

KIET PARKING MANAGEMENT SYSTEM

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PROJECT DESCRIPTION:

Here we use C language for programming in which we use different functions.

INTRODUCTION:

Our project “KIET PARKING MANAGEMENT SYSTEM” is only designed for helping the management staff (parking staff) in KIET. In which we show parking of cars, buses and scooters where we can see how many vehicles are parked at a time there. Firstly when we run the program the console will show the introductory page after the introduction login page will appear and after successful login the menu will appear where we have different prices for parking such as (for car=Rs:80, for bus=Rs:100, for scooter=Rs:50) so anybody can park his/her vehicle by paying the required amount after that it will ask for the owner's and vehicle information (such as the name of owner, name of the vehicle (Ex: COROLA), number of vehicle (number plate), color of vehicle etc). In the menu there will be an option for details (on number 4) where we can see the details about vehicles, the name and information of the owners of the cars/buses/scooters, how many amount is collected for individual, how many overall cash is collected yet and many more options are available there. In the menu option by clicking on 5 a departure section will appear that will ask the vehicle number of the vehicle we want to departure if the vehicle number matches with the car parked in the parking area it will do the departure process and will delete the records of that car/bus/scooter and will do for what the departure option is designed to do. And the last option (by clicking 6) you will exit from the program and the program will end and all the data will vanish.

WORKING:

If we click on first option that is parking of car and their ticket is RS: 80 then they ask for information such as:

- 1- Name of owner
- 2- Last digits of vehicle
- 3- Car name
- 4- Car color
- 5- There will be a condition in option 5 if you want to wash your car press 1 (after washing car RS: 150 will add in your total bill) and if you don't want to wash your car press 2.

- 6- You want to park your car in shade or not press 1 for shade otherwise press 2. After parking in shade RS: 50 will add in your total bill.

If we click on second option that is parking of bus and their ticket is RS: 100 then they ask for information such as:

- 1- Name of owner
- 2- Last digits of vehicle
- 3- Bus name
- 4- Bus color
- 5- There will be a condition in option 5 if you want to wash your bus press 1 (after washing car RS: 200 will add in your total bill) and if you don't want to wash your bus press 2.
- 6- You want to park your bus in shade or not press 1 for shade otherwise press 2. After parking in shade RS: 50 will add in your total bill.

If we click on third option that is parking of bus and their ticket is RS: 50 then they ask for information such as:

- 1- Name of owner
- 2- Last digits of vehicle
- 3- Scooter name
- 4- Scooter color
- 5- There will be a condition in option 5 if you want to wash your scooter press 1 (after washing car RS: 100 will add in your total bill) and if you don't want to wash your car press 2.
- 6- You want to park your car in shade or not press 1 for shade otherwise press 2. After parking in shade RS: 50 will add in your total bill.

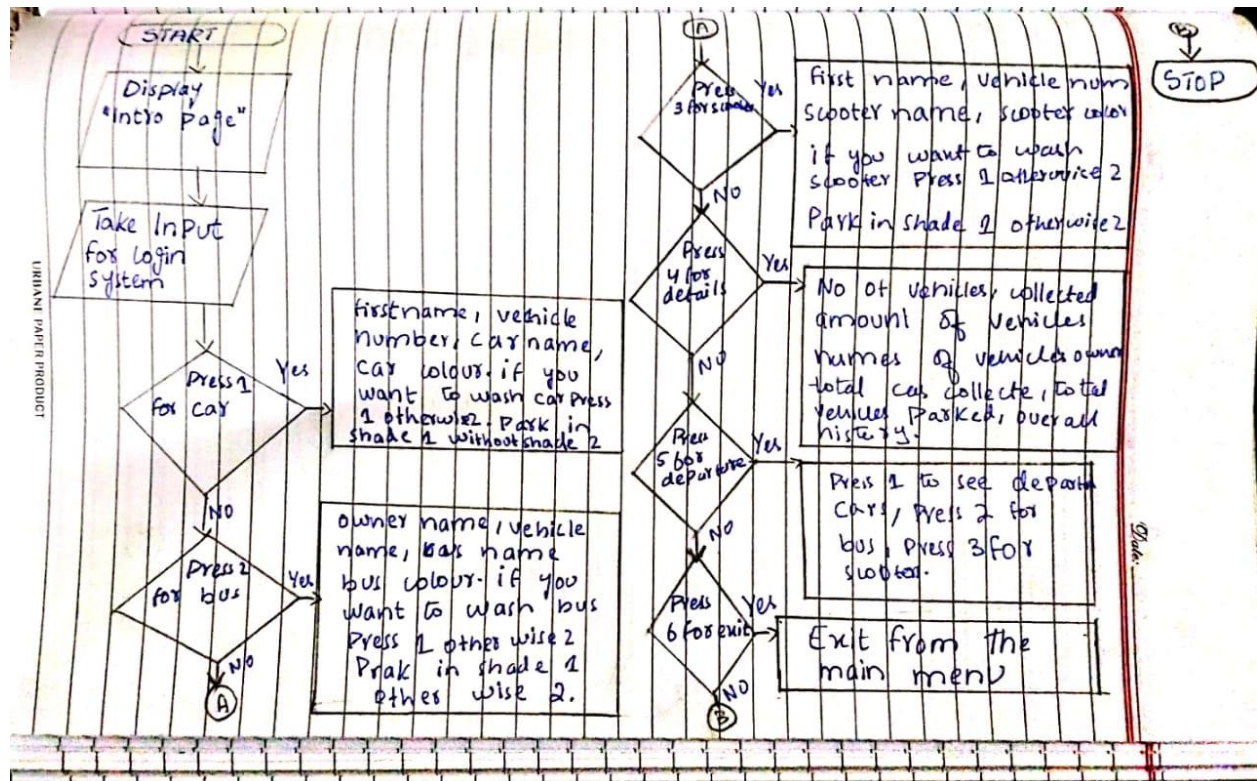
Option four is for details:

- 1- First three options will be about number of vehicles.
- 2- Next three options will be about collected amount of vehicles
- 3- Next three will be about name of owners of vehicles.
- 4- Option ten will be about total cash collected.
- 5- Option eleven Total vehicles parked.
- 6- Option 12 will be about over all history.
- 7- Last one will exit from details portion.

Option five is for details:

- 1- Option 1, 2, 3 will be up to your choice you have to choose any one for car bus and scooter depart.
- 2- After choosing anyone they will ask number plate's number if the number matches with the previous enter number of vehicles then departure will completed otherwise error will occur.

FLOWCHART:



CODE:

```

#include<stdio.h>

#include<string.h>

#include<conio.h>

#include <stdlib.h>

int
noc=0,cash=0,gari=0,nob=0,nos=0,ch,l,q[3][10],m,z=0,k=0,j=0,c,f,po,carrs=0,busrs=0,scooterrrs
=0,info,u;

```

```
char s[3][50][10];
char p[3][50][15];
char i[3][50][10];
int menu();
void subinfo();
void bhaijan();
int login();
void departcar();
void departbus();
void departscooter();
void intro();
void check();
void scooterwash();
void status();
void car();
void carwash();
void choice(int);
void bus();
void buswash();
void scooter();
void total();
int main()
{
    intro();
    system("cls");
```

```
int b;

b=login();

if(b==1)

{

while(1)

{

info=0;

system("cls");

switch(menu())

{

case 1:

{

car();

printf("\nENTER FIRST NAME ONLY:\n\n");

scanf("%s",&s[0][k][10]);

printf("\n");

printf("ENTER LAST 3/4 DIGITS OF VEHICLE:\n\n");

scanf("%d",&q[0][k]);

printf("\n");

printf("ENTER CAR NAME:\n\n");

scanf("%s",&p[0][k][15]);

printf("\n");

printf("ENTER CAR COLOR:\n\n");

scanf("%s",&i[0][k][10]);
```

```
printf("\n");

k++;

carwash();

break;

    }

    case 2:

    {

        bus();

                                printf("\nENTER FIRST NAME ONLY:\n\n");

                                scanf("%s",&s[1][z][10]);

                                printf("\n");

printf("ENTER LAST 3/4 DIGITS OF VEHICLE:\n\n");

scanf("%d",&q[1][z]);

printf("\n");

printf("ENTER BUS NAME:\n\n");

scanf("%s",&p[1][z][15]);

printf("\n");

printf("ENTER BUS COLOR:\n\n");

scanf("%s",&i[1][z][10]);

printf("\n");

z++;

        buswash();

        break;

    }
```

```

        case 3:
        {
            scooter();

            printf("\nENTER FIRST NAME ONLY:\n\n");

            scanf("%s",&s[2][j][10]);

            printf("\n");

printf("ENTER SCOOTER NUMBER:\n\n");

scanf("%d",&q[2][j]);

printf("\n");

        printf("ENTER SCOOTER NAME:\n\n");

scanf("%s",&p[2][j][15]);

printf("\n");

printf("ENTER SCOOTER COLOR:\n\n");

scanf("%s",&i[2][j][10]);

printf("\n");

j++;

        scooterwash();

        break;

    }

    case 4:

    {

        while(info!=13)

        {

            system("cls");

printf("\n1>> ENTER 1 FOR NO.OF CAR/CARS:\n\n");

```

[illegible]


```

    }

    case 6:

        {

            printf("\n\nALLAH HAFIZ\n");

            getch();

            exit(0);

        }

    }

}

return 0;

}

int menu()

{

    printf ( "\n\t\xdb\xdb\xdb\xdb\xdb\xdb VEHICLE PARKING
\xdb\xdb\xdb\xdb\xdb\xdb\n" );

    printf("\n\t1>> PRESS 1 FOR CAR Rs.80\n\n");

    printf("\n\t2>> PRESS 2 FOR BUS Rs.100\n\n");

    printf("\n\t3>> PRESS 3 FOR SCOOTER Rs.50\n\n");

    printf("\n\t4>> PRESS 4 FOR DETAILS\n\n");

    printf("\n\t5>> PRESS 5 FOR
DEPARTURE\n\n\n");

```

```
printf("\n\t6>> PRESS 6 FOR EXIT\n\n\n");
```

printf

[illegible]

```
printf("\nENTER YOUR CHOICE: \n\n");
```

```
scanf("%d",&ch);
```

```
system("cls");
```

```
return ch;
```

}

```
void car()
```

$$\{$$

```
noc++;
```

```
carrs=carrs+80;
```

```
cash=cash+80;
```

gari++;

$$\}$$

```
void bus()
```

$$\{$$

nob++;

```
busrs=busrs+100;
```

```
cash=cash+100;
```

```
gari++;
```

$$\}$$

```

void scooter()
{
    nos++;

    scooterrs=scooterrs+50;

    cash=cash+50;

    gari++;
}

void total()
{
    noc+nos+nob;
}

void status()
{
    printf("TOTAL NUMBER OF CAR PARKED ARE: %d\n\n",noc);
    printf("TOTAL NUMBER OF BUS PARKED ARE: %d\n\n",nob);
    printf("TOTAL NUMBER OF SCOOTER PARKED ARE: %d\n\n",nos);
    printf("TOTAL AMOUNT COLLECTED: %d\n\n",cash);
    printf("TOTAL NUMBER OF VEHICLES PARKED ARE: %d\n\n",gari);

    printf("\nNAME\t\t\t CAR/BUS/SCOOTER
NUMBER\t\t\t CAR/BUS/SCOOTER NAME\t\t\t COLOR\n\n");

    printf("THE NAME AND NUMBER PLATE OF THE OWNERS
WHOM CAR ARE PAKED HERE ARE:\n");

    for(c=0;c<k;c++)
    {

        printf("\n%s\t\t\t\t %d\t\t\t\t %s\t\t\t\t %s\n",&s[0][c][10],q[0][c],&p[0][c][15],&i[0][c][1
0]);
    }
}

```

[illegible]

```

        if(i==1)
        {
            printf("\nWE HAVE SENT YOUR CAR TO THE SERVICE
STATION\n");

            cash=cash+150;
            carrs=carrs+150;

            printf("\nAFTER WASH YOU WANT TO PARK CAR IN
SHADE RS.50RS?\n");

            printf("\nPRESS 1 FOR YES / PRESS 2 FOR
NO\n\n");

            scanf("%d",&po);
            if(po==1)
            {
                cash=cash+50;
                carrs=carrs+50;
                printf("\nPress any key to continue...\n");
            }
            else
            {
                printf("\nYour answer is no\n");
                printf("\nPress any key to continue...\n");
            }
        }
        else
        {

```

```

        printf("\nYour answer is no\n\n");

        printf("\nPress any key to continue...\n");

    }

    getch();

}

void buswash()
{
    int i;

    printf("YOU WANT TO WASH YOUR CAR IN JUST 200RS?\n");

    printf("\nPRESS 1 FOR YES / PRESS 2 FOR NO\n\n");

    scanf("%d",&i);

    if(i==1)
    {
        printf("\nWe have sent your bus to the service station\n");

        cash=cash+200;

        busrs=busrs+200;

        printf("\nAFTER WASH YOU WANT TO PARK BUS IN
        SHADE RS.50RS?\n");

        printf("\nPRESS 1 FOR YES / PRESS 2 FOR
        NO\n\n");

        scanf("%d",&po);

        if(po==1)
        {
            cash=cash+50;

            busrs=busrs+50;

```

```

        printf("\nPress any key to continue...\n");
    }

    else

    {

        printf("\nYour answer is no\n");

        printf("\nPress any key to continue...\n");

    }

}

else

{

    printf("\nYour answer is no\n");

    printf("\nPress any key to continue...\n");

}

getch();

}

void scooterwash()

{

    int i;

    printf("YOU WANT TO WASH YOUR CAR IN JUST 100RS?\n");

    printf("\nPRESS 1 FOR YES / PRESS 2 FOR NO\n\n");

    scanf("%d",&i);

    if(i==1)

    {

        printf("\nWe have sent your scooter to the service station\n");

        cash=cash+100;

```



```

        scooterrs=scooterrs+100;

        printf("\nAFTER WASH YOU WANT TO PARK SCOOTER IN
        SHADE RS.50RS?");

        printf("\n\nPRESS 1 FOR YES/PRESS 2 FOR NO\n\n");

        scanf("%d",&po);

        printf("\n");

        if(po==1)
        {
            cash=cash+50;
            scooterrs=scooterrs+50;

            printf("\nPress any key to continue...\n");

            }

            else

        {

            printf("\nYour answer is no\n");

            printf("\nPress any key to continue...\n");

            }

        }

        else

        {

            printf("\nYour answer is no\n");

            printf("\nPress any key to continue...\n");

            }

        getch();

    }

```

[illegible]

```
getch();  
}  
  
int login()  
{  
    char username[10];  
    char password[10];  
    int ha=0;  
    while(ha<5)  
    {  
        printf("\n  
\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb  
b\xdb LOGIN FIRST  
\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb\xdb  
b\xdb ");  
  
        printf(" \n\n          ENTER USERNAME:-");  
        gets(username);  
  
        printf(" \n\n          ENTER PASSWORD:-");  
        gets(password);  
  
        if(strcmp(username,"KIETIANS")==0 && strcmp(password,"KIET")==0)  
        {  
            printf("Login is successfull\n\n");  
            printf("Press any key to continue.....\n\n");  
            getch();  
            return 1;  
        }  
    }  
}
```

```

    }
else
{
    printf("Login is unsuccessfull\n\n\n");

}
ha++;
}
}
void subinfo()
{
    switch(info)
    {
        case 1:
            {
                system("cls");
                printf("\n");
                printf("No of car/cars parked are = %d\n",noc);
                printf("\nPress any key to continue...\n");
                getch();
                break;
            }
        case 2:
            {
                system("cls");

```

```

        printf("\n");
        printf("No of bus/buses parked are = %d\n",nob);
        printf("\nPress any key to continue...\n");
        getch();
        break;
    }

    case 3:
    {
        system("cls");
        printf("\n");
        printf("No of scooter/scooters parked are = %d\n",nos);
        printf("\nPress any key to continue...\n");
        getch();
        break;
    }

    case 4:
    {
        system("cls");
        printf("\n");
        printf("Car Amount Collected= %d\n",carrs);
        printf("\n\nPress any key to continue...\n");
        getch();
        break;
    }

    case 5:

```

```

{
    system("cls");

    printf("\n");

    printf("Bus Amount Collected= %d\n",busrs);

    printf("\n\nPress any key to continue...\n");

    getch();

    break;
}

case 6:

{

    system("cls");

    printf("\n");

    printf("Scooter Amount Collected= %d\n",scooterrs);

    printf("\n\nPress any key to continue...\n");

    getch();

    break;

}

case 7:

{

    system("cls");

    printf("\n");

    printf("\nThe name and number plate of the owners whom
cars are paked here are:\n");

    printf("\nNAME\t\t\t CAR/BUS/SCOOTER
NUMBER\t\t\tCAR/BUS/SCOOTER NAME\t\t\tCOLOR\n\n");

    for(c=0;c<k;c++)

```

```

{

printf("\n%s\t\t\t\t%d\t\t\t\t%s\t\t\t\t%s\n",&s[0][c][10],q[0][c],&p[0][c][15],&i[1][c][10]);

}

printf("\n\nPress any key to continue...\n");

    getch();

    break;

}

case 8:

{

    system("cls");

    printf("\n");

    printf("\nThe name and number plate of the owners  
whom bus are paked here are:\n");

    printf("\nNAME\t\t\t CAR/BUS/SCOOTER  
NUMBER\t\t\t CAR/BUS/SCOOTER NAME\t\t\t COLOR\n\n");

    for(c=0;c<Z;c++)

    {

        printf("\n%s\t\t\t\t\t%d\t\t\t\t\t%s\t\t\t\t\t%s\n",&s[1][c][10],q[1][c],&p[1][c][15],&i[2][c][10]);

    }

    printf("\n\nPress any key to continue...\n");

    getch();
}

```

```

        break;
    }
    case 9:
    {
        system("cls");

        printf("\n");

        printf("\nThe name and number plate of the
owners whom scooters are paked here are:\n");

        printf("\nNAME\t\t\t CAR/BUS/SCOOTER
NUMBER\t\t\tCAR/BUS/SCOOTER NAME\t\t\tCOLOR\n\n");

        for(c=0;c<j;c++)
        {

            printf("\n%s\t\t\t\t%d\t\t\t\t%s\t\t\t\t%s\n",&s[2][c][10],q[2][c],&p[2][c][15],&i[3][c][1
0]);

        }

        printf("\n\nPress any key to continue...\n");

        getch();

        break;
    }

    case 10:
    {

        system("cls");

        printf("\n");

        printf("Total Amount Collected= %d
",cash);

        printf("\n\nPress any key to continue...\n");

```



```

                                getch();
                                break;
                                }
                                case 11:
                                {
                                system("cls");
                                printf("\n");
                                printf("Total no.of vehicles parked
are = %d",gari);
                                printf("\n\nPress any key to
                                continue...\n");

                                getch();
                                break;
                                }
                                case 12:
                                {
                                system("cls");
                                status();
                                break;
                                }

                                default:
                                printf("\nPress any key to continue.....\n");

```

```

                                getch();

                                }

                                }

void departcar()
{
    int op=0,d,value=0;

    printf("Enter your Number plate\n");

    scanf("%d",&d);

    for(op=0;op<=10;op++)
    {

        if(d==q[0][op])
        {
            strcpy(&s[0][op][10],"-");
            strcpy(&p[0][op][15],"-");
            strcpy(&i[0][op][10],"-");
            q[0][op]=0;
            printf("\nDEPARTURE COMPLETED");

            noc--;

            gari--;

            value=90;

            break;
        }

    }

    if(value!=90)

```

```
printf("\n\nThe car with such number plate is not parked here.\n");  
printf("\nPress any key to continue....");  
}
```

```
void departbus()  
{  
    int op=0,d,value=0;  
    printf("Enter your Number plate\n");  
    scanf("%d",&d);  
    for(op=0;op<=10;op++)  
    {  
  
        if(d==q[1][op])  
        {  
            strcpy(&s[1][op][10],"-");  
            strcpy(&p[1][op][15],"-");  
            strcpy(&i[1][op][10],"-");  
            q[1][op]=0;  
            printf("\nDEPARTURE COMPLETED");  
            nob--;  
            gari--;  
            value=90;  
            break;  
        }  
    }
```

```

}

if(value!=90)

printf("\n\nThe bus with such number plate is not parked here.\n");

printf("\nPress any key to continue....");

getch();

}

void departscooter()

{

    int op=0,d,value=0;

    printf("Enter your Number plate\n");

    scanf("%d",&d);

    for(op=0;op<=10;op++)

    {

        if(d==q[2][op])

        {

            strcpy(&s[2][op][10],"-");

            strcpy(&p[2][op][15],"-");

            strcpy(&i[2][op][10],"-");

            q[2][op]=0;

            printf("\nDEPARTURE COMPLETED");

            printf("\nPress any key to continue....");

            nos--;

            gari--;

            value=90;

```

```
break;

}

}

if(value!=90)

{

printf("\n\nThe scooter with such number plate is not parked here.\n");

printf("\nPress any key to continue....");

getch();

}

}

void bhaijan()

{
```

```
    switch(u)

    {

        case 1:

        {

            departcar();

            break;

        }

        case 2:

        {

            departbus();
```

```
break;
```

```
}
```

```
case 3:
```

```
{
```

```
    departscooter();
```

```
    break;
```

```
}
```

```
default:
```

```
{
```

```
    printf("Invalid choice");
```

```
    printf("\nPress any key to continue....");
```

```
    getch();
```

```
}
```

```
}
```

```
}
```