CHAPTER 1: INTRODUCTION

Introduction

The project Online Bike Rental System is the complete web-based design on Laravel using Visual Studio Code Editor Software. The aim of the project is to develop Online Bike Rental System Model Software in which all the information regarding the Rent bike available in the organization will be presented. By using this system users can book the bike as rent for sutten days. Then Admin will check the rent details of the user and approve or reject it. It is an internet-based web application that has an admin component to manage bikes in the system. This web application is based on the management of rented bikes in the organization. The application contains Renting Bike Catalog, Rent Details, Reports, and other essential Bike Rental System entities. There is a provision for updating the bike information also. This application also provides information on available bikes and rentals as well as transaction details. Each new bike is registered according to its properties. Here Login page and Register page is created in order to implement authorization and authentication of the system users.

Statement of Problem

Here are some problems faced by many traditional bike rentals organizations which are as follows:

* The country lacks a proper and comprehensive bike rental system, despite the presence of 3000 bike rental systems worldwide.
* Existing bike rental stations encounter difficulties with liability, paperwork, and time management.
* This absence of an effective bike rental system hinders convenient transportation options for individuals without access to their own vehicles.
* There is a need to address these challenges and establish a well-structured bike rental system to improve accessibility and streamline management processes.
* There is a need to improve the payment methods to ensure seamless and secure transactions, enhancing the overall rental experience.

Objectives

Here are some objectives of this system which are as follows:

* To develop a proper and comprehensive bike rental system for the country, considering the presence of 3000 bike rental systems worldwide.
* To address the challenges faced by existing bike rental stations, specifically related to liability, paperwork, and time management.
* To enhance transportation options by establishing an effective bike rental system for individuals without access to their own vehicles.
* To improve accessibility and streamline management processes in the bike rental system.
* To implement efficient payment methods that ensure seamless and secure transactions, thereby enhancing the overall rental experience.

Scope and Limitation

The Online Bike Rental System (OBRS) is specifically designed for small and medium-sized organizations with a single authority. It aims to streamline and enhance the bike rental process by providing a centralized platform for managing rental details and records. With security-driven features, the system ensures that only authorized personnel can access and modify the information. The OBRS also offers scalability, allowing the addition of new depots or rental locations as needed. Furthermore, it assists in determining the optimal economic order quantity, minimizing costs associated with ordering or manufacturing bikes. By implementing effective policies for location, layout, and materials handling equipment, the OBRS facilitates efficient store operations.

Despite the advantages of the OBRS, the existing paper-based record maintenance system poses several limitations. Manual record keeping leads to redundancy, making data susceptible to loss or inconsistency during modifications. The lack of a secure digital platform exposes records to unauthorized access and tampering. Additionally, the time-consuming and costly nature of the current system hampers information retrieval and storage. The manual handling of data also increases the likelihood of errors and inaccuracies. Moreover, the limited storage capacity for physical records poses challenges in maintaining data for an extended period. By transitioning to the OBRS, organizations can overcome these limitations and enjoy an automated and secure platform that optimizes bike rental management, improving overall efficiency and convenience.