



RamanaSoft



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 category	spms_db admin	spms_db add_vehicle
cat_id : int(11)	id : int(11)	id : int(11)
parking_area_no : varchar(100)	name : varchar(120)	vehicle_no : varchar(200)
vehicle_type : varchar(100)	username : varchar(100)	parking_area_no : varchar(200)
vehicle_limit : varchar(200)	password : varchar(100)	vehicle_type : varchar(200)
parking_charge : varchar(200)		parking_charge : varchar(200)
status : varchar(10)		status : varchar(10)
doc : datetime		arrival_time : datetime

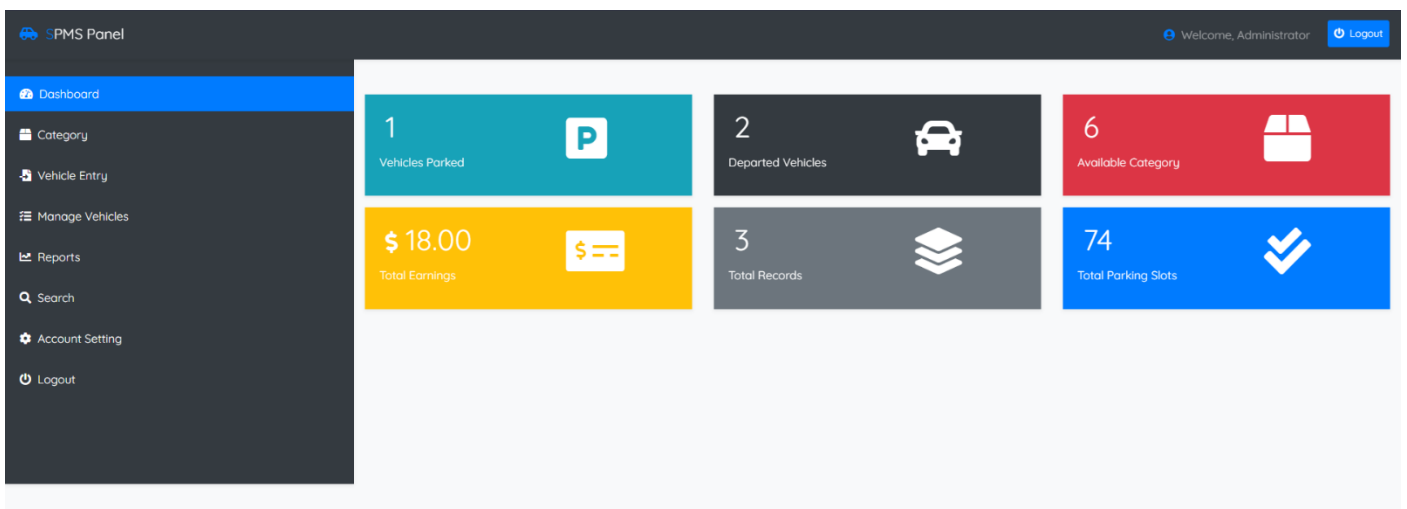


Required Frontend Design Screen Shorts:

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

The screenshot shows the 'Simple Parking Management System' login page. It features a dark blue header with a car icon and the system name. The main content area is a white box titled 'Admin Login' with a blue arrow icon. It contains two input fields: 'Username' and 'Password', followed by a blue 'Login' button.

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**.

SPMS Panel

Welcome, Administrator Logout

Dashboard

Category

Vehicle Entry

Manage Vehicles

Reports

Search

Account Setting

Logout

Add Category

Parking Area Number

Vehicle Type

Vehicle Limit

Parking Charge

Submit

Details:

Car	\$ 4.00
Motorcycle	\$ 2.00
Mini Van	\$ 5.00
Pickup Van	\$ 5.00
Minibus	\$ 6.00
Car Type 101	\$ 7.00

Manage Category

Show 10 entries

Search:

#	Area Number	Vehicle Type	Vehicle Limit	Charge	Status	Action
1	2	Car	18	4.00	Activated	Deactivate
3	6	Motorcycle	26	2.00	Activated	Deactivate
4	2	Mini Van	8	5.00	Activated	Deactivate
5	7	Pickup Van	11	5.00	Activated	Deactivate
6	9	Minibus	6	6.00	Activated	Deactivate
7	1	Car Type 101	5	7.00	Activated	Deactivate

Showing 1 to 6 of 6 entries

Previous 1 Next

4. Entry of the Vehicle Entry: Adding the new vehicles to the **vehicle lot** (Limitations).

SPMS Panel

Welcome, Administrator Logout

Dashboard

Category

Vehicle Entry

Manage Vehicles

Reports

Search

Account Setting

Logout

Add Vehicle

Vehicle Number

Vehicle Type

Parking Area Number

Parking Charge

Add Vehicle

Vehicle Limitations

Car Limit:	17 out of 18
Motorcycle Limit:	26 out of 26
Mini Van Limit:	3 out of 8
Pickup Van Limit:	11 out of 11
Minibus Limit:	6 out of 6
Car Type 101 Limit:	5 out of 5

Current Vehicles

Show 10 entries

Search:

#	Vehicle Number	Area Number	Arrival Time	Status	Action
36	GBN-2306	2	2022-07-04 10:43:15	Ported	Receipt

Showing 1 to 1 of 1 entries

Previous 1 Next



7. Manage Vehicles: User can manage the **parked Vehicles** and **leaved** by clicking on Done.

The screenshot shows the 'Manage Vehicle' interface. On the left is a sidebar with navigation options: Dashboard, Category, Vehicle Entry, Manage Vehicles (highlighted), Reports, Search, Account Setting, and Logout. The main content area has a header 'Manage Vehicle | Only the records of the last 30 days are available here'. Below this is a search bar and a 'Show 10 entries' dropdown. The table displays the following data:

#	Vehicle Number	Type	Area No.	Charge	Arrival Time	Status	Action
34	GBN-2306	Car Type 101	1	\$ 7.00	2022-07-04 09:29:13	Leaved	Done
35	ABC-1234	Car Type 101	1	\$ 7.00	2022-07-04 09:29:47	Leaved	Done
36	GBN-2306	Car	2	\$ 4.00	2022-07-04 10:43:15	Parked	Done
37	CDM-1014	Category 102	2	\$ 50.00	2022-07-04 14:08:26	Leaved	Done
38	ABC-4321	Minibus	9	\$ 6.00	2022-07-04 14:09:14	Leaved	Done

At the bottom of the table, it says 'Showing 1 to 5 of 5 entries'. There are 'Previous', '1', and 'Next' navigation buttons.

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).

The screenshot shows the 'Search Data' interface. On the left is the same sidebar as in the previous screenshot. The main content area has a header 'Search Data | Only the records of the last 30 days are available here'. Below this is a search bar with the text '2306' and a search icon. The table displays the following data:

#	Vehicle Number	Type	Area	Charge	Arrival Time	Status
34	GBN-2306	Car Type 101	1	\$ 7.00	2022-07-04 09:29:13	Leaved
36	GBN-2306	Car	2	\$ 4.00	2022-07-04 10:43:15	Parked

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

Dashboard

Category

Vehicle Entry

Manage Vehicles

Reports

Search

Account Setting

Logout

Change Your Password

Current Password

New Password

Re enter Password

Change Password