

Simple basic code for rental car system

Include directives :

- **#include <iostream>**

This includes the input-output stream library, which allows you to use cin (for input) and cout (for output).

- **#include <vector>**

This includes the vector container from the Standard Library, which is used to store the list of cars in the system.

- **#include <string>**

This includes the string library to handle strings, which are used for car makes and models.

Main Function:

Begins here int main() is the starting point of any C++ program.

Defining the Car struct:

struct Car: *A struct in C++ is a user-defined data type that allows you to group together variables (called members) of different types under a single name. In this case, the Car struct has four members:*

- **string make:** *Represents the car's make (e.g., "Toyota", "Honda").*
- **string model:** *Represents the car's model (e.g., "Camry", "Civic").*

- **int year**: The year the car was manufactured (e.g., 2020, 2019).
- **double pricePerDay**: The rental price of the car per day (e.g., 40.0 dollars).

Initializing the List of Cars:

- **vector<Car>**: A vector is a dynamic array, meaning its size can grow or shrink as needed. Here, cars is a vector that stores a list of Car objects.
- Each Car object is initialized with data (make, model, year, and pricePerDay). This is done using curly braces {} for each car inside the vector.

Menu Loop:

- **while (true)**: This creates an infinite loop, which keeps displaying the menu and processing the user's choices until they choose to exit.
- **cin >> choice**: Takes the user's input and stores it in the choice variable. This determines which option the user selects.

View Available Cars:

- **if (choice == 1)**: Checks if the user has chosen option 1 (view available cars).
- **cars.size()**: Returns the number of cars in the cars vector.
- **for (int i = 0; i < cars.size(); ++i)**: Loops over the cars vector to display each car's details (make, model, year, and price per day). The index i is used to access each car in the vector.

- **`cars[i].make, cars[i].model, etc.:`** Accesses the individual fields of the Car object using dot notation.

Rent a Car :

- **`else if (choice == 2):`** Checks if the user has chosen option 2 (rent a car).
- **`CarChoice`**: A new variable to store the user's choice of car from the list.

Exit:

- **`else if (choice == 3):`** Checks if the user wants to exit the program (choice 3).
- **`break;`** Exits the while(true) loop and ends the program.