PARKING LOT

RICHA VERMA – 2K18/IT/095

RHYTHM ARYA – 2K18/IT/094

WHY DID WE CHOOSE THIS PROJECT?

- Parking is a major concern in India.
- Small villages and cities here lack basic parking technologies.
- We intended to create a parking lot management system which can be deployed and used by the people.

INTRODUCTION

Parking Lot System is based on a concept to generate and maintain parking details with their total charge. In India, there is no proper infrastructure, rules or regulations regarding the maintenance of parking lots. Although automated parking lots exist in some posh areas, the basic facility of maintaining a parking lot in most of the areas is rarely seen. So this project is merely a suggestion how we can implement the basic record of vehicles being parked along with some necessary details.

LANGUAGE AND T⚙⚙LS

C++

C++ language was used in this project due to the fact that we can implement various features such as:

– Use of OOPs concepts

– File Handling to store the details

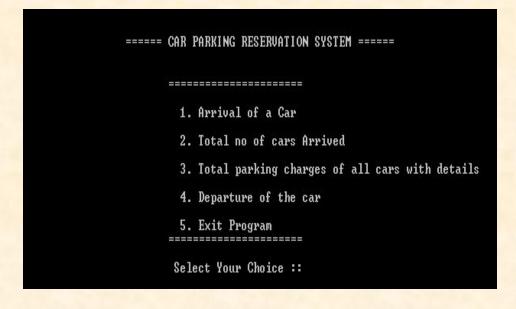– Use of various classes and user-defined functions.

OBJECTIVE :

The main objective of this project on Parking lot is to manage the details :

• Driver Name
• Duration of Parking
• Type of car
• Area of Parking depending upon type of car

```cpp
void input()
{
int d=0;
    cout<<"\n\n\t\tEnter the name of driver :  ";
    cin>>dname;
    cout<<"\n\n\t\tEnter the car no :     ";
    cin>>vno;
    cout<<"\n\n\t\tEnter the type of vehicle(SUV/Sedan) :
    cin>>vtype;
    cout<<"\n\n\t\tEnter the no of hours of stay : ";
    cin>>count_;
```

A menu driven code ….


```
====== CAR PARKING RESERVATION SYSTEM ======

=====================

    1. Arrival of a Car

    2. Total no of cars Arrived

    3. Total parking charges of all cars with details

    4. Departure of the car

    5. Exit Program
=====================

  Select Your Choice ::
```

On selecting different options different functions will be performed

ON CHOOSING OPTION 1

```
====== CAR PARKING RESERVATION SYSTEM ======

=====================
    1. Arrival of a Car
    2. Total no of cars Arrived
    3. Total parking charges of all cars with details
    4. Departure of the car
    5. Exit Program
=====================
    Select Your Choice ::1

==Do You Want to continue==Y/N Y

Enter the name of driver :  RHYTHM

Enter the car no :    2258

Enter the type of vehicle(SUV/Sedan) :    SUV

Enter the no of hours of stay : 3

Parking Available! You can park your car.
Car Parked at A!!
```

On choosing option 1, customer comes and enter the required details if he satisfies the condition for parking the car is parked at a given block depending on the type of car..

```
====================
          Select Your Choice ::2

     === View the Records in the Parking Database ===

The Car position in parking lot : 1
 PARKING LOT A..

The Driver Name : RHYTHM

The Car No : 2258

The Hours Of Stay : 3
```

Option 2 will display the Records in the Parking Database along with the position of the car

Option 3 calculates and display the parking charges depending upon VIP or a non VIP customer

```
                    Select Your Choice ::3


Are you a V.I.P: Y/N Y
_____

The total expense during parking  60 Rupees
 PARKING LOT A..

The Driver Name : RHYTHM

The Car No : 2258

The Hours Of Stay : 3
```

```
========================
    1. Arrival of a Car

    2. Total no of cars Arrived

    3. Total parking charges of all cars with details

    4. Departure of the car

    5. Exit Program
========================

Select Your Choice ::4

Enter the car no you want to get depart : 2258
Data Deleted !!!
```

Option 4 deletes the record once the car is departed !!

FURTHER IMPROVEMENTS

No project is perfect and we fully accept that this is not a fully-fledged application upon which people could rely upon to ease the problem of maintaining the data in parking lots. Hence, improvements which we can make in this project given the opportunity can be:

1. Connecting it with an online server and database

2. Creation of a GUI in order to make it user-friendly and easy to use

3. Sharing the recorded data with police and other authorities in order to help them trace culprits in case of vehicle-related crimes.

And many more…

Thank You!