RamanaSoft

Parking Management System

Proposal for

Ramana Soft Internship (Assignment-1)

Road No. 45, 100 Ft Road, Ayyappa Society, Madhapur, Hyderabad - 500081.

Parking Management Assignment (Development)

Introduction:

This project is a Simple Parking Management System with CRUD. This is a web-based application project developed in Python, using with using Django frame work, HTML, CSS, JS, and MySQL Database. The main goal of this application is to provide Vehicle Parking Businesses with an automated and online platform to manage their daily transactions. This can help the said type of business to easily store, retrieve, and manage their daily transactions with their customers. The application has a pleasant user interface using the Bootstrap 4.6 Framework and consists of user-friendly features and functionalities which can give the end-users a better experience while using the app.

Required Software's:

- XAMPP v3.3.0
- Python Django Frame Work
- MySQL Database
- HTML
- CSS
- JavaScript
- jQuery Bootstrap
- Font Awesome

This Parking Management System application is only accessible by the Parking Lot Business Management. It requires the administrator user credentials for the user to access the features and functionalities of the said project. The application allows the user to list all the allowed vehicle categories on their business with some relevant information such as the parking location or area and parking charges or rates. Here, the admin can simply register the newly arrived vehicle information to their selected category or parking area. The vehicle added our being displayed below the form which is called the current vehicles. The current vehicles table is the listed vehicle that is currently parked. The system also contains a feature that counts the available parking area in each category. The admin must update the departed vehicles to update the parking area availability. This project also generates a statistical report for parked vehicles within a 10 days range.

Project Features:

❖ **Dashboard Page**
- Display Summary

❖ **Category Management**
- Add New Category
- List All Categories
- Edit/Update Category Details
- Activate Category
- Deactivate Category
- Delete Category
- Category Price Rate Details Panel

❖ **Vehicle Entry Management**
- Add New Vehicle Entry
- List All Currently Parked Vehicles
- Display Parking is available details
- View and Print Receipt

❖ **Vehicle Management**
List All Currently/Departed Vehicle Records
Update Vehicle Entry to Departed

❖ **Generate Statistical Vehicle Entry Report from 10 days to the current day**
❖ **Search Vehicle Entry or Record by Vehicle Number or Receipt Serial Number**
❖ **User Account Settings/Update Account Password**
❖ **Login and Logout**

Data Base Schema:

spms_db admin
- id : int(11)
- name : varchar(120)
- username : varchar(100)
- password : varchar(100)

spms_db category
- cat_id : int(11)
- parking_area_no : varchar(100)
- vehicle_type : varchar(100)
- vehicle_limit : varchar(200)
- parking_charge : varchar(200)
- status : varchar(10)
- doc : datetime

spms_db add_vehicle
- id : int(11)
- vehicle_no : varchar(200)
- parking_area_no : varchar(200)
- vehicle_type : varchar(200)
- parking_charge : varchar(200)
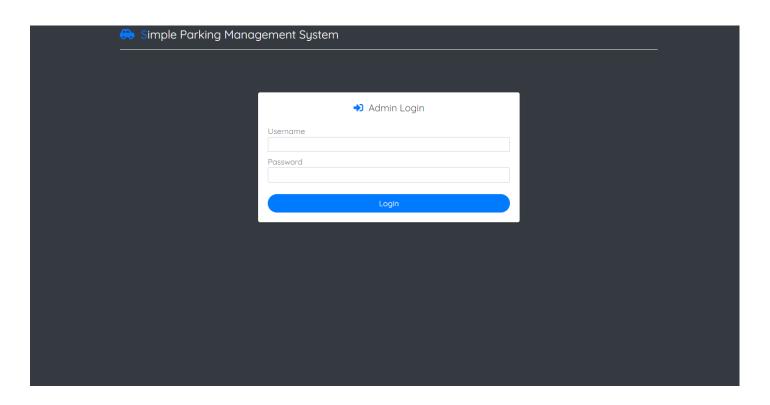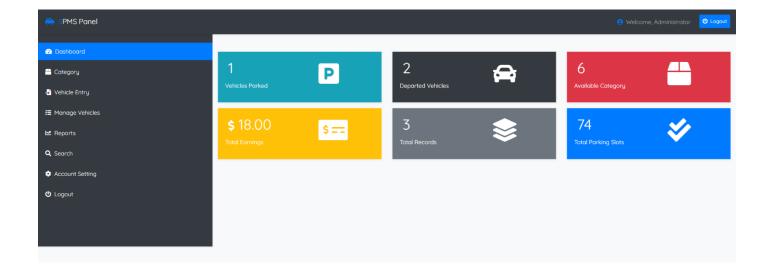- status : varchar(10)
- arrival_time : datetime

Required Frontend Design Screen Shorts:

1. Login Page: User will have the login and password to access the dashboard (home page).
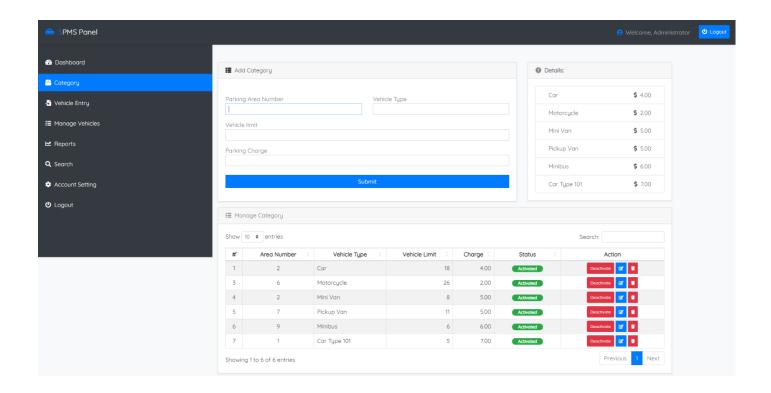

2. Dashboard Screen Short: User will have the clean dash board for over view of the data.
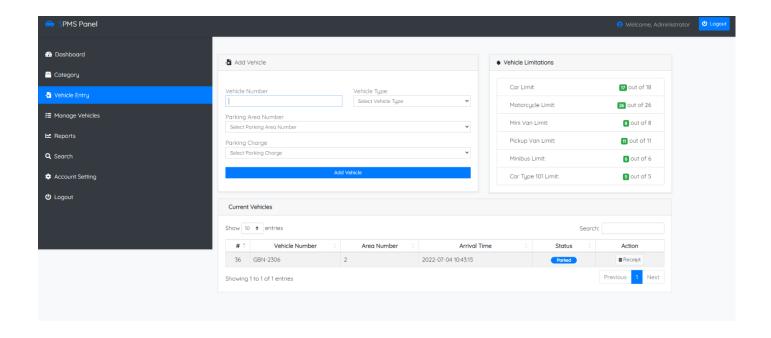
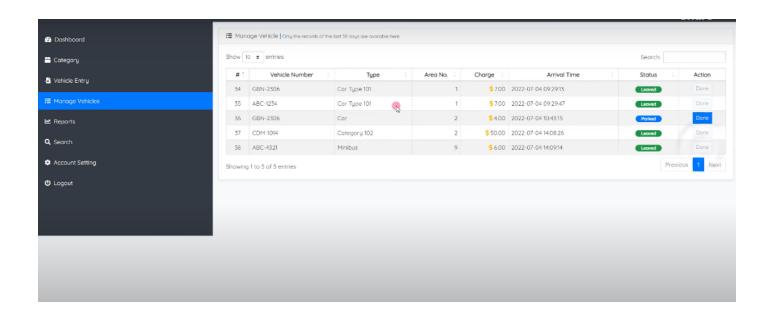**3. Add Category Module:** User can add category of the **vehicle type** and **limit** and **charges**.

4. Entry of the Vehicle Entry: Adding the new vehicles to the **vehicle lot (Limitations)**.
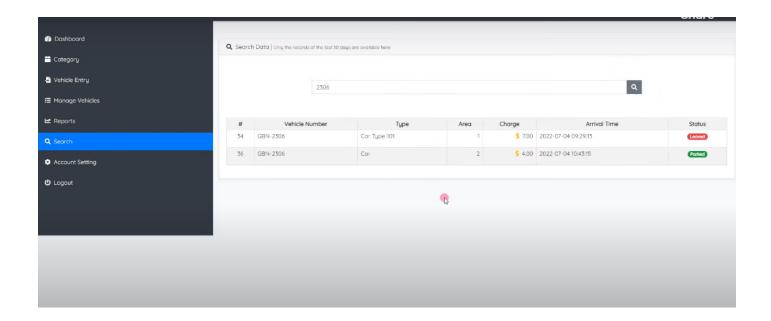
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7. Manage Vehicles: User can manage the **parked Vehicles** and **leaved** by clicking on Done**.**

8. Complete Search base on the Vehicle Number: If user is entering the vehicle number details of the **parking slot, area, charge Arrival time details** (Leaved, Parked).

9. Reset Account Settings: User can reset the credentials from the account settings