Title: Vehicle Parking Management System

Subtitle: A simple console-based project in C language

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Introduction

Vehicle parking is a common problem in cities.

Efficient management saves time and reduces congestion.

This system is a console-based C program to track vehicles and calculate parking fees.

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Keep track of cars and bikes parked.

Calculate total amount collected.

Show current parking status.

Provide a simple menu-based interface for users.

Features

Park Car / Bike: Increment vehicle count and calculate fees.

Show Parking Status: Display cars, bikes, total vehicles, and amount collected.

Exit Option: Quit the program safely.

Menu-based system: User-friendly and easy to operate.

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System Design

Start → Show Menu

User chooses option

Park Car → Update count & fee

Park Bike → Update count & fee

Show Status → Display info

Exit → Stop program

Repeat menu until exit

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```
#include <stdio.h>

int cars = 0, bikes = 0, total_amount = 0, total_vehicles =
0;

void park_car() { cars++; total_vehicles++; total_amount
+= 50; }
void park_bike() { bikes++; total_vehicles++;
total_amount += 20; }
void show_status() { printf("Cars: %d, Bikes: %d, Total:
%d, Amount: Rs.%d\n", cars, bikes, total_vehicles,
total_amount); }
```

How to Run

Compile the C program:

Copy code

gcc parking_management.c -o parking

Output Example

Menu Display

1. Park Car

2. Park Bike

3. Show Parking Status

4. Exit

Enter your choice:

Example Status:

Cars: 2, Bikes: 3, Total Vehicles: 5, Total Amount: Rs.160

Conclusion

This project is a simple yet useful toolfor parking management

Demonstrate C programming like functions,loops conditions

future improvements could include Vehicle number tracking , parking slots and automated fee calculation

Thankyou