mentioned in the introduction

Keywords: DBMS, XAMPP, PHP, PHPMYADMIN, Functional and Non-functional Requirements, Database Connection.

1. INTRODUCTION

There are three phases to this car rental system.

- 1) The first phase entails organising car rental locations into pools and allowing pooled car rental outlets to share a fleet of automobiles.
- 2) The second phase for each pool determines the types and quantities of cars to be acquired and delivered to the auto manufacturer, as well as the geographic redistribution of automobiles among pools across the long-term planning horizon.
- 3) The third phase entails day-to-day operations, during which the fleet's deployment within each pool and among its locations is determined.

A. Need for Car Rental System

Nowadays, there is Online Car Rental, which benefits users greatly. A rental service is one where customers come to seek the rental of a rental unit. It is more convenient than paying for the unit's ownership and maintenance. A car rental company lends autos for a price for a few hours, a few days, or a week or more.

B. Objective of Car Rental System

The project's goal is to automate vehicle rental and reservation so that clients don't have to waste time calling and waiting for a vehicle. To convert the manual car rental procedure into a digital method. A customer satisfaction test was used to validate the rental automobile system. As a system development reference,

create documents such as Software Requirement Specification (SRS) and Software Design Description.

C. Methodology/Procedure

The database was designed on PHPMYADMIN, the back end was developed in simple PHP, and we utilised the same basic PHP codes for the frontend. Software methods are concerned with the process of developing software, not so much with the technical elements as with the organisational ones. Since the dawn of information technology, a variety of software development methodologies have been employed.

2. PROPOSED SYSTEM

A. Problem Statement

A car rental is a vehicle that may be rented for a price and utilised for a specific length of time. Getting a rental automobile makes it easier for people to travel around when they don't have access to their own vehicle or don't own one at all. A person who needs transportation must call a rental car company and sign a contract. This method improves client retention while also making car and employee management more straightforward.

B. Proposed Solution

Create a web-based system that allows consumers to register and reserve automobiles online while also allowing the firm to manage its car rental business efficiently. To make the process of renting an automobile easier for consumers.

C. Scope and Features

This project covers a wide range of topics, from business concepts to computer science, and it necessitates the completion of numerous studies in order to meet the project's objective.

Some of the topics covered include:

- 1) Vehicle rental industry – This covers research on how the car rental industry operates, the processes involved, and the potential for improvement.
- 2) The application was built using the PHP programming language.
- 3) Customers, as well as corporate employees, will be able to make good use of the system.

The web platform implies that the system will be accessible 24 hours a day, seven days a week, with the exception of minor server outages.

D. Functional Requirements

Requirement analysis is a software engineering approach that consists of a series of activities that establish the demands or conditions that must be satisfied for a new or updated product while taking into account the potential for competing requirements from different users. Functional requirements are those that are used to demonstrate the system's internal functioning nature, as well as the system's description and explanation of each subsystem. It comprises the task that the system should accomplish, the processes involved, the data that the system should contain, and the user interfaces.

3. LITREATURE REVIEW

A. System Analysis

System analysis is a thorough examination of a system's different processes and their interrelationships both within and outside the system. The key question here is – why are there so many flaws in the current system? What measures should be taken to address the problem? When a user or management begins a study of the software utilising the current system, analysis begins. Data was collected on numerous files, decision points, and transactions handled by the current system during the analysis. For example Data Flow Diagrams, etc. are widely utilised in the system. For the collection of important information needed to create the system, training, experience, and common sense are necessary. The system's success is primarily determined by how well the problem is identified, fully studied, and appropriately implemented via the selection of a solution. A good analytical model should include not just methods for comprehending the problem, but also the framework for solving it. As a result, it should be extensively investigated by gathering data about the system. The suggested system should next be extensively examined in light of the requirements. System analysis is divided into four sections.

- 1) Initial research and system architecture.
- 2) Using analytic tools to do structured analysis.
- 3) Feasibility study.
- 4) Analyze the cost and benefits.

B. Problem Analysis

We are currently creating a new system because there is no existing system at this time. There is currently no

system on the market with these features and capabilities. This system is designed for a wide range of users, with a highly adaptable and adjustable solution that will ensure worldwide marketing.

C. Design and Development Problem

- 1) There is a problem operating XAMPP.
- 2) During the development process, to debug the mistake.
- 3) To depict a connection between two or more entities.

A database table has a minor mistake.

A. Feasibility Analysis

Once the problem is fully recognised, a feasibility study is carried out. The goal of the research is to see if the problem is worth fixing. It is the process of analysing and evaluating a proposed project in order to evaluate if it is technically viable.

B. Economical Analysis

The economic feasibility of a system is used to assess the project's or system's advantages as well as the expenses involved. A method known as cost-benefit analysis is used to accomplish this. It offers both concrete and intangible benefits, such as cost.

savings, increased flexibility, quicker activities, and efficient database administration.

The application is on a medium scale, and it is financially possible for us to complete. This necessitates a cost-benefit analysis. As a result, there is no issue with excessive costs or cost-benefit analyses.

4. CONCLUSION

In comparison to previous experiences, when every activity related to the vehicle rental business was restricted to a physical place alone, the car rental industry has emerged with new delicacies. Even if the physical location has not been completely eliminated, the internet's power has altered the nature of functions.

Conflict of interest statement

Authors declare that they do not have any conflict of interest.

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