BIKE RENTAL SYSTEM

A

Mini Project Report

Submitted in partial fulfilment of the

Requirements for the award of the Degree of

BACHELOR OF ENGINEERING

IN

INFORMATION TECHNOLOGY

By

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DECLARATION BY THE CANDIDATE

We, SAGI HASINI and SHRAVANI MAHANTH bearing hall ticket numbers, 1602-19-737-133 and 1602-19-737-169 , hereby declare that the project report entitled “BIKE RENTAL SYSTEM” is submitted in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Information Technology.

This is a record of bonafide work carried out by us and the results embodied in this project report have not been submitted to any other university or institute for the award of any other degree or diploma.

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Last but not the least, we wish to thank our parents for financing our studies in this privileged Vasavi College of Engineering as well as for constantly encouraging us to learn engineering. Their personal sacrifice in providing this opportunity to learn engineering is gratefully acknowledged.

Abstract

Vehicle Rental System is based on a concept to maintain rental for a short period of time and generating total charge. Before stepping into the main system a user has to pass through a login system to get access, then a menu displays with the selective option of the Car models for rent. There are different models in this system which can be changed by the user according to their will. Talking about the features of this Mini Project before hiring a vehicle he/she has to choose the vehicle, each of the vehicle has its own rate, maximum speed, color, and model. After selecting a vehicle, the system wants a confirmation before proceeding. Afterward, the user has to provide his/her Personal details such as Name (first name without spaces), Citizen-ship Number and provide Payment Amount. If the amount provided by the user is less than the vehicle rate then the payment won’t proceed for the rental. After all these procedures, the user can continue hiring more vehicles or either exit the system .

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Introduction

Bike rental system is for those who are you planning to explore the city ,who is in a need of a two wheeler for emergency purpose ,who needs a vehicle for a short tour/vacation. It presents Bike rentals to make customer's job easy it offers to Enjoy the freedom of owning a two-wheeler without the hefty down-payments, EMIs and paperwork.

Firstly the user has to enter some details in order to rent a bike. It involves entering a valid driving license number , email id ,phone number and nationality as well . We believe that each one of us is unique. Being unique means we all have different likes and needs .So, we went out of our way to get something for everyone.

All you have to do is make up your mind and pick one! It doesn’t matter if you’re a college student, a working professional or a bike enthusiast who just wants to ride around the city for the weekend, pick something that suits your lifestyle and Wallet as well.

Initially user has to register if he/she is new to the system else they can simply sign-in . After registration is done user has to sign-in to the account to rent a bike.

Here we are trying to avoid taking the user's details multiple times if they already have an account. We offer a wide variety of vehicles starting from scooters such as Activa, Dio, luna, maestro, NS200,R15,access,pulsar, KTM Duke 200,etc.

We have access for both admin and user side .

USER SIDE:

1.Rent a Bike

2.View rental fares

3.View rental records

4.Search rental record

5.Exit

Firstly ,for user side customer can Rent a bike where he/she can check for rental fares and choose one of his choice and can generate a bill.

Also, user/customer can search and view for rental records .If the stock of the bike chosen isn't available then customer will have to choose another one!

ADMIN SIDE:

1.View rental records

2.View vehicle fares

3.Edit fares and stocks

4.Remove a user

5.Search user

6.Edit user

7.Exit

Firstly ,admin has to sign-in to the account with their credentials which are hardcoded (user name : bikerentalsystem ,password: miniproject).Then admin can view rental records and vehicle rental fares as well. If the user choose a specified bike then admin will have to change the stock of bikes available for next use. Also, he can change the bike fares.

Admin can remove the user if they return the bike and can also search the users . Admin can also edit the users details and fix them accordingly .Finally Admin can exit from the page and can view home page.

Technology

Computer technology consists of the hardware of computers and computer-controlled devices and software like the operating systems, authoring tools, expert systems, and courseware use to support training technology. Many projects, for-profit organizations often require technology development involving hardware or software design.

Software requirements

Software requirements deal with defining software resource requirements that need to be installed on the computer These prerequisites are generally not included in the software installation package and need to be installed separately before the software is installed

The following sub-sections discuss the various aspects of software requirements for bike rental system.

- Web Browser: Microsoft Internet Explorer, Mozilla, Google Chrome or later
- Operating System: Windows XP / Windows7/ Windows Vista

Hardware requirements

The **hardware requirements** are the requirements of a hardware device. Most hardware only has operating system requirements or compatibility.

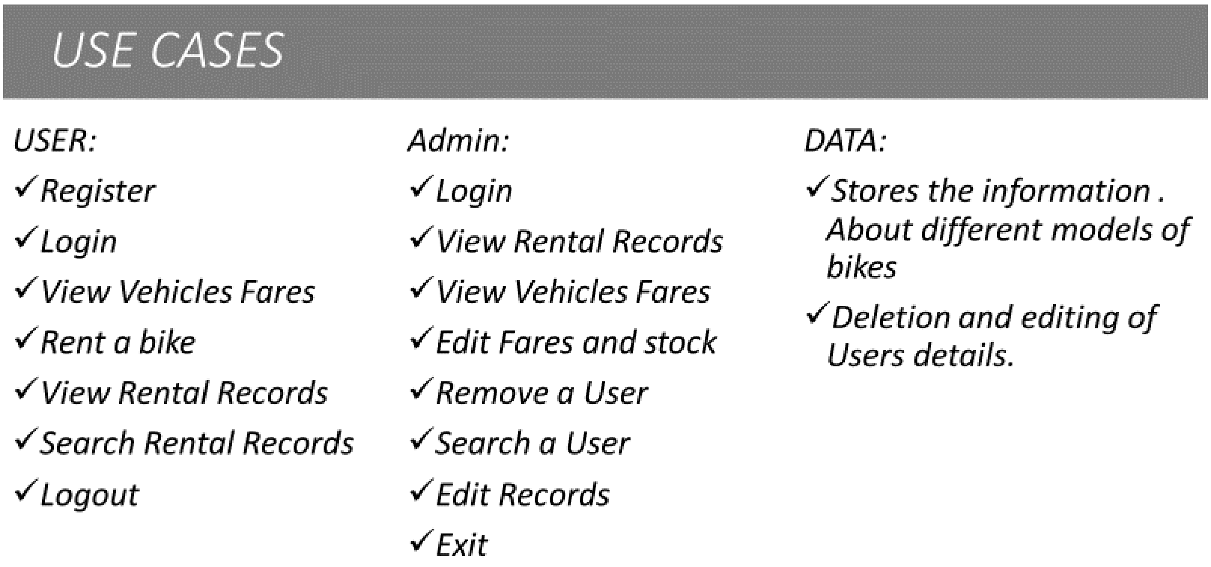
The following sub-sections discuss the various aspects of hardware requirements for bike rental system.

- 256 MB RAM
- 1 Gb hard free drive space
- Processor: Intel Core i5 and more

Proposed work

a. Design

i. Use case diagram and descriptions for all the use-cases



USE CASES

USER:

- ✓Register
- ✓Login
- ✓View Vehicles Fares
- ✓Rent a bike
- ✓View Rental Records
- ✓Search Rental Records
- ✓Logout

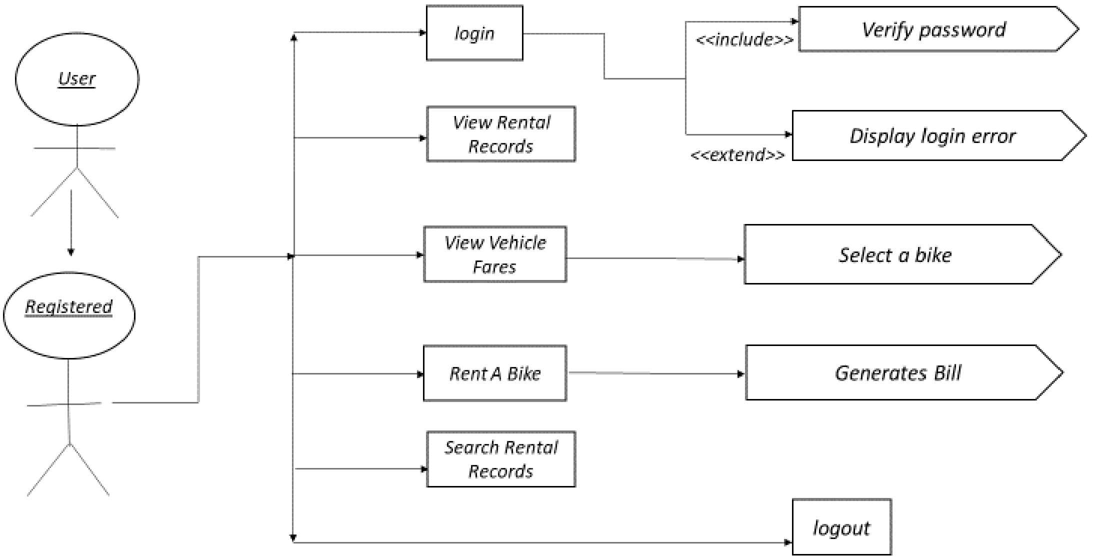
Admin:

- ✓Login
- ✓View Rental Records
- ✓View Vehicles Fares
- ✓Edit Fares and stock
- ✓Remove a User
- ✓Search a User
- ✓Edit Records
- ✓Exit

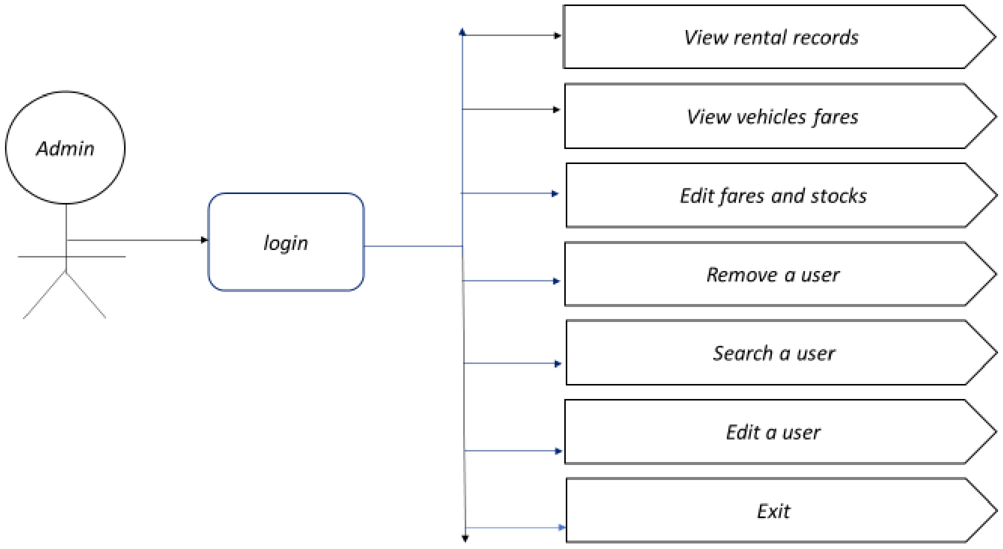
DATA:

- ✓Stores the information . About different models of bikes
- ✓Deletion and editing of Users details.

USER – Use Case Diagram



ADMIN – Use Case Diagram



USER

Register

User has to registers to login ,To register user has to enter credentials (creates username and password to login and full name ,address ,contact number ,nationality ,email , driving license number). System Saves all the credentials entered by the user and this details are used to login.

Login

User has to Enters credentials (username and password) to login , if the credentials are correct user can login successfully and gets access to program. If not user has to enter the credentials until they login.

View vehicle fares

Before renting the bike user can see the available stocks of bikes and the fares of each bike so that user can choose the bike available and can rent the bike.

Rent a bike

After choosing the bike in view vehicle fares now user can rent a bike of their valid choose and can generate a bill.

View Rental Records

User can view the details of their rented bike i.e; (Bike name ,Full name , address , phone number , nationality , email, days, rented time).

Search Rental Records.

User can search their rental records by entering the bike name.

Exit

User can exit from the page after renting the bike they wanted and they are redirected to welcome page.

Admin

Login

Admin must login with their credentials (username and password) which are hard-coded(user name: bikerentalsystem , password : miniproject) to get access to program If not admin has to enter the credentials until they login.

View Rental Records

Admin can view the details of all the rented bikes.

Edit fares and stocks

Admin can edit the bikes fares and the count of bikes if they needed.

Remove a user

Admin can remove the user details by entering username of the customer . If he/she returns the bike after their time duration.

Search a user

Admin can search the rental records by entering user name and full name.

Edit user

Admin can edit the user details if there is any mistake in the details.

Exit

Admin can exit from the page so that admin can redirected to the home page.

b . IMPLEMENTATION

i . Module wise code for the entire project

```
int main()

{

        system("color 70");

        WelcomePage();

}
```

FUNCTION NAME : void Title()

```
void Title()

{
        printf("\n\t\t\t\t\t");

        for (int i = 0; i < 81; i++)

                printf("-");

        printf("\n\t\t\t\t\t   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<----
-------------------- ");

        printf("\n\t\t\t\t\t");

        for (int i = 0; i < 81; i++)

                printf("-");

}
```

FUNCTION NAME : void WelcomePage()

```
void WelcomePage()

{

        time_t t;

        time(&t);

        int i = 0, choice;

        system("cls");

        printf("\n\t\t\t\t\t\t\t%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c
%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%
c%c%c%c",201,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,2
05,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,2
05,205,205,205,205,205,205,205,205,205,205,187);

        printf("\n\t\t\t\t\t\t\t%c                                    %c",186,186);

        printf("\n\t\t\t\t\t\t\t%c          __________________________________
%c",186,186);

        printf("\n\t\t\t\t\t\t\t%c                                    %c",186,186);
        printf("\n\t\t\t\t\t\t\t%c          WELCOME TO BIKE RENTAL SYSTEM
%c",186,186);

        printf("\n\t\t\t\t\t\t\t%c         ________________________________
%c",186,186);

        printf("\n\t\t\t\t\t\t\t%c                                          %c",186,186);

        printf("\n\t\t\t\t\t\t\t%c                                          %c",186,186);

        printf("\n\t\t\t\t\t\t\t%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c
%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%
c%c%c%c\n\n",200,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,2
05,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,205,2
05,205,205,205,205,205,205,205,205,205,205,205,205,188);

        printf("\n\t\t\t\t\t");

        for (i = 0; i < 80; i++)

                printf(">");

        printf("\n\t\t\t\t\t\t\tCurrent date and time : %s", ctime(&t));

        printf("\t\t\t\t\t");

        for (i = 0; i < 80; i++)

                printf("<");

        printf(" \n\n\n\t\t\t\t\t Press any other key to continue:");

        getch();

        system("cls");

        printf("\n\n\n");

        Title();

        printf("\n\n\n\n\n\t\t\t\t\t\t=========================================
==========");
```

```
        printf("\n\n\t\t\t\t\t\t\t\t1. REGISTER/ CREATE AN ACCOUNT");

        printf("\n\n\t\t\t\t\t\t\t\t2. LOGIN TO EXISTING ACCOUNT");

        printf("\n\n\t\t\t\t\t\t\t\t3. LOGIN AS ADMIN");

        printf("\n\n\t\t\t\t\t\t\t\t4. EXIT");

        printf("\n\n\t\t\t\t\t\t\t==========================================
=======");

        printf("\n\n\t\t\t\t\t\t\tENTER YOUR CHOICE : ");

        scanf("%d", &choice);

        fflush(stdin);

        switch (choice)

        {

                case 1:

                                registerMenu();

                                break;

                case 2:

                                login();

                                break;

                case 3:

                                loginForAdmin();

                                break;

                case 4:

                                Thankyou();

                                exit(0);

                                break;
        default:
                printf("\nINVALID CHOICE!!!");
                break;
    }
}
```

FUNCTION NAME : void registerMenu()

```
void registerMenu()
{
    system("cls");
    char user_name[30], password[20], UName[20], Pass[20];
    int valid=0;
    FILE *usp, *read;
    usp = fopen("Register.txt", "a+");
    read = fopen("Register.txt", "r");
    printf("\n\n\n\t\t\t----------------------------------------------------- SIGNUP -------
-----------------------------------------------\n");
    A:
        printf("\n\t\t\t\t\t\tENTER USERNAME : ");
        gets(user_name);
        while (fscanf(read, "%s %s %s %s %s %s %s %s\n",
s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.licens
e) != EOF)
        {
            if (strcmp(s.username, user_name) == 0)
            {
                printf("\n\t\t\t\t\t\tUSERNAME ALREADY EXISTS!!");
                goto A;
            }
        }
        fclose(read);

    printf("\n\t\t\t\t\t\tENTER PASSWORD : ");
    gets(s.password);
    B:
        printf("\n\t\t\t\t\t\tENTER FULL NAME : ");
        gets(s.fullname);
        for (int b=0;b<strlen(s.fullname);b++)
        {
            if(isalpha(s.fullname[b]))
            {
                valid=1;
            }
            else
            {
                valid=0;
                break;
            }
        }
        if(!valid)
        {
            printf("\n\t\t\t\t\t\t Full Name contains an Invalid character...Enter again.");
            goto B;
        }
    C:
        printf("\n\t\t\t\t\t\tENTER ADDRESS : ");
        gets(s.address);
        s.address[0]=toupper(s.address[0]);
        if(strlen(s.address)>30||strlen(s.address)<5)
        {
            printf("\n\t\t\t\t\t\tInvalid...The address should be in range of 5 to 30");
            goto C;
        }
    D:
        printf("\n\t\t\t\t\t\tContact no: ");
        gets(s.phonenumber);
        if(strlen(s.phonenumber)>10||strlen(s.phonenumber)!=10)
        {
            printf("\n\t\t\t\t\t\t Invalid...Contact must contain 10 digits.");
            goto D;
```

```
                }
        E:
                printf("\n\t\t\t\t\t\tENTER NATIONALITY : ");
                gets(s.nationality);
        F:
                printf("\n\t\t\t\t\t\tENTER EMAIL : ");
                gets(s.email);
        G:
                printf("\n\t\t\t\t\t\tENTER DRIVING LICENSE NUMBER : ");
                gets(s.license);


        fprintf(usp, "%s %s %s %s %s %s %s %s\n", user_name,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.license);
        printf("\n\n\n\t\t\t--------------------------------------------  ACCOUNT SUCCESSFULLY CREATED  --------------------------------------------------\n");
        getch();
        fclose(usp);
        WelcomePage();
}
```

FUNCTION NAME : void login()

```
void login()
{
        Title();
```

```
    int a = 0, i = 0, counter = 0, flag = 0;

    char ch;

    char un[30],pw[30];

    FILE *fp;

    fp = fopen("Register.txt", "r");

    system("cls");

    printf("\n\n\t\t\t\t\t\t************************  LOGIN FORM
************************");

    printf("\n\n\n\t\t\t\t\t\t\tENTER USERNAME:- ");

    gets(un);

    printf("\n\n\t\t\t\t\t\t\tENTER PASSWORD:- ");


    while (ch != 13)

    {

        ch = getch();

        if (ch != 13 && ch != 8)

        {

            printf("*");

            pw[i] = ch;

            i++;

        }

        else if (ch == 8)

        {

            if (i > 0)
```

```
                {
                        i--;
                        pw[i] = '\0';
                        printf("\b \b");
                }
        }
        if (ch == 13)
        {
                break;
        }
}
pw[i] = '\0';

while (fscanf(fp, "%s %s %s %s %s %s %s %s\n",
s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.licens
e) != EOF)
{
        if (strcmp(s.username, un) == 0)
        {
                flag = 1;
                if (strcmp(s.password, pw) == 0)
                {
                        printf("\n\n\n\t\t\t\t\t\t      ---------- LOGIN
SUCCESSFUL ----------");
```

```
                getch();
                fclose(fp);
                UserMenu(un);
            }
            else
            {
                counter++;
                printf("\n\n\n\t\t\t\t\t\t\t-----WRONG PASSWORD!!!----
-");
                printf("\n\n\t\t\t\t\t\t\t    ----- TRY AGAIN -----");
                getch();
                fclose(fp);
                login();
            }
        }
    }
    if (flag != 1)
    {
        printf("\n\n\n\t\t\t\t\t\t\t\tUSERNAME NOT FOUND!!");
        getch();
        fclose(fp);
        login();
    }
}
```

FUNCTION NAME : void loginForAdmin()

```
void loginForAdmin()
{
	system("cls");
	char username[] = "bikerentalsystem";
	char pw[] = "miniproject";
	char UName[20], password[20], ch;
	int i, flag = 0, counter = 0;
	printf("\n\n\n");
	Title();
	printf("\n\n\n\n\n\t\t\t\t\t\t*************************  LOGIN FOR ADMIN *************************");
	printf("\n\n\n\t\t\t\t\t\t\tENTER USERNAME:- ");
	gets(UName);
	printf("\n\n\t\t\t\t\t\t\tENTER PASSWORD:- ");
	gets(password);

	if (strcmp(username, UName) == 0)
	{
		flag = 1;
		if (strcmp(password, pw) == 0)
		{
			printf("\n\n\n\t\t\t\t\t\t      ---------- LOGIN SUCCESSFUL ----------");
```

```
            getch();
            adminMenu();
        }
        else
        {
            counter++;
            printf("\n\n\n\t\t\t\t\t\t\t-----WRONG PASSWORD!!!-----");
            printf("\n\n\t\t\t\t\t\t\t    ----- TRY AGAIN -----");
            getch();
            loginForAdmin();
        }
    }
    if (flag != 1)
    {
        printf("\n\n\n\t\t\t\t\t\t\t\tUSERNAME NOT FOUND!!");
        getch();
        WelcomePage();
    }
}
```

FUNCTION NAME : void Thankyou()

```
void Thankyou()
{
    system("cls");
```

```
	printf("\n\n\n");
	Title();
	printf("\n\n\n\n\n\t\t\t\t\t========================================
=====================================");
	printf("\n\n\t\t\t\t\t\t\t\tTHANKYOU FOR USING OUR SERVICES\n");
	printf("\n\t\t\t\t\t=============================================
================================\n\n\n\n\n");
}
```

FUNCTION NAME : void UserMenu()

```
void UserMenu(char username[30])
{
	int i = 0;


	time_t t;
	time(&t);
	char customername;
	int choice;
	system("cls");
	while (1)
	{
		system("cls");
		printf("\n\t\t\t\t\t");
		for (i = 0; i < 80; i++)
			printf("-");
```

```
        printf("\n\n\t\t\t\t\t   ----------------------->>>>  |MAIN MENU|  <<<<------
------------------ \n");

        printf("\n\t\t\t\t\t");

        for (i = 0; i < 80; i++)

            printf("-");

        printf("\n");

        printf("\t\t\t\t\t\t *Select and Enter Your Choice From Menu*:");

        printf("\n\n");


    printf("\n\t\t\t\t\t\t==============================================");

        printf(" \n\t\t\t\t\t\t  Enter 1 ->> Rent a bike");


    printf("\n\t\t\t\t\t\t==============================================");

        printf(" \n\t\t\t\t\t\t  Enter 2 ->> View Vehicle Fares");


    printf("\n\t\t\t\t\t\t==============================================");

        printf(" \n\t\t\t\t\t\t  Enter 3 ->> View Your Rental Record");


    printf("\n\t\t\t\t\t\t==============================================");

        printf(" \n\t\t\t\t\t\t  Enter 4 ->> Search Your Rental Record");


    printf("\n\t\t\t\t\t\t==============================================");

        printf(" \n\t\t\t\t\t\t  Enter 5 ->> Logout");


    printf("\n\t\t\t\t\t\t==============================================");
        printf("\n \n\t\t\t\t\t");
        for (i = 0; i < 80; i++)
            printf(">");
        printf("\n\t\t\t\t\tCurrent date and time : %s", ctime(&t));
        printf("\t\t\t\t\t");
        for (i = 0; i < 80; i++)
            printf("<");
        scanf("%d", &choice);
        fflush(stdin);
        switch (choice)
        {
            case 1:
                    RentBike(username);
                    break;
            case 2:
                    ViewFares();
                    break;
            case 3:
                    UserRentedList(username);
                    break;
            case 4:
                    UserSearch(username);
                    break;
```

```
                    case 5:

                                system("cls");

                                WelcomePage();

                                break;

                    default:

                                system("cls");

                                printf("Incorrect Input");

                                printf("\n Press any key to continue");

                                getch();

                                break;

               }

          }

}
```

FUNCTION NAME : void RentBike()

```
void RentBike(char username[30])

{

          FILE *f,*fp,*fp1,*fp2;

          time_t t;

          time(&t);

          int i, n, valid = 0, flag = 0;

          char test, bikename[50];

          char vehicle[30], price[7], stock[7],stockLeft1[7],time[50];

          char tempBike[20];
```

```
    char tempPrice[5];

    int stockLeft;

    Title();

    f = fopen("Rentals.txt", "a+");

    system("cls");

    printf("\n\t\t\t\t\t\t\t\t--------------------------");

    printf("\n\t\t\t\t\t\t\t\t      ENTER DETAILS");

    printf("\n\t\t\t\t\t\t\t\t--------------------------\n");


bikename:

    printf("\n\t\t\t\t\t=============================================
======================================");

    printf("\n\t\t\t\t\t\t\t\t ENTER BIKE NAME\t: ");

    gets(s.bikename);

    /*for (i = 0; s.bikename[i] != '\0'; i++)

    {

        if (s.bikename[i] >= 'a' && s.bikename[i] <= 'z')

        {

            s.bikename[i] = s.bikename[i] - 32;

        }

    }*/

    fp = fopen("viewFares.txt", "r");

    while (fscanf(fp, "%s %s %s\n", tempBike, tempPrice,stock) != EOF)

    {
```

```
    if (strcmp(tempBike, s.bikename) == 0)
    {
        flag = 1;
    }
}
fclose(fp);
if (flag != 1)
{
    printf("\n\t\t\t\t\t\t\t  PLEASE ENTER A VALID BIKE NAME!");
    goto bikename;
}
fp = fopen("viewFares.txt","r");
fp2 = fopen("newFares.txt","w+");
flag = 0;
while (fscanf(fp, "%s %s %s\n", vehicle, price, stock) != EOF)
{
    if (strcmp(vehicle, s.bikename) == 0)
    {
        stockLeft = atoi(stock);
        if(stockLeft>0)
        {
            flag = 1;
            stockLeft--;
```

```
                itoa(stockLeft,stockLeft1,10);
                fprintf(fp2, "%s %s %s\n", vehicle, price,stockLeft1);
            }
            else
            {
                itoa(stockLeft,stockLeft1,10);
                printf("\n\t\t\t\t\t\t\tNO STOCK OF THIS VEHICLE
!\n");
                fprintf(fp2,"%s %s %s\n", vehicle, price,stockLeft1);
            }
        }
        else
        {
            fprintf(fp2,"%s %s %s\n", vehicle, price,stock);
        }
    }
    fclose(fp);
    fclose(fp2);
    remove("viewFares.txt");
    rename("newFares.txt","viewFares.txt");
    if(flag != 1)
    {
        goto bikename;
    }
```

```
        do
        {

        printf("\n\t\t\t\t\t==================================================
===========================================");
                printf("\n\t\t\t\t\t\t\t ENTER TIME PERIOD('x'days)\t: ");
                scanf("%i", &s.period);
                if (s.period > 10 || s.period <= 0)
                {
                        printf("\n\t\t\t\t\t\t\t\t\tINVALID!!\n\t\t\t\t\t\t\tTHE MAXIMUM
PERIOD TO RENT IS 10 DAYS.\n\n");
                }
        } while (s.period > 10 || s.period <= 0);

        for(int i = 0;i<strlen(ctime(&t))-1;i++)
   {
                if(ctime(&t)[i] == ' ')
                {
                        time[i] = '-';
                }
                else
                {
                        time[i] = ctime(&t)[i];
                }
   }

        fprintf(f,"%s %s %i %s\n", s.bikename, username, s.period,time);
        printf("\n\n\t\t\t\t\t============================================
=======================================");
        printf("\n\n\t\t\t\t\t\t\t---- YOUR DESIRED BIKE IS RENTED
SUCCESSFULLY! ----");
        fclose(f);
        printf("\n\n\n\t\t\t\t\t\t\tPRESS ANY KEY TO GO TO BILLING : ");
        getch();
        generateBill(username, s.bikename, s.period);
}
```

FUNCTION NAME : void generateBill(char[],char[], int)

```
void generateBill(char username[20], char bikename[20], int period)
{
        time_t t;
        FILE *fp = fopen("viewFares.txt", "r");
        time(&t);
        char tempBike[20];
        char tempPrice[5],stock[7];
        float bill = 0;
        while (fscanf(fp, "%s %s %s\n", tempBike, tempPrice,stock) != EOF)
        {
                if (strcmp(tempBike, bikename) == 0)
                {

                        bill = atoi(tempPrice) * period;

                }

        }

   system("cls");


printf("\n\t\t\t\t\t|==========================================================
===================================|");

        printf("\n\t\t\t\t\t|                  Bike Rental - Customer Invoice
|");

        printf("\n\t\t\t\t\t|====================================================
=========================================|");

   printf("\n\t\t\t\t\t\t    > USER NAME              :         %s\n", username);

        printf("\n\t\t\t\t\t\t     > CUSTOMER NAME          :         %s\n", s.fullname);

        printf("\n\t\t\t\t\t\t     > BIKE MODEL             :         %s\n", s.bikename);

        printf("\n\t\t\t\t\t\t     > ADDRESS                :         %s\n", s.address);

        printf("\n\t\t\t\t\t\t     > PHONENUMBER            :         %s\n",
s.phonenumber);

        printf("\n\t\t\t\t\t\t     > NATIONALITY            :         %s\n", s.nationality);

        printf("\n\t\t\t\t\t\t     > EMAIL                  :         %s\n", s.email);

        printf("\n\t\t\t\t\t\t     > NUMBER OF DAYS         :         %i\n", s.period);

        printf("\n\t\t\t\t\t\t     > RENTED DATE & TIME     :         %s\n", ctime(&t));

        printf("\n\t\t\t\t\t__________________________________________________________
___________________________________\n");

        printf("\n\t\t\t\t\t\t     > TOTAL RENTAL AMOUNT    :           Rs. %f", bill);
        printf("\n\t\t\t\t\t____________________________________________________________________________________________________");

        printf("\n\n\t\t\t\t\tENTER ANY KEY TO PROCEED : ");

        getch();

        fclose(fp);

        UserMenu(username);

}
```

FUNCTION NAME : void ViewFares()

```
void ViewFares()

{

        system("cls");

        FILE *fp;

        char vehicle[20];

        char price[7];

        char stock[7];

        int y=12;

        Title();

        fp = fopen("viewFares.txt", "r");

        printf("\n\n\n\t\t\t\t   ------------------ FARES OF VEHICLES PER DAY AND STOCK ------------------");

        gotoxy(55,10);          printf("VEHICLE");

        gotoxy(75,10);          printf("FARE");

        gotoxy(90,10);          printf("STOCK LEFT");

        printf("\n\t\t\t\t\t\t-------------------------------------------------------");
```

```
	while (fscanf(fp,"%s %s %s\n", vehicle,price,stock) != EOF)
	{
		gotoxy(55,y);  printf("%s",vehicle);
		gotoxy(75,y);  printf("%s",price);
		gotoxy(95,y);  printf("%s",stock);
		y++;
	}
	fclose(fp);
	printf("\n\n\n\n\t\t\t\t\tENTER ANY KEY TO CONTINUE");
	getch();
}
```

FUNCTION NAME : void UserRentedList(char[])

```
void UserRentedList(char username[30])
{
	char user_name[50],time[50];
   FILE *f,*fp;
	int i, q = 9;
	fp = fopen("Rentals.txt","r");
	Title();
	system("cls");
	gotoxy(1, 6);
	printf("BIKENAME ");
	gotoxy(15, 6);
```

```
    printf("NAME ");

    gotoxy(30, 6);

    printf("ADDRESS ");

    gotoxy(45, 6);

    printf("PHONENUMBER ");

    gotoxy(63, 6);

    printf("NATIONALITY ");

    gotoxy(83, 6);

    printf("EMAIL ");

    gotoxy(105, 6);

    printf("PERIOD \n");

    gotoxy(130, 6);

    printf("RENTED TIME \n");

    printf("\n");

    for (i = 0; i < 155; i++)

    {

        printf("-");

    }

    while(fscanf(fp,"%s %s %i %s\n", s.bikename, user_name, &s.period,time) != EOF)

    {

        if(strcmp(user_name,username) == 0)

        {

            f = fopen("Register.txt", "r");
```

```
                        while (fscanf(f, "%s %s %s %s %s %s %s %s\n", 
s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.licens
e) != EOF)

                        {

                                if(strcmp(user_name,s.username) == 0)

                                {

                                        gotoxy(1, q);

                                        printf("%s", s.bikename);



                                        gotoxy(15, q);

                                        printf("%s", s.fullname);



                                        gotoxy(30, q);

                                        printf("%s", s.address);



                                        gotoxy(45, q);

                                        printf("%s", s.phonenumber);



                                        gotoxy(66, q);

                                        printf("%s", s.nationality);



                                        gotoxy(82, q);

                                        printf("%s", s.email);
                                        gotoxy(107, q);
                                        printf("%i", s.period);


                                        gotoxy(122, q);
                                        printf("%s",time);
                                        q++;
                                   }
                              }
                              fclose(f);
                         }
                    }
                    gotoxy(0,q);
                    for (i = 0; i < 155; i++)
                         printf("-");
                    fclose(fp);
                    getch();
                    UserMenu(username);
               }
```

FUNCTION NAME : void UserSearch(char [])

```
void UserSearch(char username[20])
{
   system("cls");
        FILE *f,*fp;
        char bikename[50],user_name[30],time[50];

        int flag = 1;

        fp = fopen("Rentals.txt","r");

        Title();

        if (fp == NULL)

        {

                printf("\n\n\t\t\t\t\t\t\tNO RECORD ADDED.");

                getch();

        }

        else

        {

                printf("\n\n\t\t\t\t\t\t\tENTER BIKENAME YOU WANT TO SEARCH :
");

                gets(bikename);

                while(fscanf(fp,"%s %s %i
%s\n",s.bikename,user_name,&s.period,time) != EOF)

                {

                        if (strcmp(bikename, s.bikename) == 0)

                        {

                                f = fopen("Register.txt", "r");

                                while (fscanf(f, "%s %s %s %s %s %s %s %s\n",
s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.licens
e) != EOF)

                                {
                                        if(strcmp(username,s.username)==0 &&
strcmp(s.username,user_name)==0)
                                        {
                                                flag = 0;

        printf("\n\n\t\t\t\t\t\t\t==========================================
=============");
                                                printf("\n\n\t\t\t\t\t\t\t\t\tRECORD
FOUND\n");
                                                printf("\n\t\t\t\t\t\t\t\tBIKE NAME\t: %s",
s.bikename);
                                                printf("\n\t\t\t\t\t\t\t\tNAME\t\t: %s",
s.fullname);
                                                printf("\n\t\t\t\t\t\t\t\tADDRESS\t\t: %s",
s.address);
                                                printf("\n\t\t\t\t\t\t\t\tPHONE NUMBER\t:
%s", s.phonenumber);
                                                printf("\n\t\t\t\t\t\t\t\tNATIONALITY\t:
%s", s.nationality);
                                                printf("\n\t\t\t\t\t\t\t\tEMAIL\t\t: %s",
s.email);
                                                printf("\n\t\t\t\t\t\t\t\tLICENSE NO\t: %s",
s.license);
                                                printf("\n\t\t\t\t\t\t\t\tPERIOD\t\t:
%i",s.period);
                                                printf("\n\t\t\t\t\t\t\t\tRENTED TIME     :
%s",time);
```

```
                                        }
                                }
                                fclose(f);
                        }
                }
                if (flag == 1)
                {
                        printf("\n\t\t\t\t\t\t\tTHIS BIKE IS NOT RENTED BY YOU !");
                }
                getch();
  }
        fclose(fp);
        UserMenu(username);
}
```

FUNCTION NAME : void adminMenu()

```
void adminMenu()
{
        int choice, i = 0;
        time_t t;
        time(&t);
        system("cls");
        while (1)
        {
```

```
        system("cls");

        printf("\n\n\n\t\t\t\t\t\t");

        for (i = 0; i < 80; i++)

                printf("-");

        printf("\n\t\t\t\t\t\t");

        printf("   ---------------------->>>>  |MAIN MENU|  <<<<-------------------
----- ");

        printf("\n\t\t\t\t\t\t");

        for (i = 0; i < 80; i++)

                printf("-");

        printf("\n");

        printf("\t\t\t\t\t\t\t\t *Select and Enter Your Choice From Menu*:");

        printf("\n\n");


    printf("\n\t\t\t\t\t\t\t=========================================");

        printf(" \n\t\t\t\t\t\t\t\t Enter 1 ->> View Rental Record");


    printf("\n\t\t\t\t\t\t\t=========================================");

        printf(" \n\t\t\t\t\t\t\t\t Enter 2 ->> View Vehicle Fares");


    printf("\n\t\t\t\t\t\t\t=========================================");

        printf(" \n\t\t\t\t\t\t\t\t Enter 3 ->> Edit Fares and stock");


    printf("\n\t\t\t\t\t\t\t=========================================");

        printf(" \n\t\t\t\t\t\t\t\t Enter 4 ->> Remove A User");
printf("\n\t\t\t\t\t\t\t============================================");
        printf(" \n\t\t\t\t\t\t\t Enter 5 ->> Search a User");

printf("\n\t\t\t\t\t\t\t============================================");
        printf(" \n\t\t\t\t\t\t\t Enter 6 ->> Edit Record");

printf("\n\t\t\t\t\t\t\t============================================");
        printf(" \n\t\t\t\t\t\t\t Enter 7 ->> Exit");

printf("\n\t\t\t\t\t\t\t============================================");
        printf("\n \n\t\t\t\t\t\t");
        for (i = 0; i < 80; i++)
                printf(">");
        printf("\n\n\t\t\t\t\t\t\t\tCurrent date and time : %s", ctime(&t));
        printf("\t\t\t\t\t\t");
        for (i = 0; i < 80; i++)
                printf("<");


        scanf("%d", &choice);
        fflush(stdin);
        switch (choice)
        {
case 1:
                                listOfRentals();
                                break;
        case 2:
                                ViewFares();
                                break;
        case 3:
                                EditFares();
                                break;
        case 4:
                                delete();
                                break;
        case 5:
                                search();
                                break;
        case 6:
                                edit();
                                break;
        case 7:
                                WelcomePage();
                                break;
        default:
                                system("cls");
                                printf("\n\t\t\t\t\t\t\t     Incorrect Input");
                                printf("\n\t\t\t\t\t\t\t Press any key to continue");
```

```
                    getch();

                    adminMenu();

        }

    }

}
```

FUNCTION NAME : void listOfRentals()

```
void listOfRentals()

{

    FILE *f,*fp;

    int i, q = 9;

    char user_name[30],time[50];

    if ((fp = fopen("Rentals.txt", "r")) == NULL)

        exit(0);

    system("cls");

        Title();

    gotoxy(0,5);

    for (i = 0; i < 155; i++)

    {

        printf("-");

    }

    gotoxy(1, 6);

    printf("BIKENAME ");

    gotoxy(15, 6);
```

```
	printf("NAME ");
	gotoxy(30, 6);
	printf("ADDRESS ");
	gotoxy(45, 6);
	printf("PHONENUMBER ");
	gotoxy(63, 6);
	printf("NATIONALITY ");
	gotoxy(83, 6);
	printf("EMAIL ");
	gotoxy(105, 6);
	printf("PERIOD \n");
	gotoxy(130, 6);
	printf("RENTED TIME \n");

	for (i = 0; i < 155; i++)
	{
		printf("-");
	}
	printf("\n");
	while(fscanf(fp,"%s %s %i %s\n", s.bikename, user_name, &s.period,time) != 
EOF)
	{
		f = fopen("Register.txt","r");
```

```
                    while (fscanf(f, "%s %s %s %s %s %s %s %s\n",
s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.licens
e) != EOF)
                    {
                              if(strcmp(user_name,s.username) == 0)
                              {
                                        gotoxy(1, q);
                                        printf("%s", s.bikename);


                                        gotoxy(15, q);
                                        printf("%s", s.fullname);


                                        gotoxy(30, q);
                                        printf("%s", s.address);


                                        gotoxy(45, q);
                                        printf("%s", s.phonenumber);


                                        gotoxy(66, q);
                                        printf("%s", s.nationality);


                                        gotoxy(82, q);
                                        printf("%s", s.email);
```

```
                gotoxy(107, q);
                printf("%i", s.period);


                gotoxy(122, q);
                printf("%s",time);
                q++;
            }
        }
        fclose(f);
    }
    printf("\n\n");
    for (i = 0; i < 155; i++)
        printf("-");
    fclose(fp);
    getch();
}
```

FUNCTION NAME : void EditFares()

```
void EditFares()
{
    system("cls");
    Title();
    FILE *fp, *r;
    int flag = 0;
```

```
char vehicle[20], price[7], editVehicle[20], editPrice[7],stock[7],editStock[7];

fp = fopen("viewFares.txt", "r");

r = fopen("temp.txt", "w+");

printf("\n");

while (fscanf(fp, "%s %s %s\n", vehicle, price,stock) != EOF)

{

        printf("\n\t\t\t\t\t\t\t\t%s\t: %s\n", vehicle, price);

}

fclose(fp);

printf("\n\t\t\t\t\t");

for (int i = 0; i < 80; i++)

        printf("-");

fp = fopen("viewFares.txt", "r");

printf("\n\n\t\t\t\t\tENTER VEHICLE TO EDIT : ");

gets(editVehicle);

printf("\n\t\t\t\t\tENTER UPDATED PRICE : ");

gets(editPrice);

printf("\n\t\t\t\t\tENTER UPDATED STOCK : ");

gets(editStock);


while (fscanf(fp, "%s %s %s\n", vehicle, price,stock) != EOF)

{

        if (strcmp(vehicle, editVehicle) == 0)
        {
            flag = 1;
            fprintf(r, "%s %s %s\n", editVehicle, editPrice,editStock);
        }
        else
        {
            fprintf(r, "%s %s %s\n", vehicle, price,stock);
        }
    }
    if (flag != 1)
    {
        printf("\n\n\t\t\t\t\t\t\t\tTHE VEHICLE DOESN'T EXIST!!!");
    }
    fclose(fp);
    fclose(r);
    remove("viewFares.txt");
    rename("temp.txt", "viewFares.txt");
    getch();
}
```

FUNCTION NAME : void delete ()

```
void delete()
{
    FILE *f, *t;
    int flag = 0;

    char custUserName[50], custName[50];

    if ((f = fopen("Register.txt", "r")) == NULL)

    {

        Title();

        printf("\n\n\n\t\t\t\t\t\tNO RECORD ADDED.");

        getch();

    }

    else

    {

        system("cls");

        Title();

        t = fopen("temp.txt", "w+");

        printf("\n\n\n\n\t\t\t\t\t\tENTER USERNAME OF COSTUMER TO
DELETE : ");

        gets(custUserName);

        while (fscanf(f, "%s %s %s %s %s %s %s %s\n",
s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.licens
e) != EOF)

        {

            if (strcmp(custUserName, s.username) == 0)

            {

     flag = 1;

            }
            else
            {
      fprintf(t, "%s %s %s %s %s %s %s %s\n", s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.license);
            }
        }
        fclose(f);
        fclose(t);
        if (flag != 1)
        {
            printf("\n\n\n\t\t\t\t\t\t\t RECORDS OF THIS COSTUMER ARE NOT FOUND !");
            getch();
        }
        else
        {
            printf("\n\n\n\n\t\t\t\t\t\t\t---------- SUCCESSFULLY DELETED ----------\n");
        }

        remove("Register.txt");
        rename("temp.txt", "Register.txt");
        getch();
    }
```

```
        adminMenu();
}
```

FUNCTION NAME : void search()

```
void search()
{
        system("cls");
        FILE *f,*fp;
        char username[50],name[50];
        char user_name[30],time[50];
        int flag = 1;
        fp = fopen("Rentals.txt","r");
        Title();
        if (f == NULL)
        {
                printf("\n\n\t\t\t\t\t\t\tNO RECORD ADDED.");
                getch();
        }
        else
        {
                printf("\n\n\t\t\t\t\t\t\tENTER USERNAME OF COSTUMER TO
SEARCH : ");
                gets(username);
     printf("\n\t\t\t\t\t\t\tENTER FULLNAME OF COSTUMER : ");
     gets(name);
```

```
        while(fscanf(fp,"%s %s %i
%s\n",s.bikename,user_name,&s.period,time) != EOF)
        {
            f = fopen("Register.txt", "r");
            while (fscanf(f, "%s %s %s %s %s %s %s %s\n",
s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.licens
e) != EOF)
            {
                if(strcmp(username,s.username) == 0
&&strcmp(user_name,username) == 0)
                {
                    flag = 2;
                    if(strcmp(name, s.fullname) == 0)
                    {
                        flag = 0;

    printf("\n\n\t\t\t\t\t\t==========================================
=============");
                        printf("\n\n\t\t\t\t\t\t\t\tRECORD
FOUND\n");
                        printf("\n\t\t\t\t\t\t\t\tBIKE NAME\t: %s",
s.bikename);
                        printf("\n\t\t\t\t\t\t\t\tNAME\t\t: %s",
s.fullname);
                        printf("\n\t\t\t\t\t\t\t\tADDRESS\t\t: %s",
s.address);
```

```
                                                printf("\n\t\t\t\t\t\t\t\tPHONE NUMBER\t:
%s", s.phonenumber);

                                                printf("\n\t\t\t\t\t\t\t\tNATIONALITY\t:
%s", s.nationality);

                                                printf("\n\t\t\t\t\t\t\t\tEMAIL\t\t: %s",
s.email);

                                                printf("\n\t\t\t\t\t\t\t\tLICENSE NO\t: %s",
s.license);

                                                printf("\n\t\t\t\t\t\t\t\tPERIOD\t\t:
%i",s.period);

                                                printf("\n\t\t\t\t\t\t\t\tRENTED TIME     :
%s",time);

                                          }

                                    }

                              }

                              fclose(f);

                  }

                  if (flag == 1)

                  {

                              printf("\n\t\t\t\t\t\t\tREQUESTED USERNAME COULD NOT
BE FOUND !");

                  }

          else if(flag == 2)

          {

               printf("\n\t\t\t\t\t\t\t THIS PERSON DID NOT RENT ANY BIKE WITH THE
USERNAME YOU ENTERED !");
```

```
   }
        getch();
    }
    fclose(fp);
    fclose(f);
    adminMenu();
}
```

FUNCTION NAME : void edit()

```
void edit()
{
    FILE *f, *r;
    int k = 0,t = 0;
    char ed;
    char username[50],name[50], upName[30], upAddress[30], upPhno[15], upNat[15], UpEm[35],upLicNo[30];
    long int size = sizeof(s);
    r = fopen("temp.txt", "w+");
    if ((f = fopen("Register.txt", "r")) == NULL)
    {
        Title();
        printf("\n\n\n\t\t\t\t\t\tNO RECORD ADDED.");
        fclose(f);
        fclose(r);
        getch();
```

```
   }
   else
   {
      system("cls");
      Title();
      printf("\n\n\n\t\t\t\t\t\tENTER USERNAME OF COSTUMER TO SEARCH : ");
      gets(username);
  printf("\n\n\t\t\t\t\t\tENTER FULLNAME OF COSTUMER : ");
  gets(name);
      while (fscanf(f, "%s %s %s %s %s %s %s %s\n", s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.license) != EOF)
      {
   if(strcmp(username,s.username) == 0)
   {
    k = 2;
    if (strcmp(name, s.fullname) == 0)
    {
     t = 1;
     printf("\n\t\t\t\t\t\t\t\t*** Existing Record ***");
     printf("\n\t\t\t\t\t\t\tName\t\t: %s", s.fullname);
     printf("\n\t\t\t\t\t\t\tAddress\t\t: %s", s.address);
     printf("\n\t\t\t\t\t\t\tPhone number\t: %s", s.phonenumber);
```

```
            printf("\n\t\t\t\t\t\t\t\tNationality\t: %s", s.nationality);
            printf("\n\t\t\t\t\t\t\t\tEmail\t\t: %s", s.email);
                                    printf("\n\t\t\t\t\t\t\t\tLicense No\t:%s",s.license);


            printf("\n\n\t\t\t\t\t\t\t\t\t*** New Record ***");
            printf("\n\t\t\t\t\t\t\t\tEnter New Name          : ");
            gets(upName);
            printf("\n\t\t\t\t\t\t\t\tEnter New Address       : ");
            gets(upAddress);
            printf("\n\t\t\t\t\t\t\t\tEnter New Phone number   : ");
            gets(upPhno);
            printf("\n\t\t\t\t\t\t\t\tEnter New Nationality    : ");
            gets(upNat);
            printf("\n\t\t\t\t\t\t\t\tEnter New Email         : ");
            gets(UpEm);
            printf("\n\t\t\t\t\t\t\t\tEnter updated license no :");
                                    gets(upLicNo);
            fprintf(r, "%s %s %s %s %s %s %s %s\n",
s.username,s.password,upName,upAddress,upPhno,upNat,UpEm,upLicNo);
        }
        else
        {
```

```
                    fprintf(r, "%s %s %s %s %s %s %s %s\n", s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.license);

                }

            }

            else

            {

                fprintf(r, "%s %s %s %s %s %s %s %s\n", s.username,s.password,s.fullname,s.address,s.phonenumber,s.nationality,s.email,s.license);

            }

                        }

                        if (k == 0)

                        {

                                    printf("\n\nNO RECORD WITH THIS USERNAME !");

                        }

        else if((k == 2) && (t != 1))

        {

            printf("\n\nNO BIKES RENTED IN THIS ACCOUNT BY THE NAME YOU ENTERED !");

        }

                        fclose(r);

                        fclose(f);

                        remove("Register.txt");

                        rename("temp.txt", "Register.txt");
                        getch();

            }

            adminMenu();

    }
```

FUNCTION NAME : void gotoxy(int,int)

```
void gotoxy(int x, int y)

{

        COORD CR;

        CR.X = x;

        CR.Y = y;

        SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE), CR)

}
```

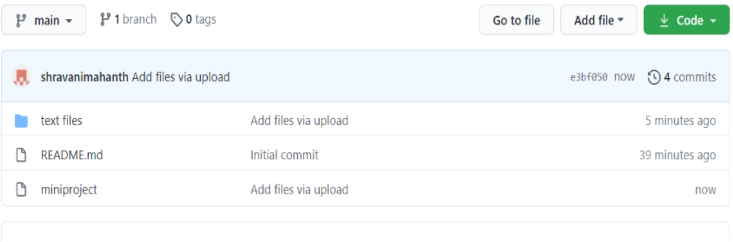
B.Github structure/folder

We segregated the files of our mini project into folders. We also added report of our project on our github repository.

Github Repository links

https://github.com/shravanimahanth/Bike-rental-system

https://github.com/hasinisagi/bike-rental-system-

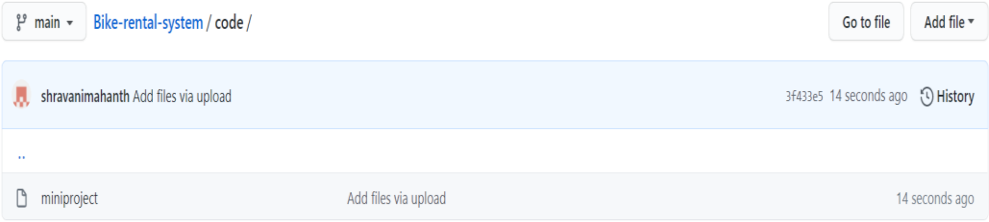


main ▾ 1 branch 0 tags Go to file Add file ▾ Code ▾

shravanimahanth Add files via upload e3bf050 now 4 commits

text files	Add files via upload	5 minutes ago
README.md	Initial commit	39 minutes ago
miniproject	Add files via upload	now

- **Code folder contents:**



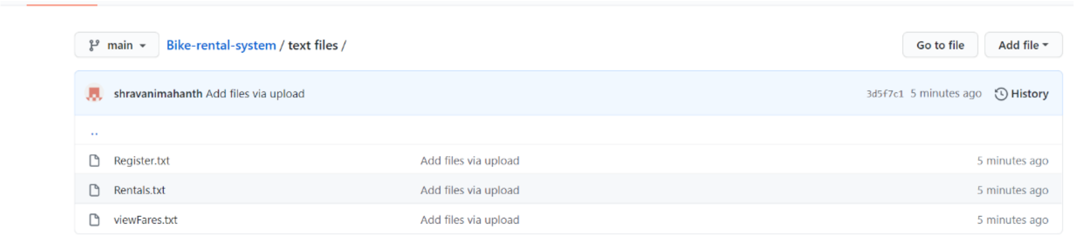
main ▾ Bike-rental-system / code / Go to file Add file ▾

shravanimahanth Add files via upload 3f433e5 14 seconds ago History

..

miniproject	Add files via upload	14 seconds ago

- **Files folder contents**



main ▾ Bike-rental-system / text files / Go to file Add file ▾

shravanimahanth Add files via upload 3d5f7c1 5 minutes ago History

..

Register.txt	Add files via upload	5 minutes ago
Rentals.txt	Add files via upload	5 minutes ago
viewFares.txt	Add files via upload	5 minutes ago

C.TESTING

TEST CASE TEMPLATE		
Test case ID : TC01		Use case ID : **UC01**
Test case title : Register		
Test case description : User has to enter details.		
Test steps	**Expected result**	**Actual result**
The system allows the user to enter the correct details to create an account with their user name and password.	If the user doesn't enter details in correct format then system won't allow to enter further details.	An error message saying invalid phone number or invalid name is displayed if they are in wrong format.

TEST CASE TEMPLATE		
Test case ID : TC01		Use case ID : **UC02**
Test case title : Login (User)		
Test case description : User has to enter password and user name.		
Test steps	**Expected result**	**Actual result**
The system prompts the user to enter password and user name correctly .	A message saying login is successful is displayed on the screen and redirects to users home page.	A message saying username not found is displayed.

Test case ID : TC02	Use case ID : **UC02**
Test case title : Login (user)	
Test case description : User has to enter password and user name.	

Test steps	Expected result	Actual result
The system prompts the user to enter password and user name correctly .	A message saying login is successful is displayed on the screen and redirects to users home page.	A message saying wrong password is displayed and allows to try again.

Test case ID : TC03		Use case ID : **UC02**
Test case title : Login		
Test case description : User has to enter password and user name.		
Test steps	**Expected result**	**Actual result**
The system prompts the user to enter password and user name correctly	A message saying login is successful is displayed on the screen and redirects to users home page.	A message saying login is successful is displayed on the screen and redirects to users home page.

Test case ID : TC01		Use case ID : **UC03**
Test case title : View Rental Fares		
Test case description : User has to click on view rental fares		
Test steps	**Expected result**	**Actual result**
After successful login the user is allowed to click on view rental fares to check price and stock available.	View Rental Fares page is displayed.	View Rental Fares page is displayed.

Test case ID : TC01		Use case ID : **UC04**
Test case title : Rent a Bike		
Test case description : User has to click on rent a bike		
Test steps	**Expected result**	**Actual result**

User is allowed to enter bike to be rented which is in the list of rental fares.	Message saying Desired Bike is rented is displayed if the bike chosen is in list of the available bikes and allows to enter time period	Message saying Desired Bike is rented is displayed if the bike chosen is in list of the available bikes and allows to enter time period

Test case ID : TC02		Use case ID : **UC04**
Test case title : Rent a Bike		
Test case description : User has to press any key to generate bill after renting		
Test steps	**Expected result**	**Actual result**
User is allowed to enter bike to be rented which is in the list of rental fares and press any key to generate bill	Bill page is displayed with respective time ,date, user details and the total amount	Bill page is displayed with respective time ,date, user details and the total amount

Test case ID : TC03		Use case ID : **UC04**
Test case title : rent a bike		
Test case description : User has to enter bike name		
Test steps	**Expected result**	**Actual result**
User is allowed to enter bike to be rented which is in the list of rental fares and press any key to generate bill.	Message saying Desired Bike is rented is displayed if the bike chosen is in list of the available bikes and allows to enter time period	If there is no availability of bikes then message saying no stock of this vehicle is displayed

Test case ID : TC01		Use case ID : **UC05**
Test case title : View Rental Records		
Test case description : User has to click on view rental records		
Test steps	**Expected result**	**Actual result**

User is allowed to view their rental records and verify.	Retal record page is displayed with the table displaying all the user details with respective date and time.	Retal record page is displayed with the table displaying all the user details with respective date and time.

<table>
<tr><td colspan="2"><b>Test case ID</b> : TC01</td><td rowspan="3">Use case ID :
<b>UC06</b></td></tr>
<tr><td colspan="2"><b>Test case title</b> : Search your rental record</td></tr>
<tr><td colspan="2"><b>Test case description</b> : User has to click on Search your rental record</td></tr>
<tr><td><b>Test steps</b></td><td><b>Expected result</b></td><td><b>Actual result</b></td></tr>
<tr><td>The system prompts the user to check the records of specific bike by entering bike name.</td><td>Rental record page is displayed with all the rental records rented by the user on specific bike.</td><td>Rental record page is displayed with all the rental records rented by the user on specific bike.</td></tr>
</table>

<table>
<tr><td colspan="2"><b>Test case ID</b> : TC02</td><td rowspan="3">Use case ID :
<b>UC06</b></td></tr>
<tr><td colspan="2"><b>Test case title</b> : Search your rental record</td></tr>
<tr><td colspan="2"><b>Test case description</b> : User has to click on Search your rental record</td></tr>
<tr><td><b>Test steps</b></td><td><b>Expected result</b></td><td><b>Actual result</b></td></tr>
<tr><td>The system prompts the user to check the rental records of specific bike by entering bike name if that user rented.</td><td>Rental record page is displayed with all the rental records rented by the user on specific bike.</td><td>Bike not rented by you message is displayed if the bike entered is not rented from your account.</td></tr>
</table>

<table>
<tr><td colspan="2"><b>Test case ID</b> : TC01</td><td rowspan="3">Use case ID :
<b>UC07</b></td></tr>
<tr><td colspan="2"><b>Test case title</b> : exit</td></tr>
<tr><td colspan="2"><b>Test case description</b> : Allows the user to exit from the user page .</td></tr>
<tr><td><b>Test steps</b></td><td><b>Expected result</b></td><td><b>Actual result</b></td></tr>
</table>

Admin chooses the exit option.	It should redirect the user to the welcomepage.	It will redirect the user to the welcomepage

<table>
<tr><th colspan="3">TEST CASE TEMPLATE</th></tr>
<tr><td colspan="2"><b>Test case ID</b> : TC01</td><td rowspan="3">Use case ID :
<b>UC08</b></td></tr>
<tr><td colspan="2"><b>Test case title</b> : Login (Admin)</td></tr>
<tr><td colspan="2"><b>Test case description</b> : User has to enter password and user name.</td></tr>
<tr><th>Test steps</th><th>Expected result</th><th>Actual result</th></tr>
<tr><td>The system prompts the Admin to enter password and user name .Admin enters the password and user name .Password entered is not same as the hard-coded one.</td><td>A message saying login is successful is displayed on the screen and redirects to Admin home page.</td><td>A message saying wrong password is displayed and allows to try again.</td></tr>
</table>

<table>
<tr><td colspan="2"><b>Test case ID</b> : TC02</td><td rowspan="3">Use case ID :
<b>UC08</b></td></tr>
<tr><td colspan="2"><b>Test case title</b> : Login (Admin)</td></tr>
<tr><td colspan="2"><b>Test case description</b> : User has to enter password and user name.</td></tr>
<tr><th>Test steps</th><th>Expected result</th><th>Actual result</th></tr>
<tr><td>The system prompts the user to enter password and username .Admin enters the password and username. Password and user name entered is same as the hard-coded one.</td><td>A message saying login is successful is displayed on the screen and redirects to users home page.</td><td>A message saying login is successful is displayed on the screen and redirects to users home page.</td></tr>
</table>

<table>
<tr><td><b>Test case ID</b> : TC01</td><td rowspan="3">Use case ID :
<b>UC09</b></td></tr>
<tr><td><b>Test case title</b> : View rental records</td></tr>
<tr><td><b>Test case description</b> : User has to click on view rental records</td></tr>
</table>

Test steps	Expected result	Actual result
Admin is allowed to view all the rental records.	Retal record page should be displayed with the table displaying all the user details with respective date and time.	Retal record page is displayed with the table displaying all the user details with respective date and time.

<table>
<tr><td colspan="2"><b>Test case ID</b> : TC01</td><td rowspan="3">Use case ID :
<b>UC010</b></td></tr>
<tr><td colspan="2"><b>Test case title</b> : view vehicles fares</td></tr>
<tr><td colspan="2"><b>Test case description</b> : User has to click on view rental fares</td></tr>
<tr><th>Test steps</th><th>Expected result</th><th>Actual result</th></tr>
<tr><td>After successful login the user is allowed to click on view rental fares to check price and stock available to rent a bike.</td><td>View Rental Fares page is displayed.</td><td>View Rental Fares page is displayed.</td></tr>
</table>

<table>
<tr><td colspan="2"><b>Test case ID</b> : TC01</td><td rowspan="3">Use case ID :
<b>UC011</b></td></tr>
<tr><td colspan="2"><b>Test case title</b> : Edit Fares and Stock.</td></tr>
<tr><td colspan="2"><b>Test case description</b> : User has to click on edit fares and stocks.</td></tr>
<tr><th>Test steps</th><th>Expected result</th><th>Actual result</th></tr>
<tr><td>The system prompts the admin to enter vehicle name .Admin enters the vehicle name .vehicle entered doesn’t exist.</td><td>It should change the price and the stock of the vehicle name we entered.</td><td>It displays the message that the vehicle doesn’t exist.</td></tr>
</table>

<table>
<tr><td><b>Test case ID</b> : TC02</td><td rowspan="3">Use case ID :
<b>UC011</b></td></tr>
<tr><td><b>Test case title</b> : Edit Fares and Stock.</td></tr>
<tr><td><b>Test case description</b> : User has to click on edit fares and stocks.</td></tr>
</table>

Test steps	Expected result	Actual result
The system prompts the admin to enter vehicle name .Admin enters the vehicle name .vehicle entered exist and updates the price and stock.	It should change the price and stock of the vehicle name we entered.	It changes the price and the stock of the vehicle name we entered.

Test case ID: TC01		Use case ID: **UC012**
Test case title: Remove a user		
Test case description: User has to enter the username to delete the record.		
Test steps	**Expected result**	**Actual result**
The Admin is allowed to enter username. User enters the user name. Username entered doesn’t exist in the records.	After entering the username all the record should be deleted on that username.	It displays a message that the records of this costumer are not found.

Test case ID: TC02		Use case ID : **UC012**
Test case title: Remove a user		
Test case description: User has to enter the username to delete the record.		
Test steps	**Expected result**	**Actual result**
Admin is allowed to enter username. User enters the user name .Username entered exist in the records.	After entering the username all the record should be deleted on that username.	After entering the username all the record are deleted on that username.

Test case ID : TC01	Use case ID :
Test case title : Search a user	

Test case description : Admin chooses search a user option.		**UC013**
Test steps	**Expected result**	**Actual result**
Admin is allowed to enter user name and full name of the customer. User name is not found.	The entered username and costumer records should be displayed .	The displays the messages that Required username could not be found.

Test case ID : TC02		Use case ID : **UC013**
Test case title : Search a user		
Test case description : Admin chooses search a user option.		
Test steps	**Expected result**	**Actual result**
Admin is allowed to enter user name and full name of the customer. User name is found.	The entered username and costumer records should be displayed .	The entered username and costumer records are being displayed .

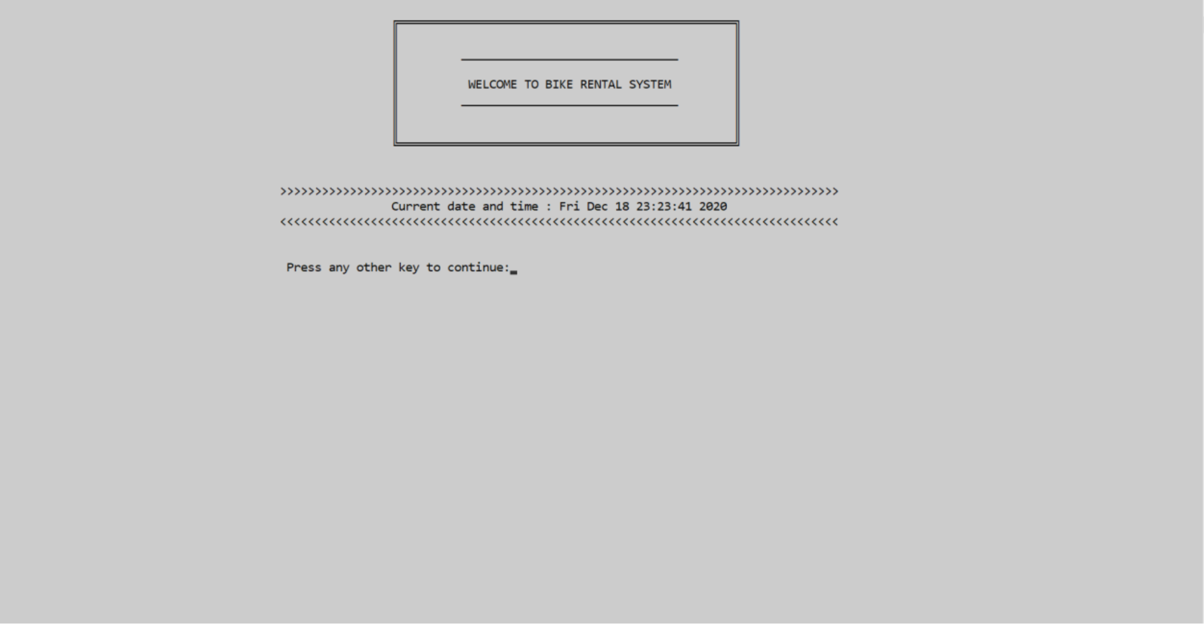
Test case ID : TC01		Use case ID : **UC014**
Test case title : edit user		
Test case description : Admin chooses the edit user option.		
Test steps	**Expected result**	**Actual result**
Admin is allowed to enter user name and full name of the customer. User name is not found.	After entering the details it allows us to edit the details.	After entering the details is shows no records with this user name is displayed.

Test case ID : TC02	Use case ID :
Test case title : edit user	

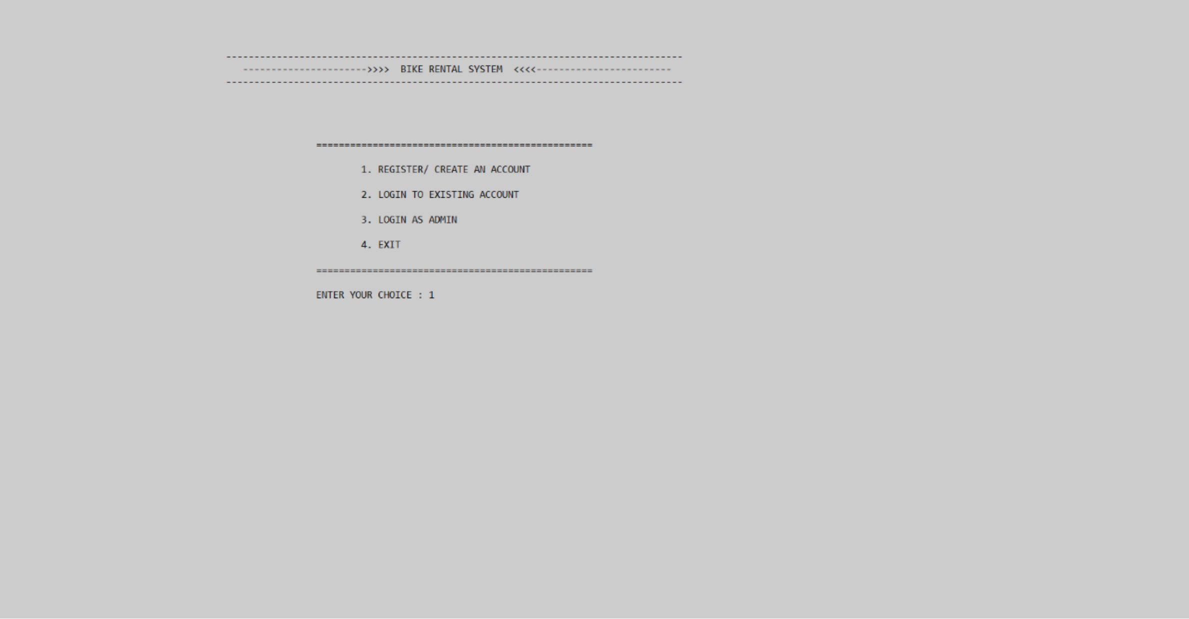
Test case description : Admin chooses the edit user option.		**UC014**
Test steps	**Expected result**	**Actual result**
Admin is allowed to enter user name and full name of the customer. User name is found.	After entering the details it allows us to edit the details.	After entering the details it allowed us to edit the details.

Test case ID : TC01		Use case ID : **UC015**
Test case title : exit		
Test case description : Allows the user to exit from the user page .		
Test steps	**Expected result**	**Actual result**
Admin chooses the exit option.	It should redirect the user to the welcomepage.	It will redirect the user to the welcomepage

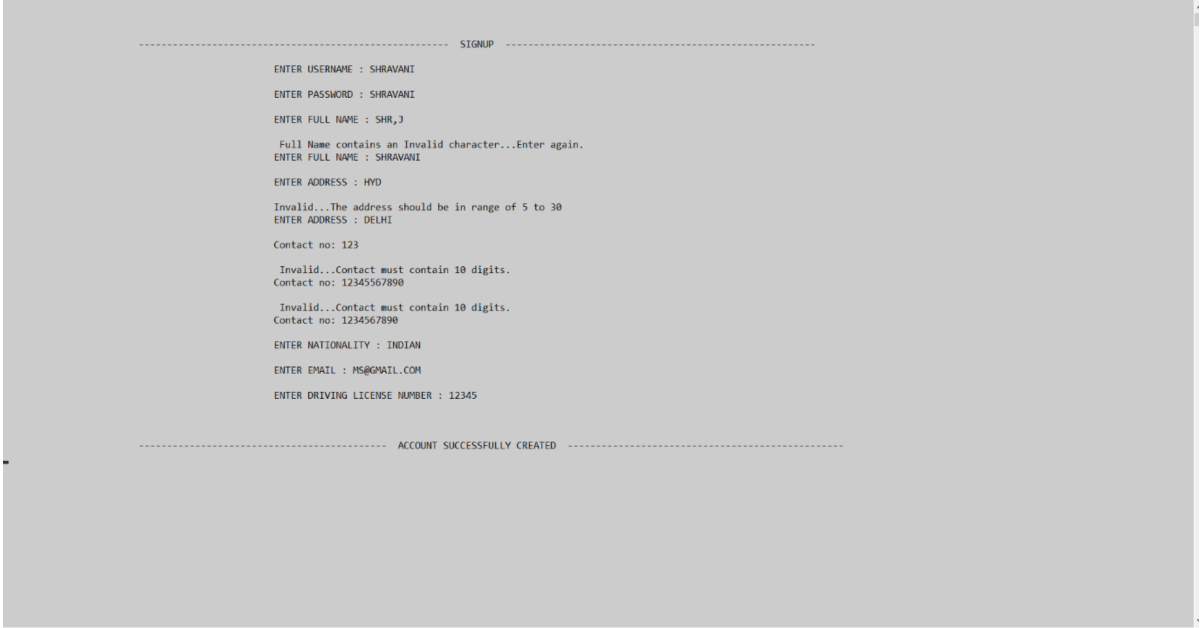
RESULT



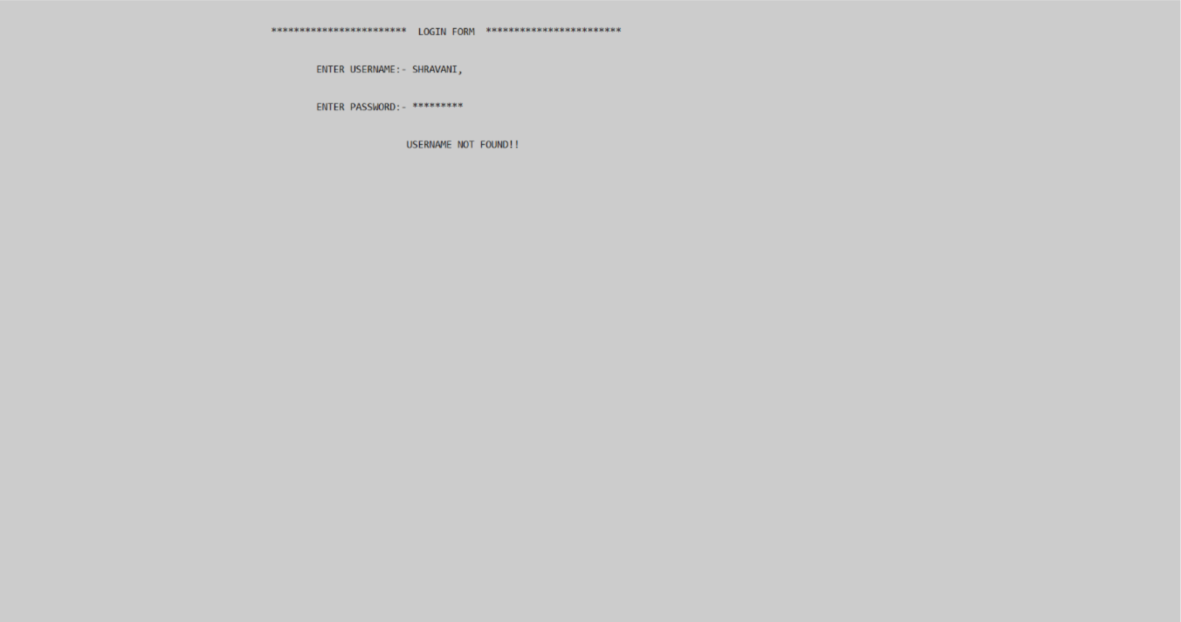
```
                    WELCOME TO BIKE RENTAL SYSTEM


>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
                Current date and time : Fri Dec 18 23:23:41 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<


 Press any other key to continue:_
```



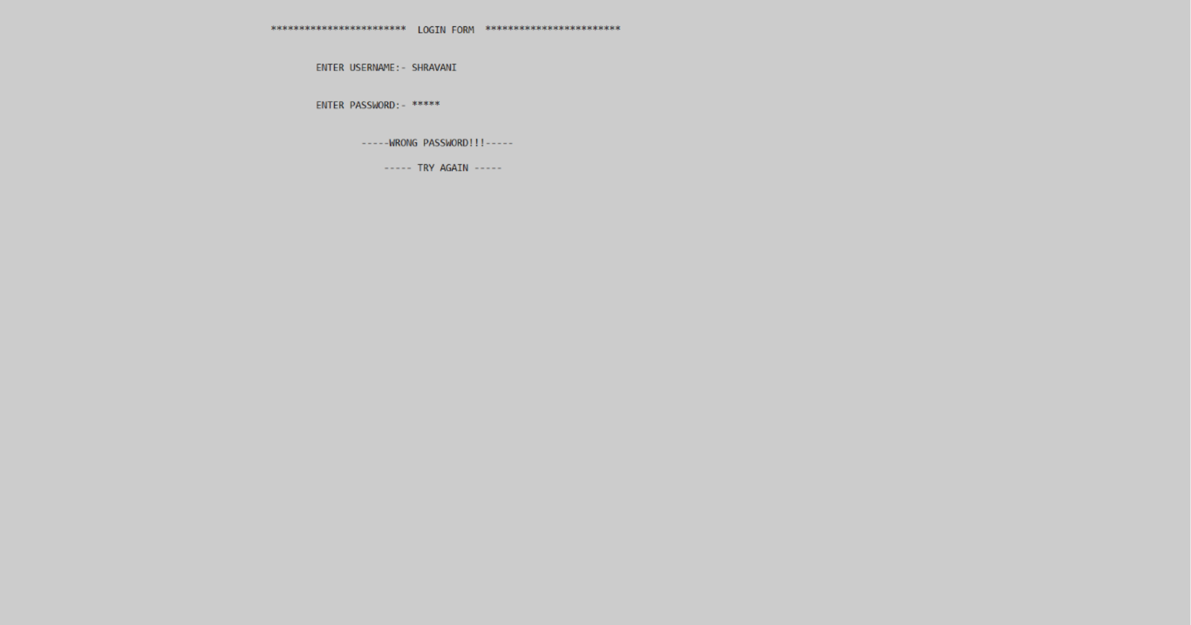
```
--------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<-----------------------
--------------------------------------------------------------------------------



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

                        1. REGISTER/ CREATE AN ACCOUNT

                        2. LOGIN TO EXISTING ACCOUNT

                        3. LOGIN AS ADMIN

                        4. EXIT

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

                ENTER YOUR CHOICE : 1
```



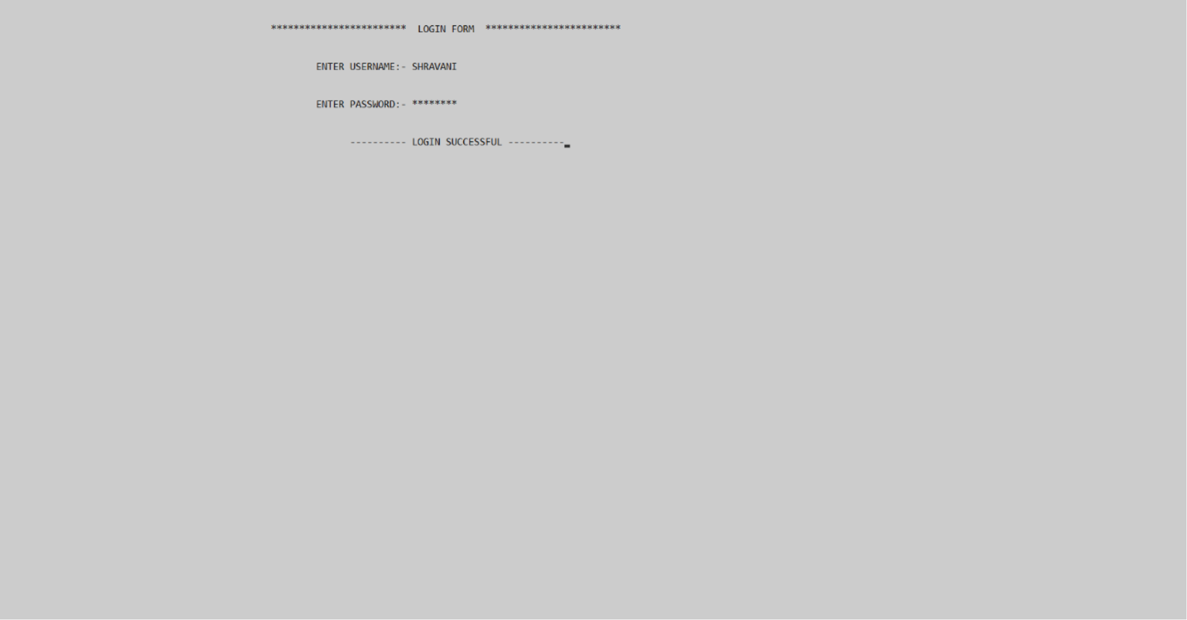
```
-------------------------------------------------------  SIGNUP  -------------------------------------------------------

                        ENTER USERNAME : SHRAVANI

                        ENTER PASSWORD : SHRAVANI

                        ENTER FULL NAME : SHR,J

                         Full Name contains an Invalid character...Enter again.
                        ENTER FULL NAME : SHRAVANI

                        ENTER ADDRESS : HYD

                        Invalid...The address should be in range of 5 to 30
                        ENTER ADDRESS : DELHI

                        Contact no: 123

                         Invalid...Contact must contain 10 digits.
                        Contact no: 12345567890

                         Invalid...Contact must contain 10 digits.
                        Contact no: 1234567890

                        ENTER NATIONALITY : INDIAN

                        ENTER EMAIL : MS@GMAIL.COM

                        ENTER DRIVING LICENSE NUMBER : 12345


--------------------------------------------  ACCOUNT SUCCESSFULLY CREATED  ------------------------------------------------
```



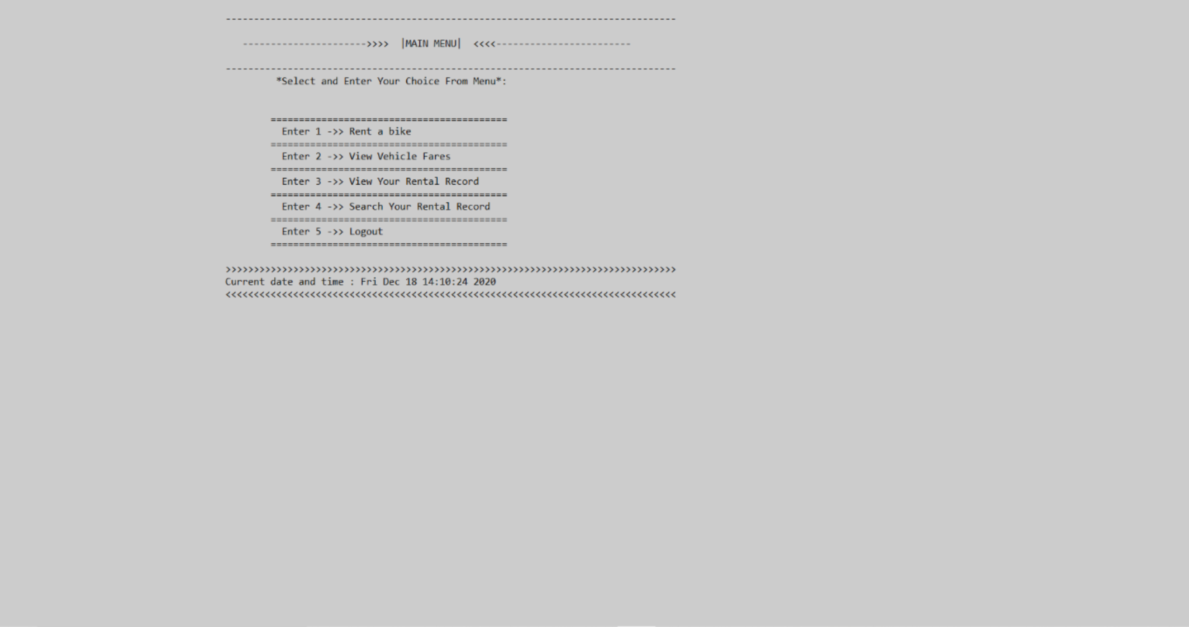
```
************************  LOGIN FORM  ************************


        ENTER USERNAME:- SHRAVANI,


        ENTER PASSWORD:- *********


                        USERNAME NOT FOUND!!
```



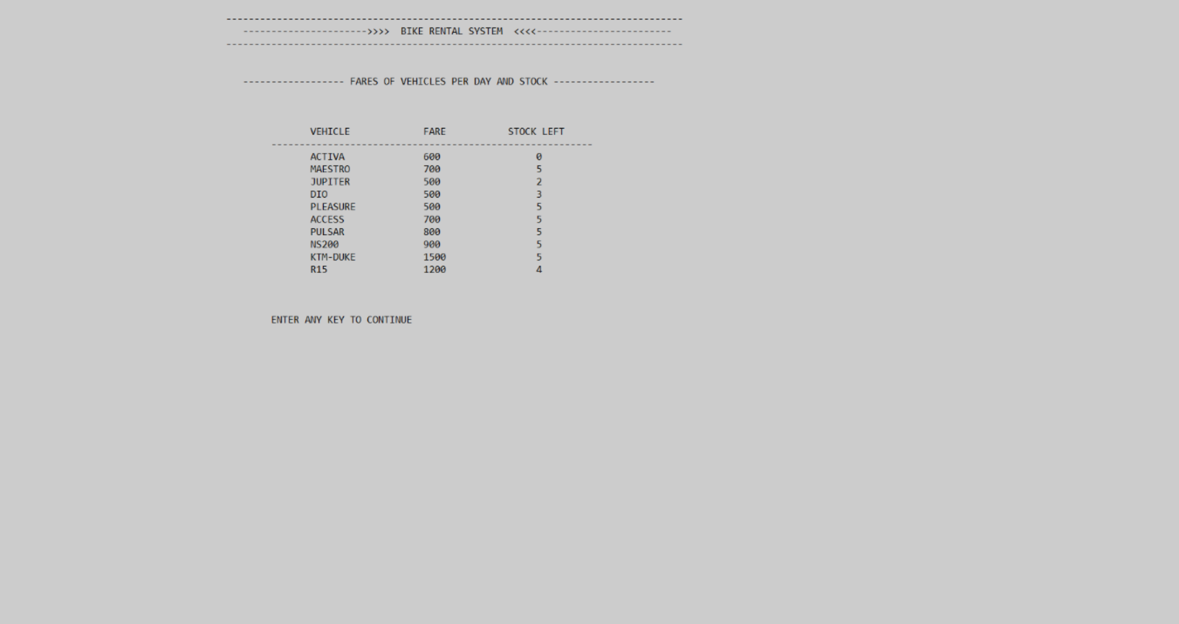
```
*********************** LOGIN FORM ***********************

        ENTER USERNAME:- SHRAVANI

        ENTER PASSWORD:- *****

                -----WRONG PASSWORD!!!-----

                    ----- TRY AGAIN -----
```



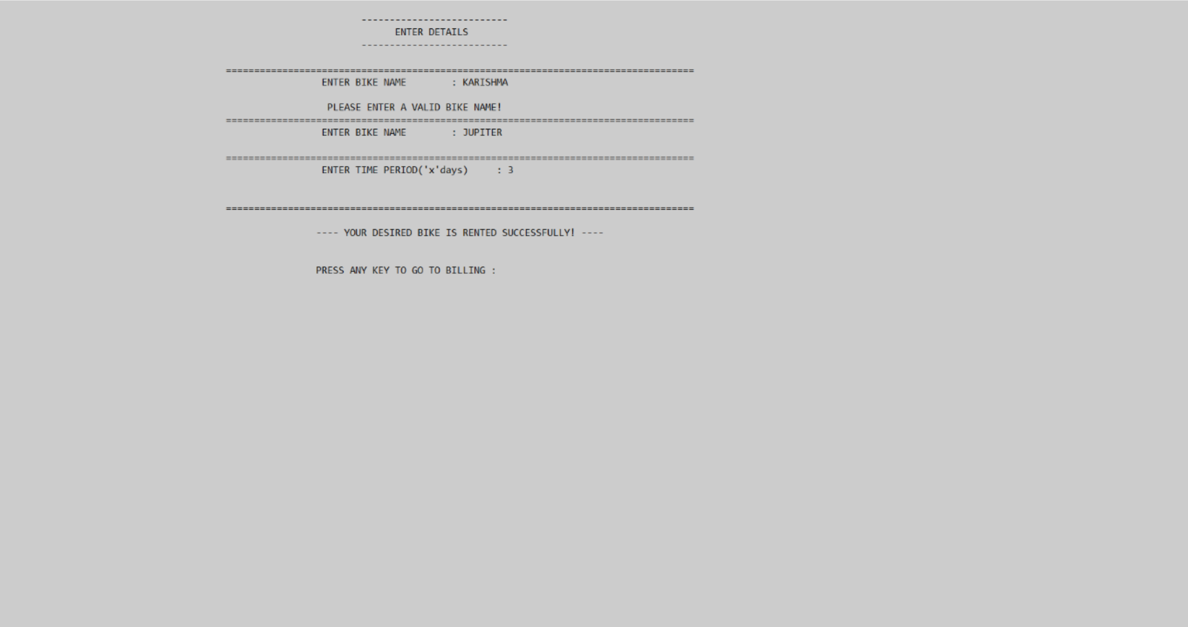
```
*********************** LOGIN FORM ***********************

        ENTER USERNAME:- SHRAVANI

        ENTER PASSWORD:- ********

              ---------- LOGIN SUCCESSFUL ----------
```



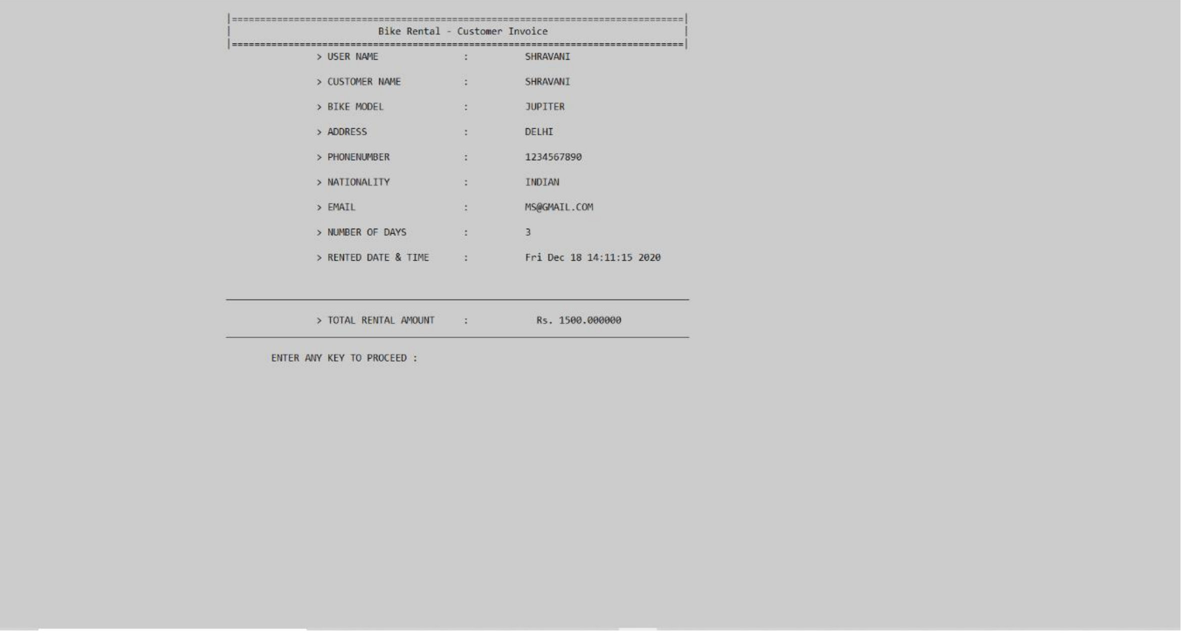
```
--------------------------------------------------------------------------------

   ---------------------->>>>  |MAIN MENU|  <<<<------------------------

--------------------------------------------------------------------------------
         *Select and Enter Your Choice From Menu*:


        ==========================================
          Enter 1 ->> Rent a bike
        ==========================================
          Enter 2 ->> View Vehicle Fares
        ==========================================
          Enter 3 ->> View Your Rental Record
        ==========================================
          Enter 4 ->> Search Your Rental Record
        ==========================================
          Enter 5 ->> Logout
        ==========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
Current date and time : Fri Dec 18 14:10:24 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```



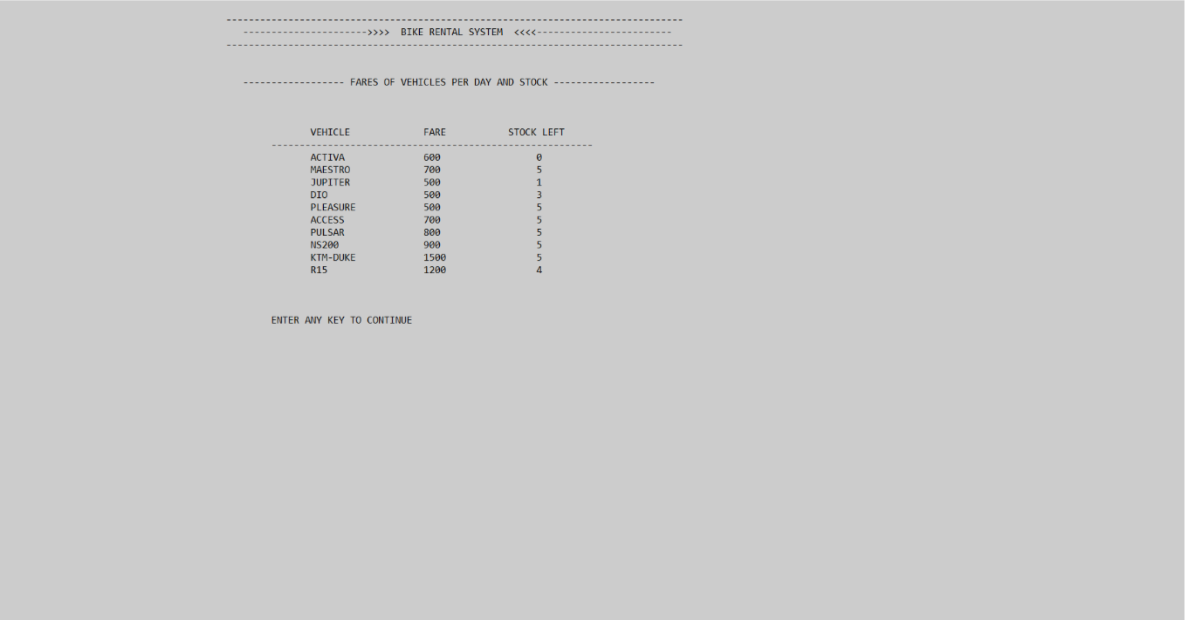
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------


   ------------------ FARES OF VEHICLES PER DAY AND STOCK ------------------


               VEHICLE             FARE           STOCK LEFT
        --------------------------------------------------------
               ACTIVA              600                 0
               MAESTRO             700                 5
               JUPITER             500                 2
               DIO                 500                 3
               PLEASURE            500                 5
               ACCESS              700                 5
               PULSAR              800                 5
               NS200               900                 5
               KTM-DUKE            1500                5
               R15                 1200                4


        ENTER ANY KEY TO CONTINUE
```



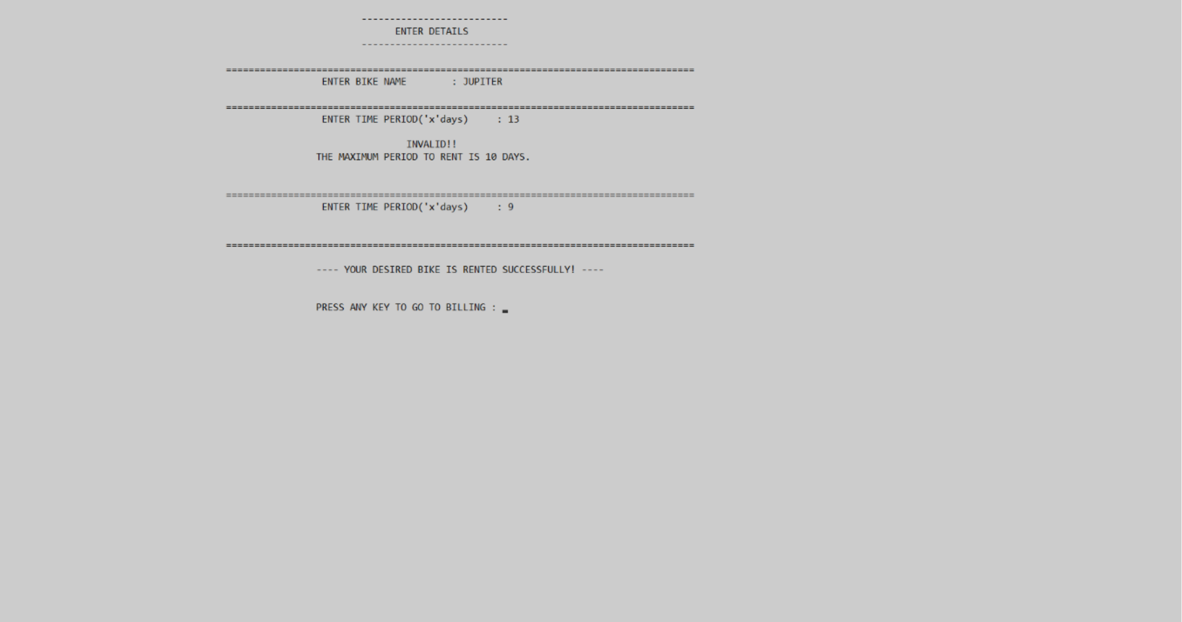
```
                         --------------------------
                               ENTER DETAILS
                         --------------------------

==================================================================================
                 ENTER BIKE NAME        : KARISHMA

                  PLEASE ENTER A VALID BIKE NAME!
==================================================================================
                 ENTER BIKE NAME        : JUPITER

==================================================================================
                 ENTER TIME PERIOD('x'days)     : 3


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

                ---- YOUR DESIRED BIKE IS RENTED SUCCESSFULLY! ----


                PRESS ANY KEY TO GO TO BILLING :
```



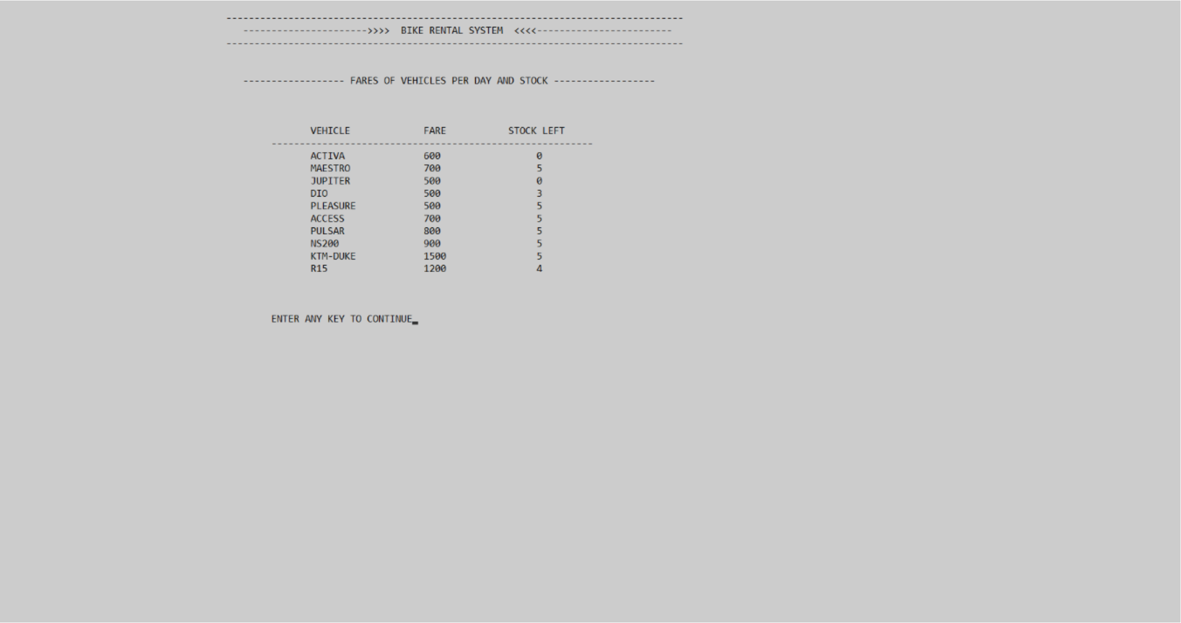
```
|================================================================================|
|                        Bike Rental - Customer Invoice                          |
|================================================================================|
                > USER NAME             :          SHRAVANI

                > CUSTOMER NAME         :          SHRAVANI

                > BIKE MODEL            :          JUPITER

                > ADDRESS               :          DELHI

                > PHONENUMBER           :          1234567890

                > NATIONALITY           :          INDIAN

                > EMAIL                 :          MS@GMAIL.COM

                > NUMBER OF DAYS        :          3

                > RENTED DATE & TIME    :          Fri Dec 18 14:11:15 2020


__________________________________________________________________________________

                > TOTAL RENTAL AMOUNT   :            Rs. 1500.000000
__________________________________________________________________________________

        ENTER ANY KEY TO PROCEED :
```



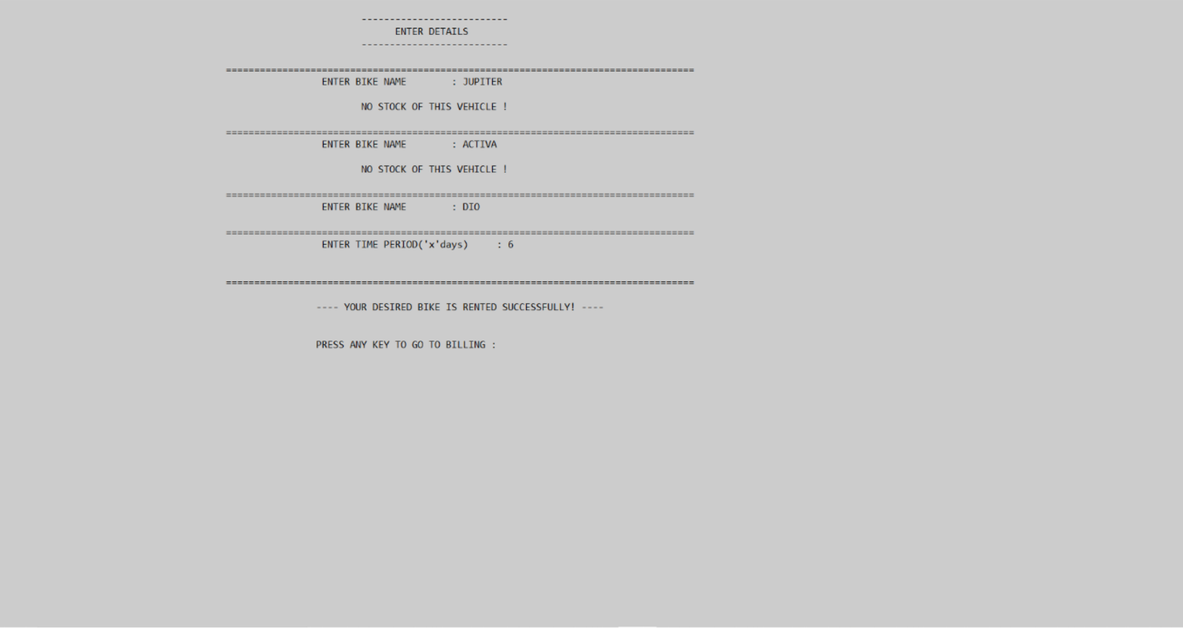
```
--------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<----------------------
--------------------------------------------------------------------------------


   ----------------- FARES OF VEHICLES PER DAY AND STOCK ------------------


              VEHICLE            FARE          STOCK LEFT
        ---------------------------------------------------------
              ACTIVA             600               0
              MAESTRO            700               5
              JUPITER            500               1
              DIO                500               3
              PLEASURE           500               5
              ACCESS             700               5
              PULSAR             800               5
              NS200              900               5
              KTM-DUKE           1500              5
              R15                1200              4


        ENTER ANY KEY TO CONTINUE
```



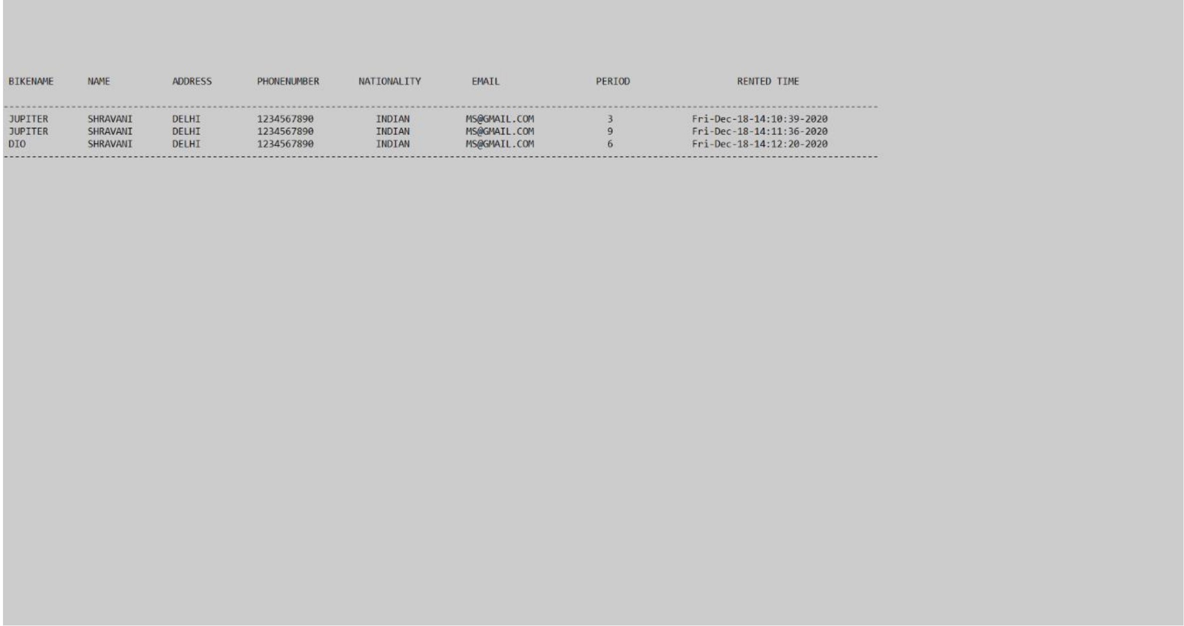
```
                        -------------------------
                              ENTER DETAILS
                        -------------------------

==================================================================================
                 ENTER BIKE NAME        : JUPITER

==================================================================================
                 ENTER TIME PERIOD('x'days)     : 13

                               INVALID!!
                THE MAXIMUM PERIOD TO RENT IS 10 DAYS.


==================================================================================
                 ENTER TIME PERIOD('x'days)     : 9


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

                ---- YOUR DESIRED BIKE IS RENTED SUCCESSFULLY! ----


                PRESS ANY KEY TO GO TO BILLING : _
```



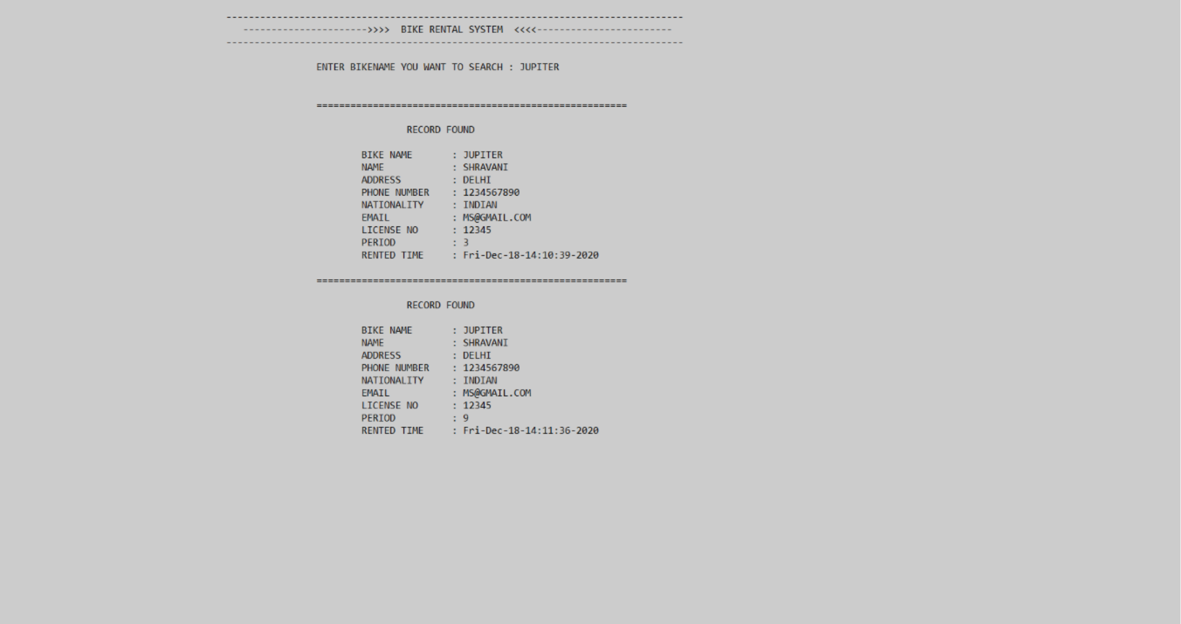
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------


   ------------------ FARES OF VEHICLES PER DAY AND STOCK ------------------



               VEHICLE             FARE           STOCK LEFT
        ---------------------------------------------------------
               ACTIVA              600                 0
               MAESTRO             700                 5
               JUPITER             500                 0
               DIO                 500                 3
               PLEASURE            500                 5
               ACCESS              700                 5
               PULSAR              800                 5
               NS200               900                 5
               KTM-DUKE            1500                5
               R15                 1200                4


        ENTER ANY KEY TO CONTINUE_
```



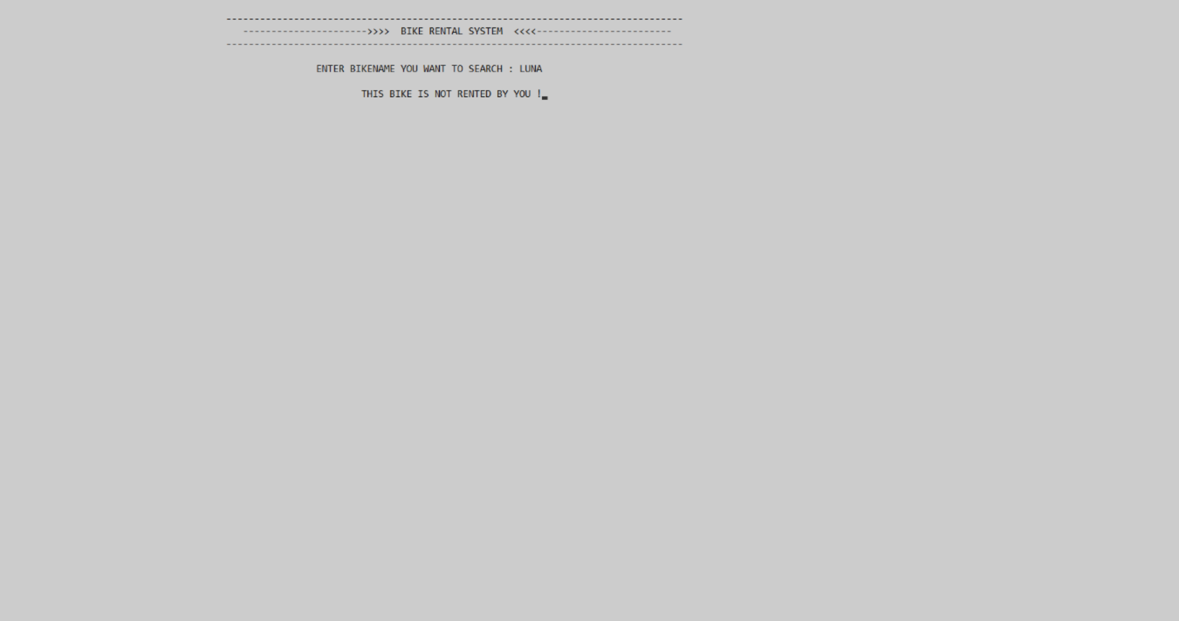
```
                        --------------------------
                              ENTER DETAILS
                        --------------------------

==================================================================================
                 ENTER BIKE NAME        : JUPITER

                        NO STOCK OF THIS VEHICLE !

==================================================================================
                 ENTER BIKE NAME        : ACTIVA

                        NO STOCK OF THIS VEHICLE !

==================================================================================
                 ENTER BIKE NAME        : DIO

==================================================================================
                 ENTER TIME PERIOD('x'days)     : 6


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

                ---- YOUR DESIRED BIKE IS RENTED SUCCESSFULLY! ----


                PRESS ANY KEY TO GO TO BILLING :
```



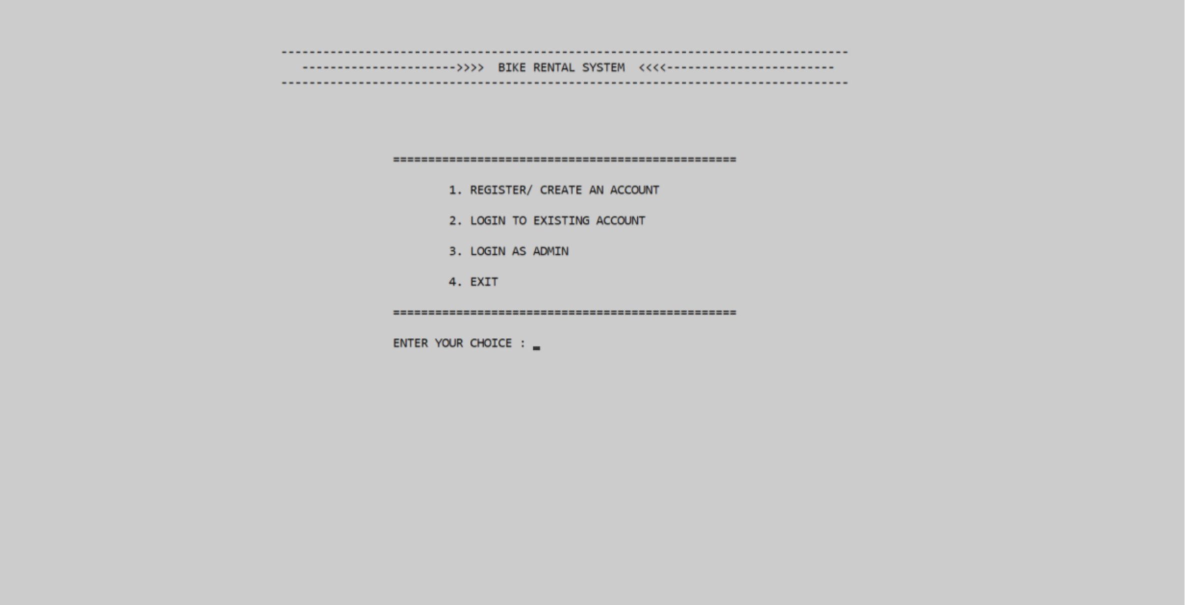
```
BIKENAME     NAME         ADDRESS      PHONENUMBER      NATIONALITY       EMAIL              PERIOD               RENTED TIME

-------------------------------------------------------------------------------------------------------------------------------
JUPITER      SHRAVANI     DELHI        1234567890         INDIAN        MS@GMAIL.COM           3            Fri-Dec-18-14:10:39-2020
JUPITER      SHRAVANI     DELHI        1234567890         INDIAN        MS@GMAIL.COM           9            Fri-Dec-18-14:11:36-2020
DIO          SHRAVANI     DELHI        1234567890         INDIAN        MS@GMAIL.COM           6            Fri-Dec-18-14:12:20-2020
-------------------------------------------------------------------------------------------------------------------------------
```



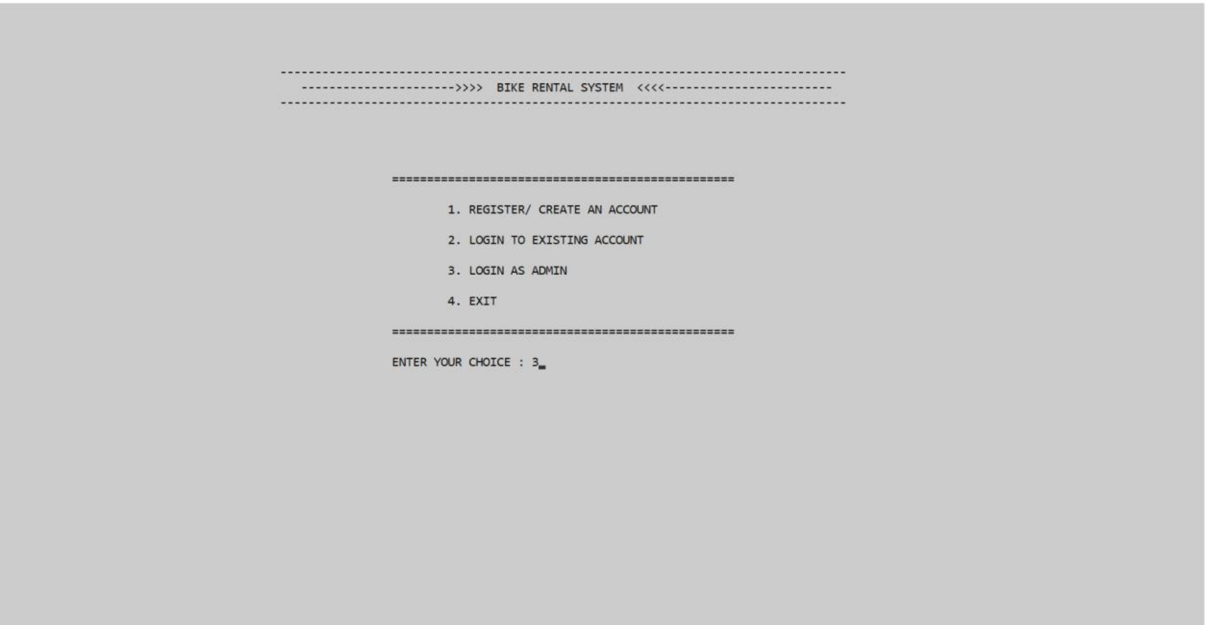
```
--------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<-----------------------
--------------------------------------------------------------------------------

                ENTER BIKENAME YOU WANT TO SEARCH : JUPITER


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

                                RECORD FOUND

                        BIKE NAME        : JUPITER
                        NAME             : SHRAVANI
                        ADDRESS          : DELHI
                        PHONE NUMBER     : 1234567890
                        NATIONALITY      : INDIAN
                        EMAIL            : MS@GMAIL.COM
                        LICENSE NO       : 12345
                        PERIOD           : 3
                        RENTED TIME      : Fri-Dec-18-14:10:39-2020

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

                                RECORD FOUND

                        BIKE NAME        : JUPITER
                        NAME             : SHRAVANI
                        ADDRESS          : DELHI
                        PHONE NUMBER     : 1234567890
                        NATIONALITY      : INDIAN
                        EMAIL            : MS@GMAIL.COM
                        LICENSE NO       : 12345
                        PERIOD           : 9
                        RENTED TIME      : Fri-Dec-18-14:11:36-2020
```



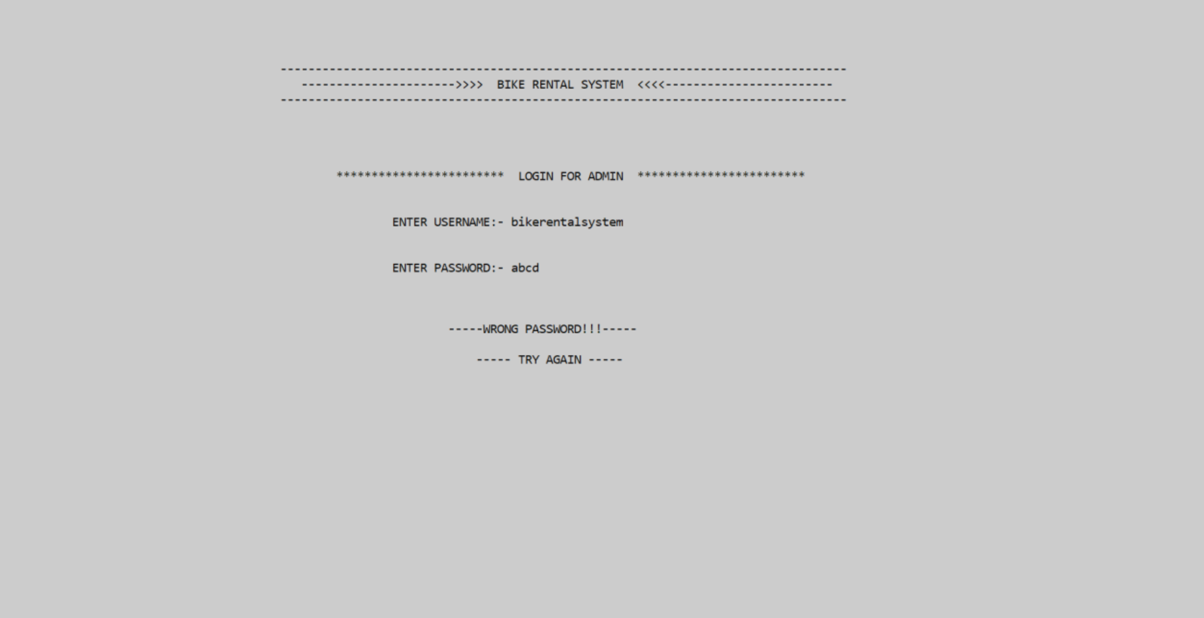
```
--------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<-----------------------
--------------------------------------------------------------------------------

                ENTER BIKENAME YOU WANT TO SEARCH : LUNA

                        THIS BIKE IS NOT RENTED BY YOU !
```



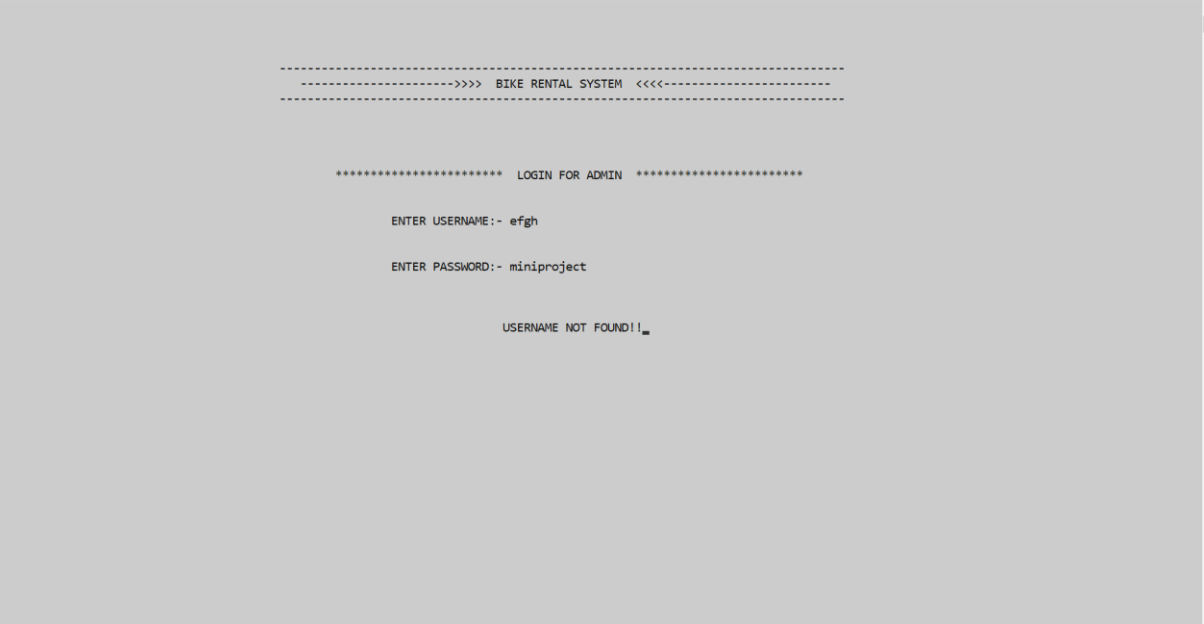
```
--------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<-----------------------
--------------------------------------------------------------------------------



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

                        1. REGISTER/ CREATE AN ACCOUNT

                        2. LOGIN TO EXISTING ACCOUNT

                        3. LOGIN AS ADMIN

                        4. EXIT

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

                ENTER YOUR CHOICE : 
```



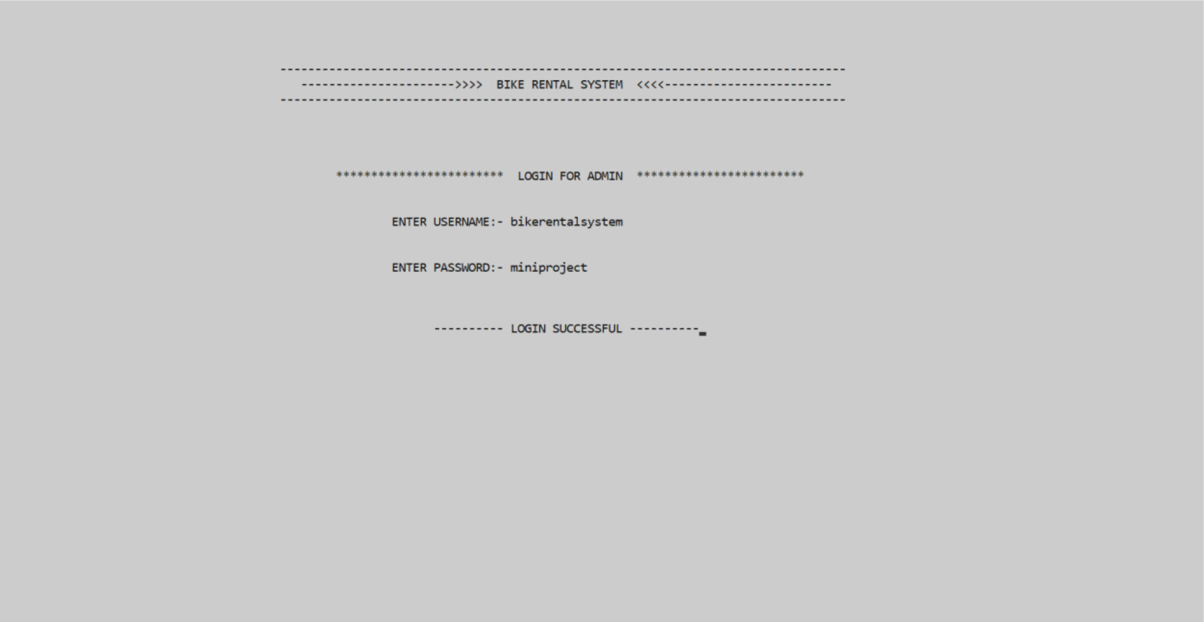
```
-------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
-------------------------------------------------------------------------------



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

                        1. REGISTER/ CREATE AN ACCOUNT

                        2. LOGIN TO EXISTING ACCOUNT

                        3. LOGIN AS ADMIN

                        4. EXIT

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

                ENTER YOUR CHOICE : 3_
```



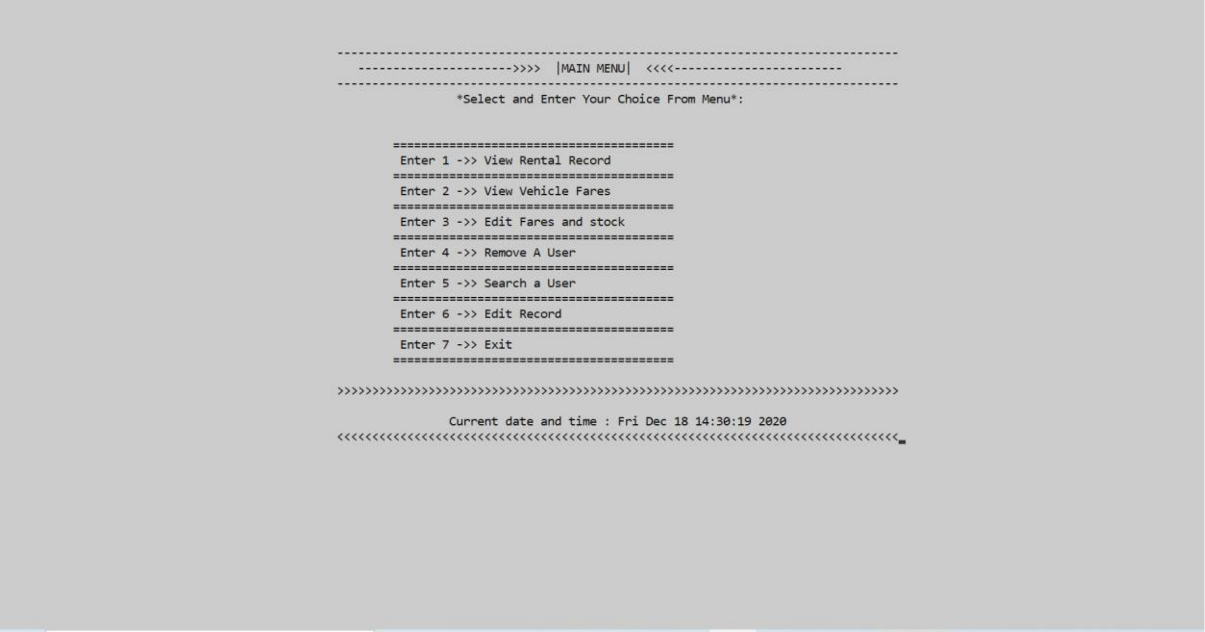
```
-------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
-------------------------------------------------------------------------------



        ************************  LOGIN FOR ADMIN  ************************

                ENTER USERNAME:- bikerentalsystem


                ENTER PASSWORD:- abcd


                        -----WRONG PASSWORD!!!-----

                            ----- TRY AGAIN -----
```



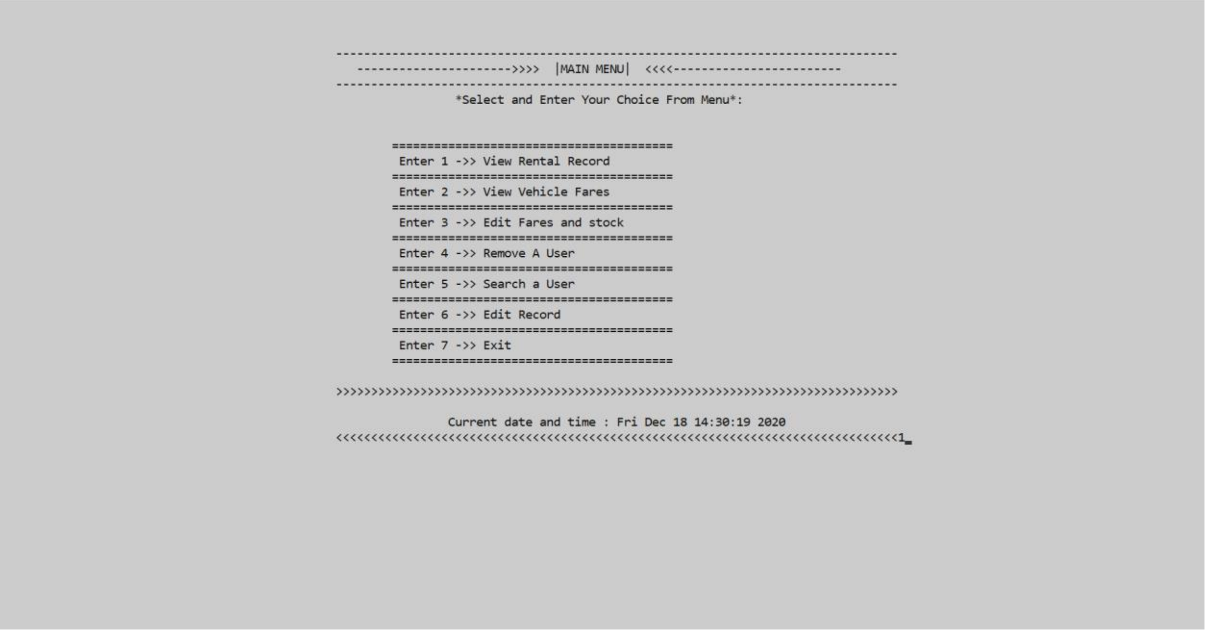
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------



        ************************  LOGIN FOR ADMIN  ************************

                ENTER USERNAME:- efgh

                ENTER PASSWORD:- miniproject

                                USERNAME NOT FOUND!!_
```



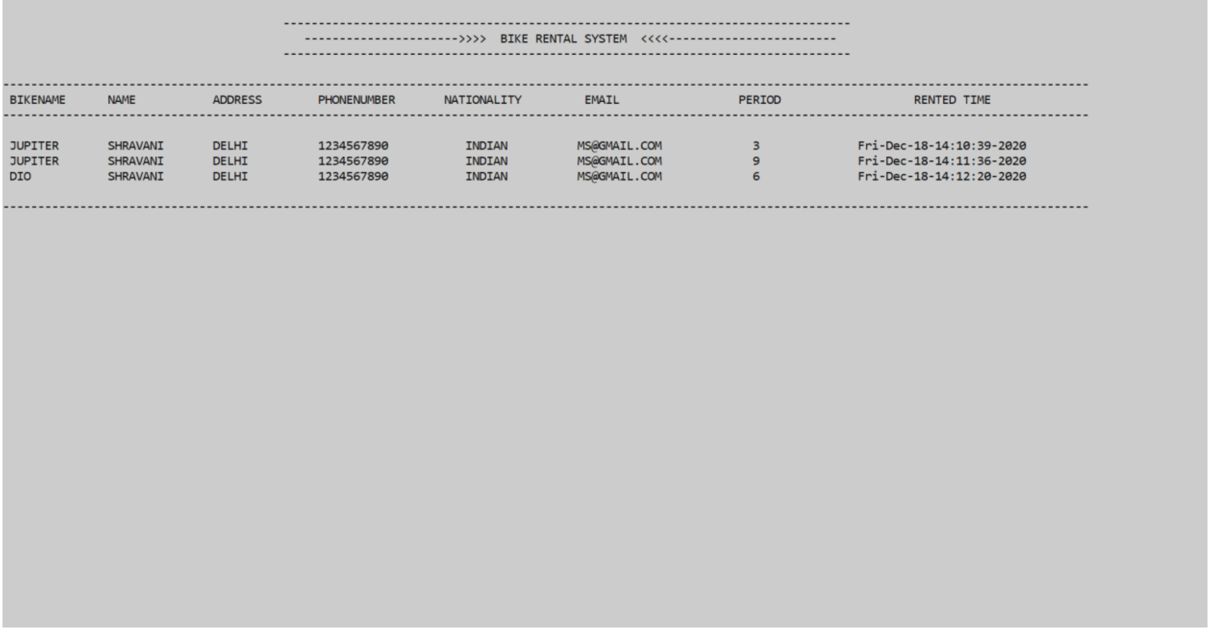
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------



        ************************  LOGIN FOR ADMIN  ************************

                ENTER USERNAME:- bikerentalsystem

                ENTER PASSWORD:- miniproject

                      ---------- LOGIN SUCCESSFUL ----------_
```



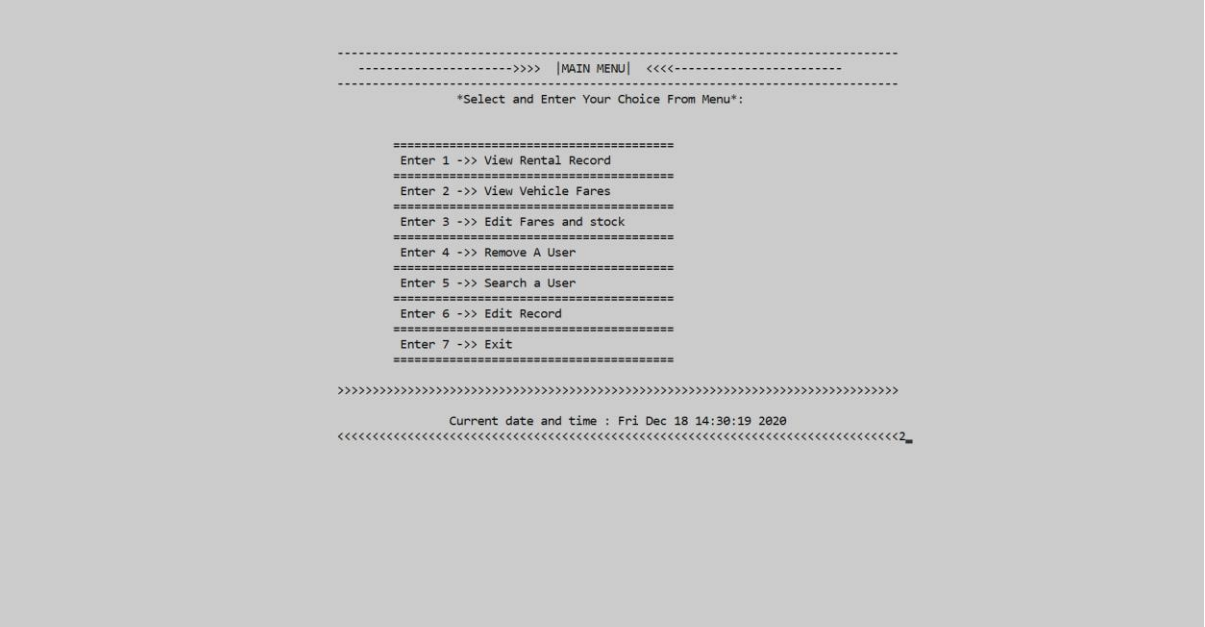
```
-------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<------------------------
-------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:30:19 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<_
```



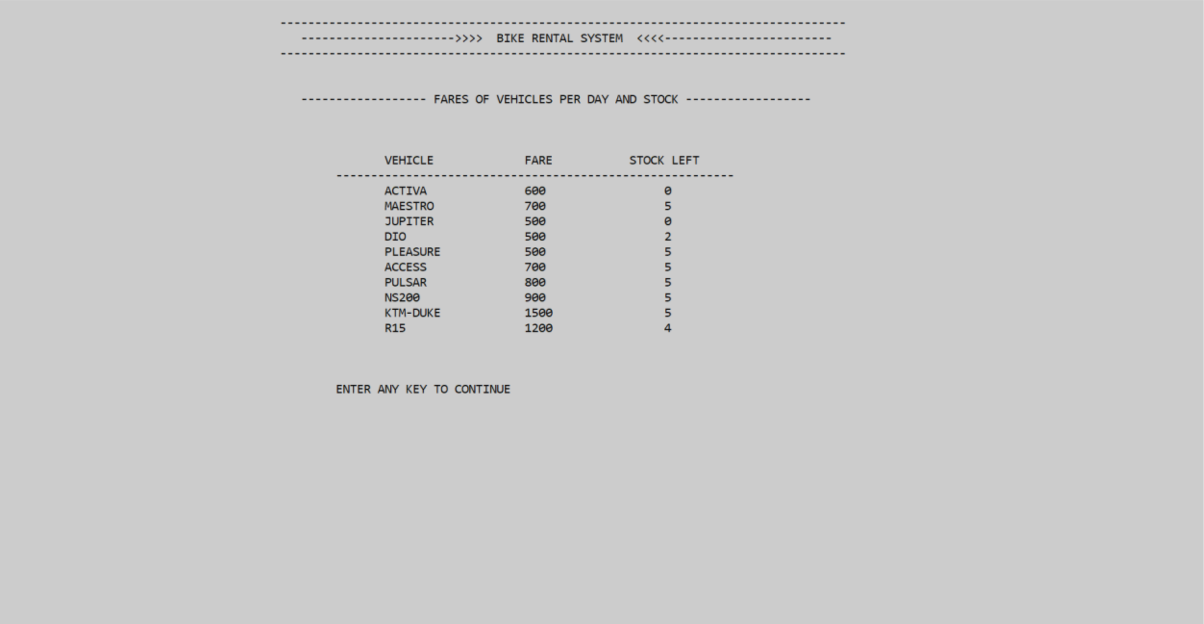
```
-------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<------------------------
-------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:30:19 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<1_
```



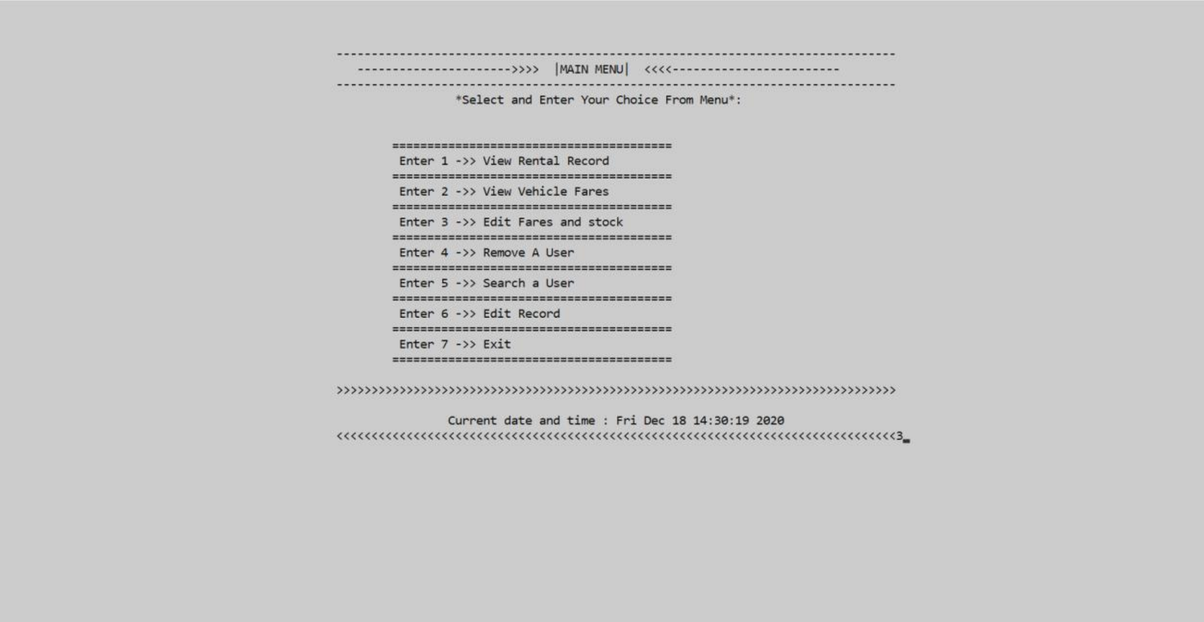
```
                                   ----------------------------------------------------------------------------------
                                      ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<-------------------------
                                   ----------------------------------------------------------------------------------

------------------------------------------------------------------------------------------------------------------------------------------------------------------
BIKENAME       NAME           ADDRESS        PHONENUMBER       NATIONALITY        EMAIL               PERIOD                    RENTED TIME
------------------------------------------------------------------------------------------------------------------------------------------------------------------

JUPITER        SHRAVANI       DELHI          1234567890           INDIAN         MS@GMAIL.COM           3               Fri-Dec-18-14:10:39-2020
JUPITER        SHRAVANI       DELHI          1234567890           INDIAN         MS@GMAIL.COM           9               Fri-Dec-18-14:11:36-2020
DIO            SHRAVANI       DELHI          1234567890           INDIAN         MS@GMAIL.COM           6               Fri-Dec-18-14:12:20-2020

------------------------------------------------------------------------------------------------------------------------------------------------------------------
```



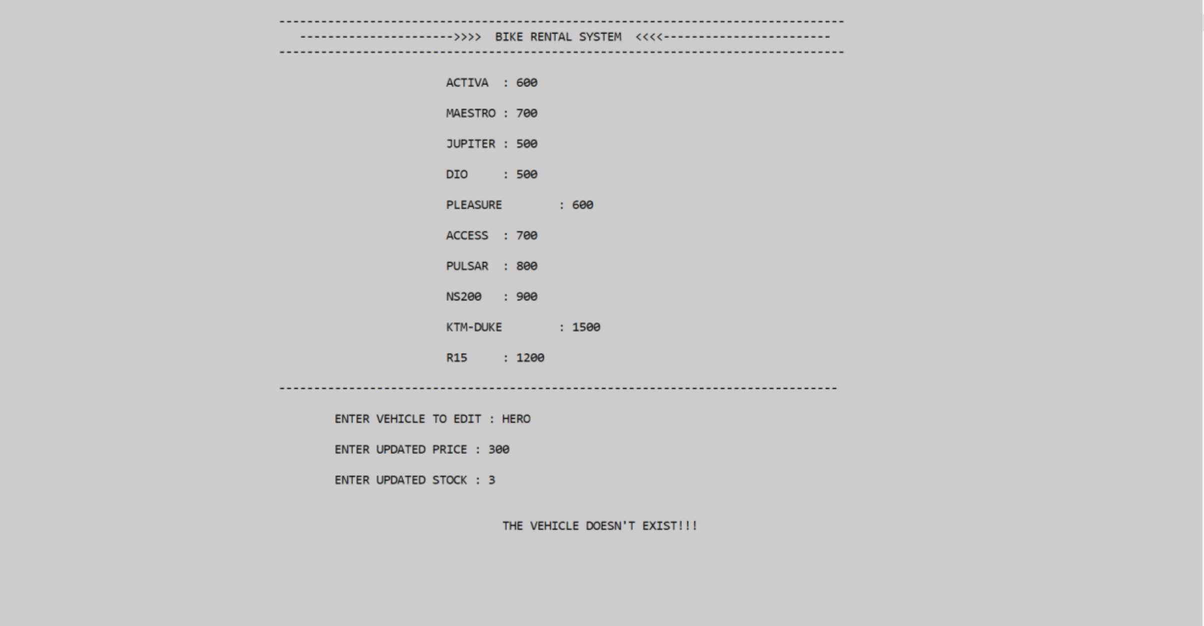
```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<-------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:30:19 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<2
```



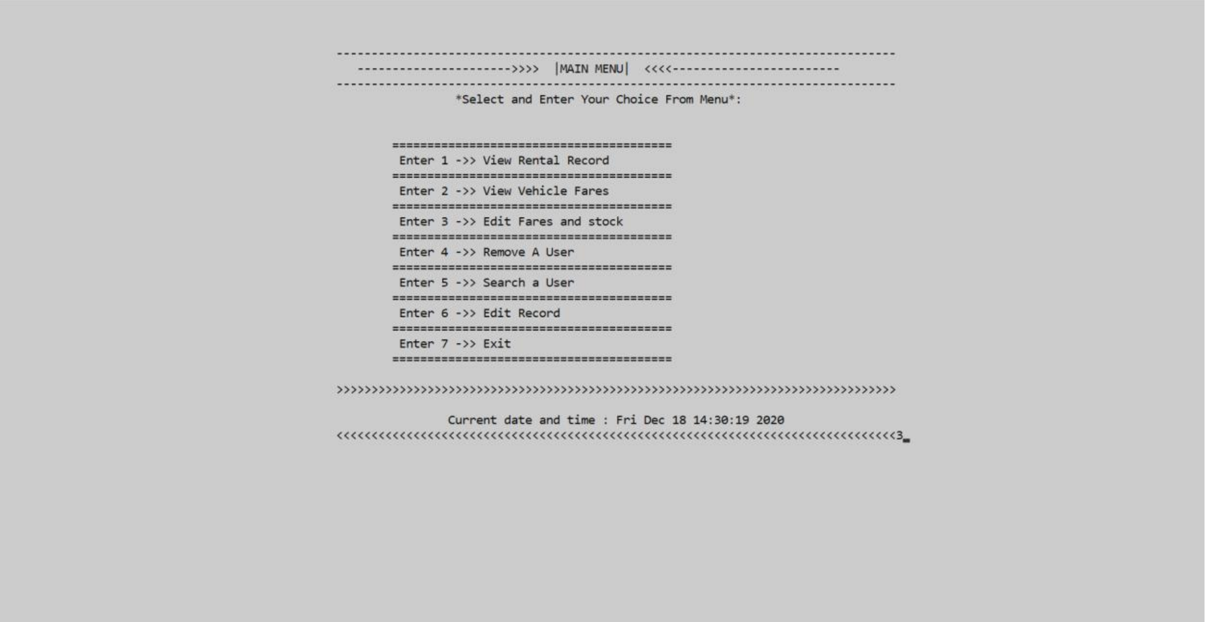
```
--------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<-----------------------
--------------------------------------------------------------------------------


   ----------------- FARES OF VEHICLES PER DAY AND STOCK -----------------



           VEHICLE             FARE          STOCK LEFT
        ---------------------------------------------------------
           ACTIVA              600                0
           MAESTRO             700                5
           JUPITER             500                0
           DIO                 500                2
           PLEASURE            500                5
           ACCESS              700                5
           PULSAR              800                5
           NS200               900                5
           KTM-DUKE            1500               5
           R15                 1200               4



        ENTER ANY KEY TO CONTINUE
```



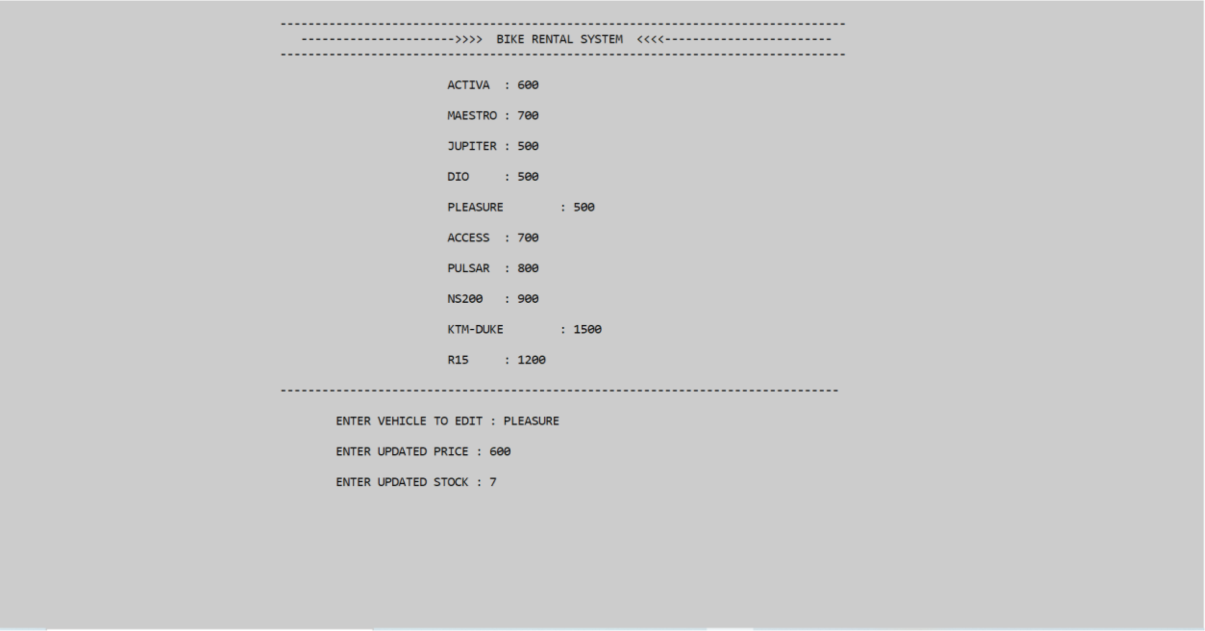
```
--------------------------------------------------------------------------------
   --------------------->>>>  |MAIN MENU|  <<<<-----------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:30:19 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<3_
```



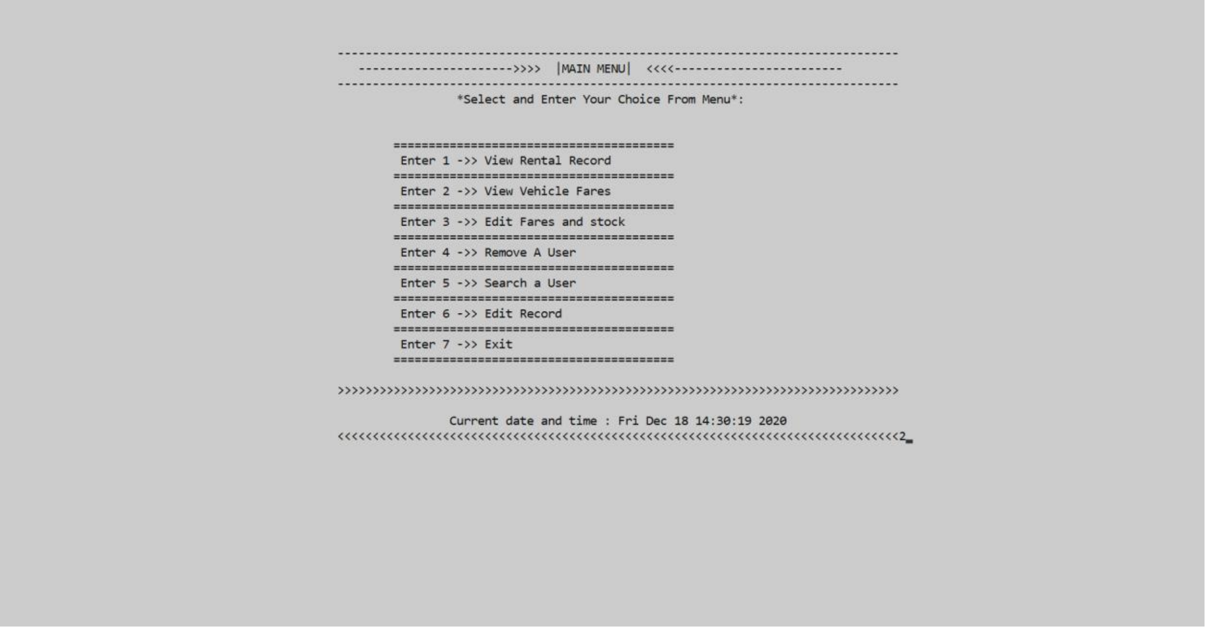
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------

                        ACTIVA  : 600

                        MAESTRO : 700

                        JUPITER : 500

                        DIO     : 500

                        PLEASURE        : 600

                        ACCESS  : 700

                        PULSAR  : 800

                        NS200   : 900

                        KTM-DUKE        : 1500

                        R15     : 1200

-------------------------------------------------------------------------------

        ENTER VEHICLE TO EDIT : HERO

        ENTER UPDATED PRICE : 300

        ENTER UPDATED STOCK : 3

                                THE VEHICLE DOESN'T EXIST!!!
```



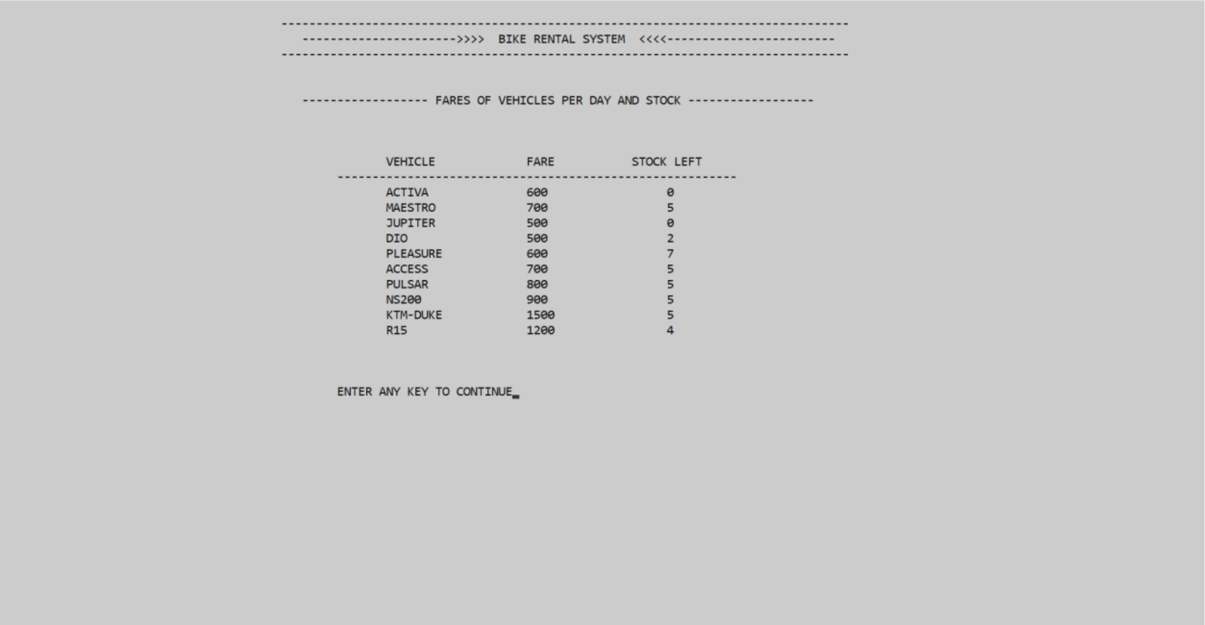
```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:30:19 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<3_
```



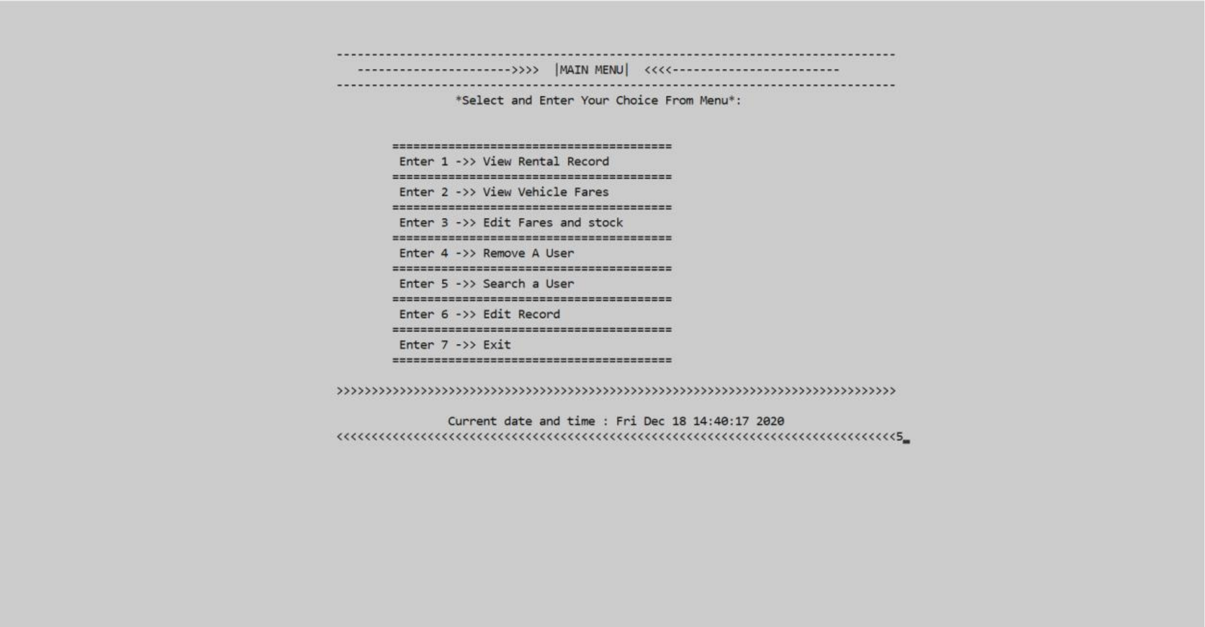
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------

                        ACTIVA  : 600

                        MAESTRO : 700

                        JUPITER : 500

                        DIO     : 500

                        PLEASURE        : 500

                        ACCESS  : 700

                        PULSAR  : 800

                        NS200   : 900

                        KTM-DUKE        : 1500

                        R15     : 1200

-------------------------------------------------------------------------------

        ENTER VEHICLE TO EDIT : PLEASURE

        ENTER UPDATED PRICE : 600

        ENTER UPDATED STOCK : 7
```



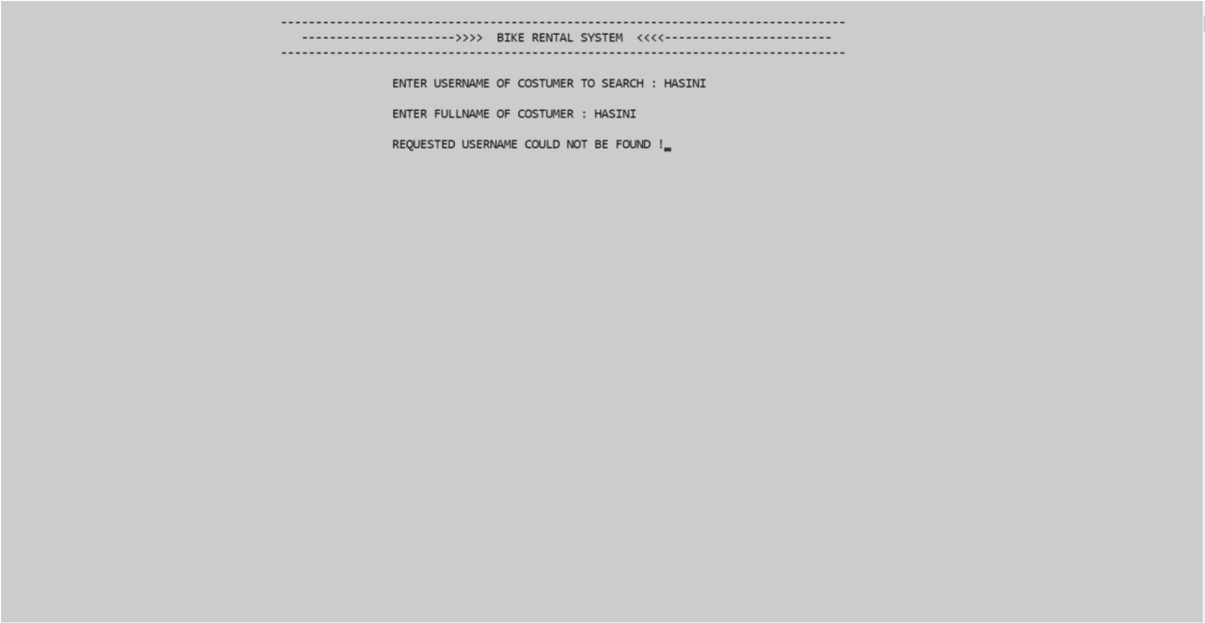
```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:30:19 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<2
```



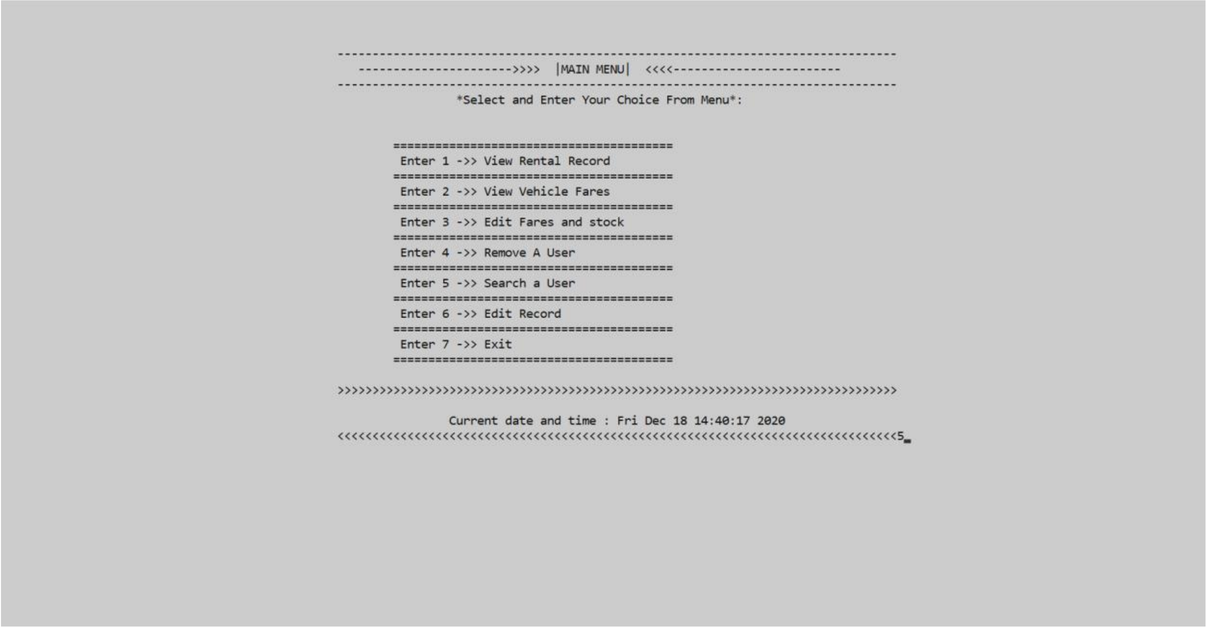
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------


   ----------------- FARES OF VEHICLES PER DAY AND STOCK ------------------


               VEHICLE             FARE           STOCK LEFT
        ---------------------------------------------------------
               ACTIVA              600                 0
               MAESTRO             700                 5
               JUPITER             500                 0
               DIO                 500                 2
               PLEASURE            600                 7
               ACCESS              700                 5
               PULSAR              800                 5
               NS200               900                 5
               KTM-DUKE            1500                5
               R15                 1200                4


        ENTER ANY KEY TO CONTINUE_
```



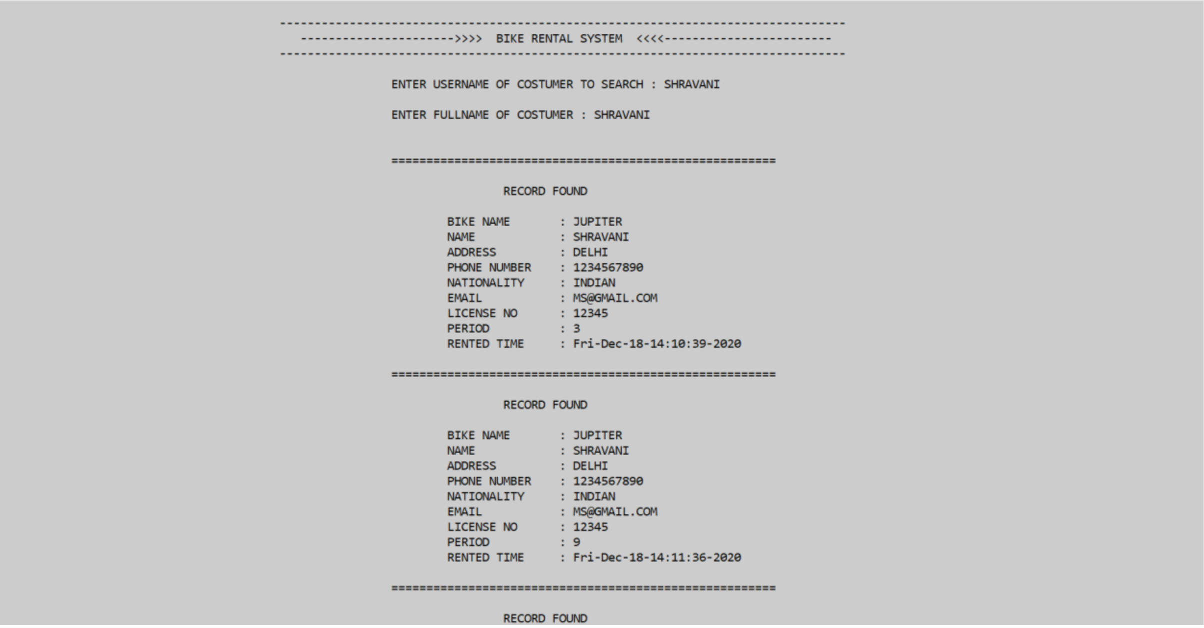
```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:40:17 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<5_
```



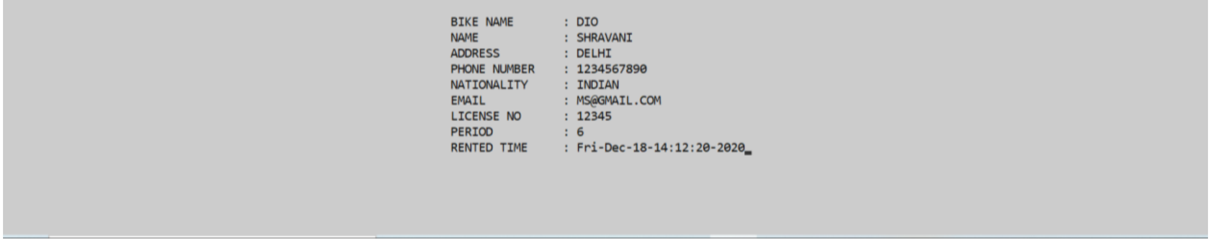
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<-------------------------
--------------------------------------------------------------------------------

                ENTER USERNAME OF COSTUMER TO SEARCH : HASINI

                ENTER FULLNAME OF COSTUMER : HASINI

                REQUESTED USERNAME COULD NOT BE FOUND !_
```



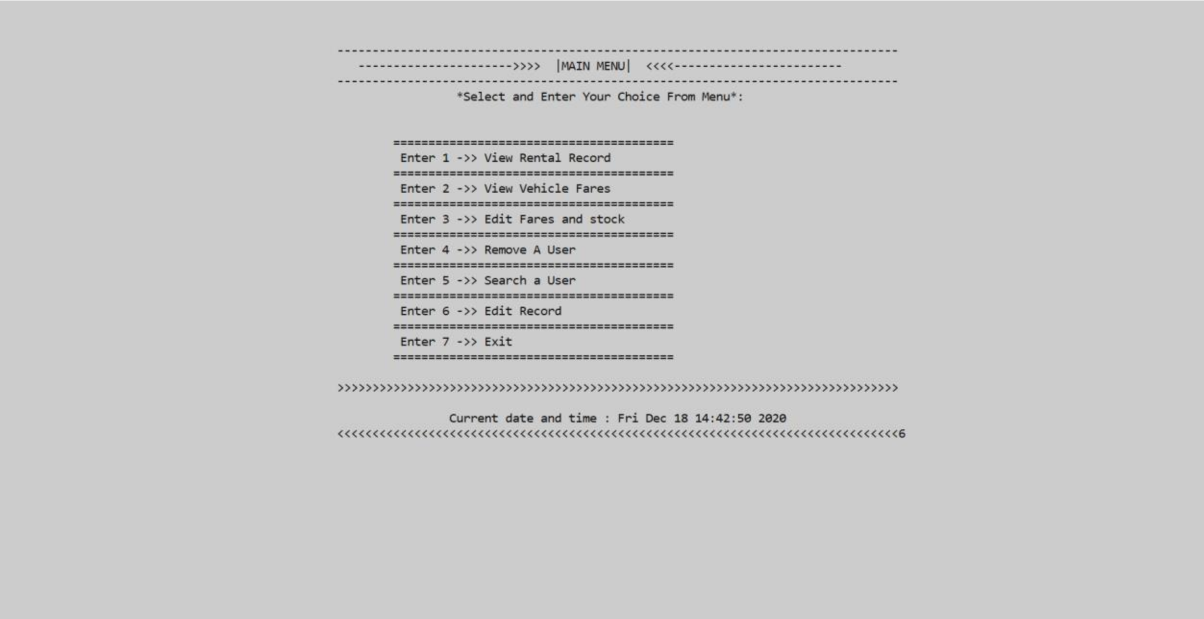
```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<-------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:40:17 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<5_
```



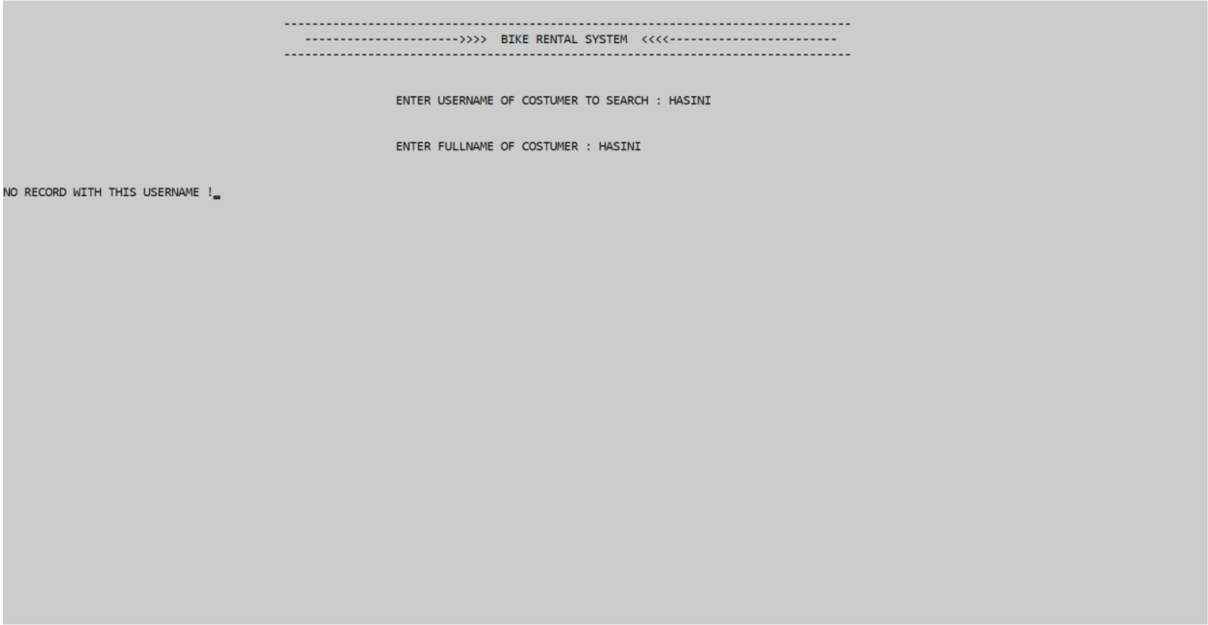
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------

                ENTER USERNAME OF COSTUMER TO SEARCH : SHRAVANI

                ENTER FULLNAME OF COSTUMER : SHRAVANI


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

                                RECORD FOUND

                        BIKE NAME       : JUPITER
                        NAME            : SHRAVANI
                        ADDRESS         : DELHI
                        PHONE NUMBER    : 1234567890
                        NATIONALITY     : INDIAN
                        EMAIL           : MS@GMAIL.COM
                        LICENSE NO      : 12345
                        PERIOD          : 3
                        RENTED TIME     : Fri-Dec-18-14:10:39-2020

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

                                RECORD FOUND

                        BIKE NAME       : JUPITER
                        NAME            : SHRAVANI
                        ADDRESS         : DELHI
                        PHONE NUMBER    : 1234567890
                        NATIONALITY     : INDIAN
                        EMAIL           : MS@GMAIL.COM
                        LICENSE NO      : 12345
                        PERIOD          : 9
                        RENTED TIME     : Fri-Dec-18-14:11:36-2020

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

                                RECORD FOUND
```



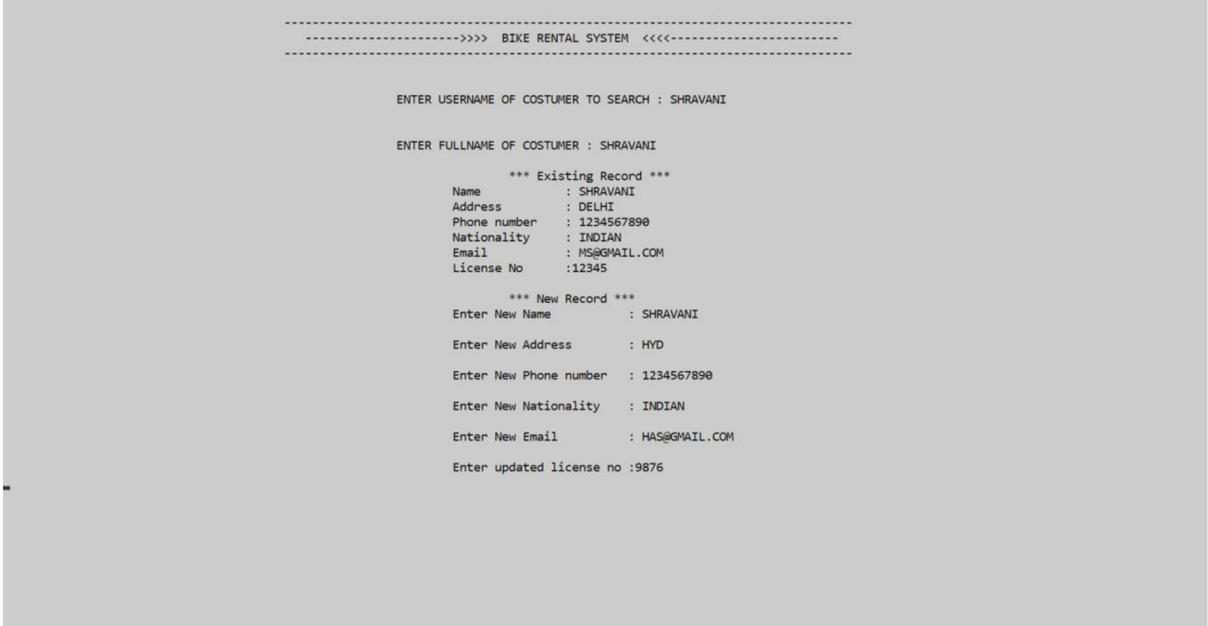
```
                        BIKE NAME       : DIO
                        NAME            : SHRAVANI
                        ADDRESS         : DELHI
                        PHONE NUMBER    : 1234567890
                        NATIONALITY     : INDIAN
                        EMAIL           : MS@GMAIL.COM
                        LICENSE NO      : 12345
                        PERIOD          : 6
                        RENTED TIME     : Fri-Dec-18-14:12:20-2020_
```



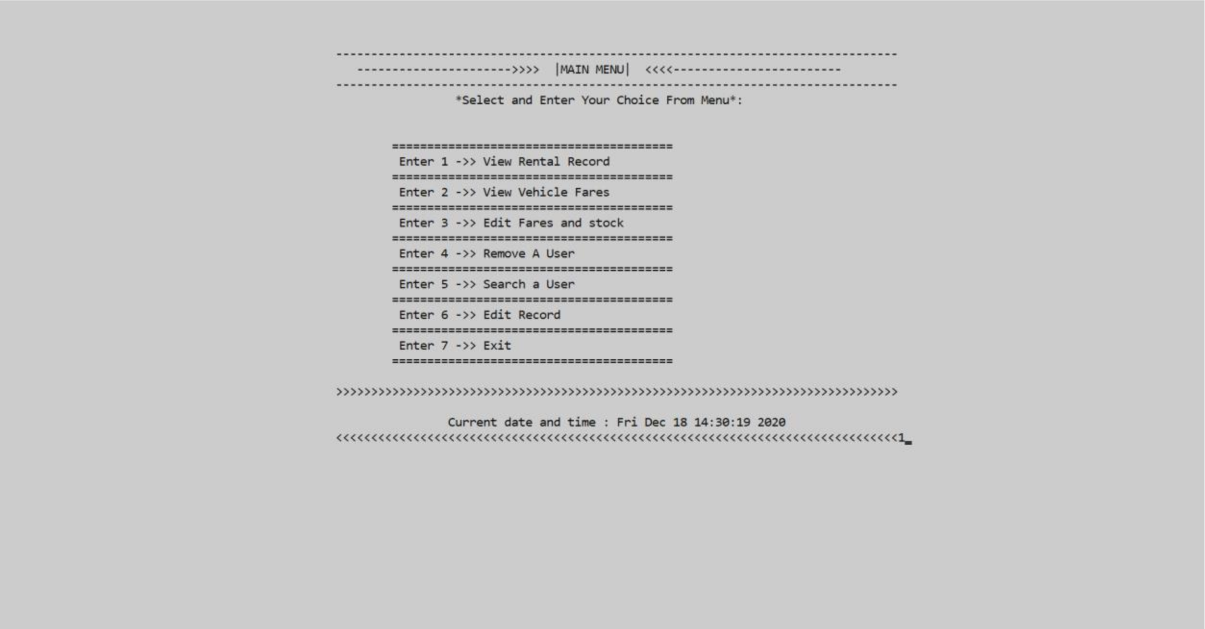
```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:42:50 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<6
```



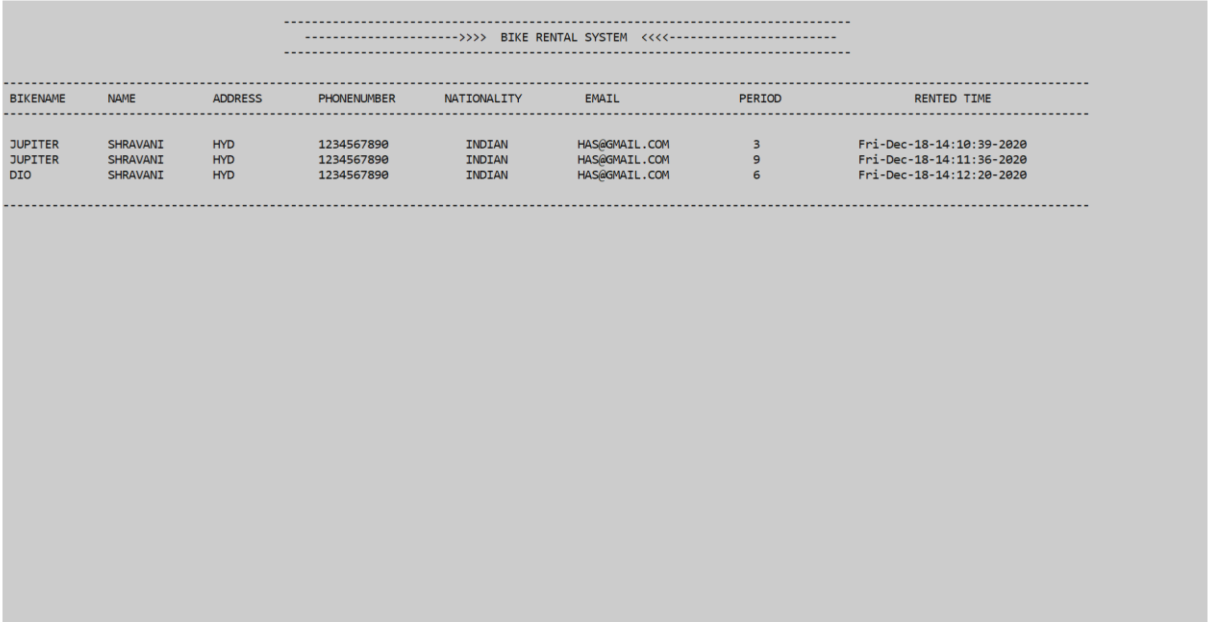
```
                                        --------------------------------------------------------------------------------
                                           ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
                                        --------------------------------------------------------------------------------


                                                        ENTER USERNAME OF COSTUMER TO SEARCH : HASINI


                                                        ENTER FULLNAME OF COSTUMER : HASINI


NO RECORD WITH THIS USERNAME !_
```



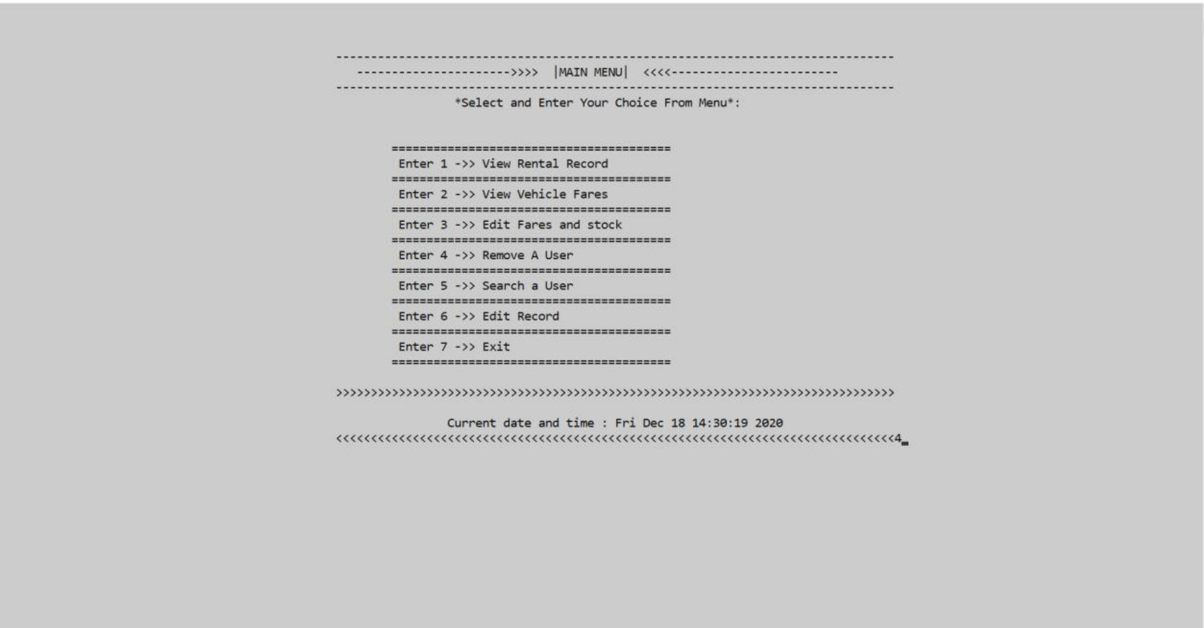
```
                                        --------------------------------------------------------------------------------
                                           ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
                                        --------------------------------------------------------------------------------


                                                        ENTER USERNAME OF COSTUMER TO SEARCH : SHRAVANI


                                                        ENTER FULLNAME OF COSTUMER : SHRAVANI

                                                                        *** Existing Record ***
                                                                Name            : SHRAVANI
                                                                Address         : DELHI
                                                                Phone number    : 1234567890
                                                                Nationality     : INDIAN
                                                                Email           : MS@GMAIL.COM
                                                                License No      :12345

                                                                        *** New Record ***
                                                                Enter New Name           : SHRAVANI

                                                                Enter New Address        : HYD

                                                                Enter New Phone number   : 1234567890

                                                                Enter New Nationality    : INDIAN

                                                                Enter New Email          : HAS@GMAIL.COM

                                                                Enter updated license no :9876

_
```



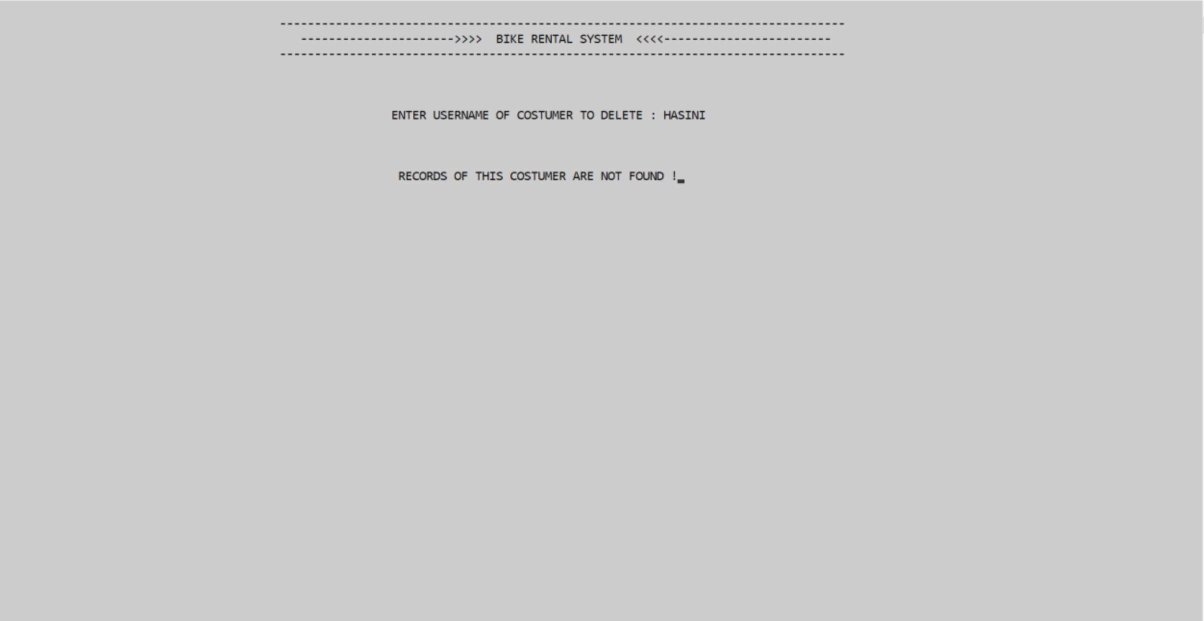
```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<-------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:30:19 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<1_
```



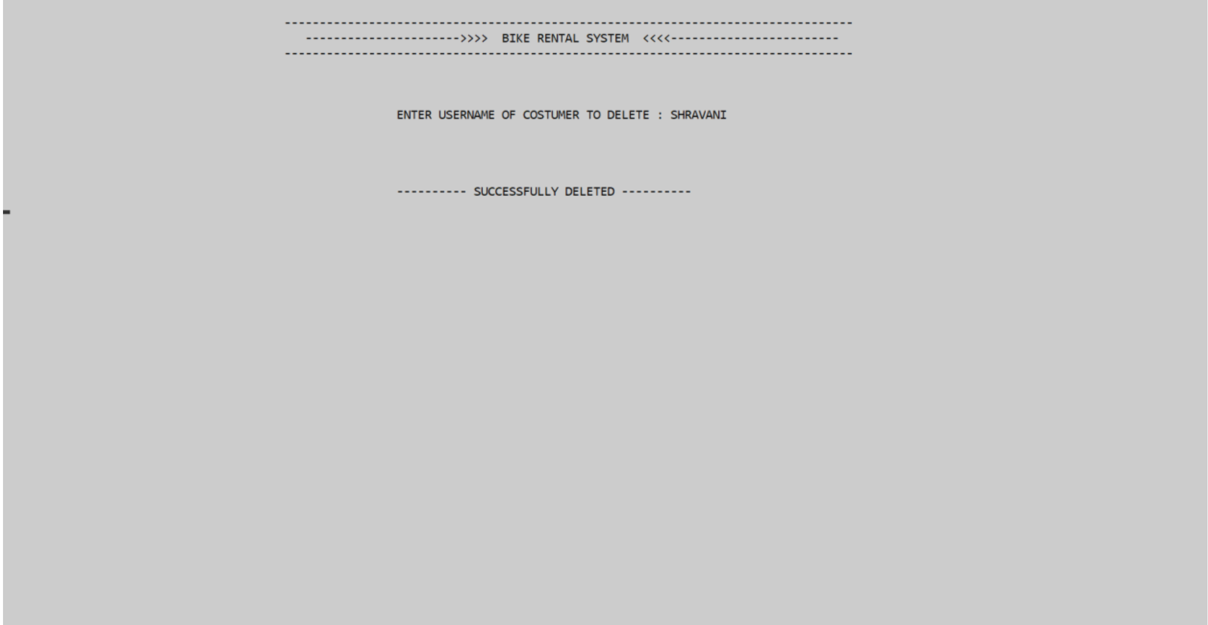
```
                                        --------------------------------------------------------------------------------
                                           ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<-------------------------
                                        --------------------------------------------------------------------------------

-----------------------------------------------------------------------------------------------------------------------------------------------------------
 BIKENAME      NAME          ADDRESS       PHONENUMBER       NATIONALITY        EMAIL                 PERIOD                  RENTED TIME
-----------------------------------------------------------------------------------------------------------------------------------------------------------

 JUPITER       SHRAVANI      HYD           1234567890           INDIAN        HAS@GMAIL.COM              3              Fri-Dec-18-14:10:39-2020
 JUPITER       SHRAVANI      HYD           1234567890           INDIAN        HAS@GMAIL.COM              9              Fri-Dec-18-14:11:36-2020
 DIO           SHRAVANI      HYD           1234567890           INDIAN        HAS@GMAIL.COM              6              Fri-Dec-18-14:12:20-2020

-----------------------------------------------------------------------------------------------------------------------------------------------------------
```



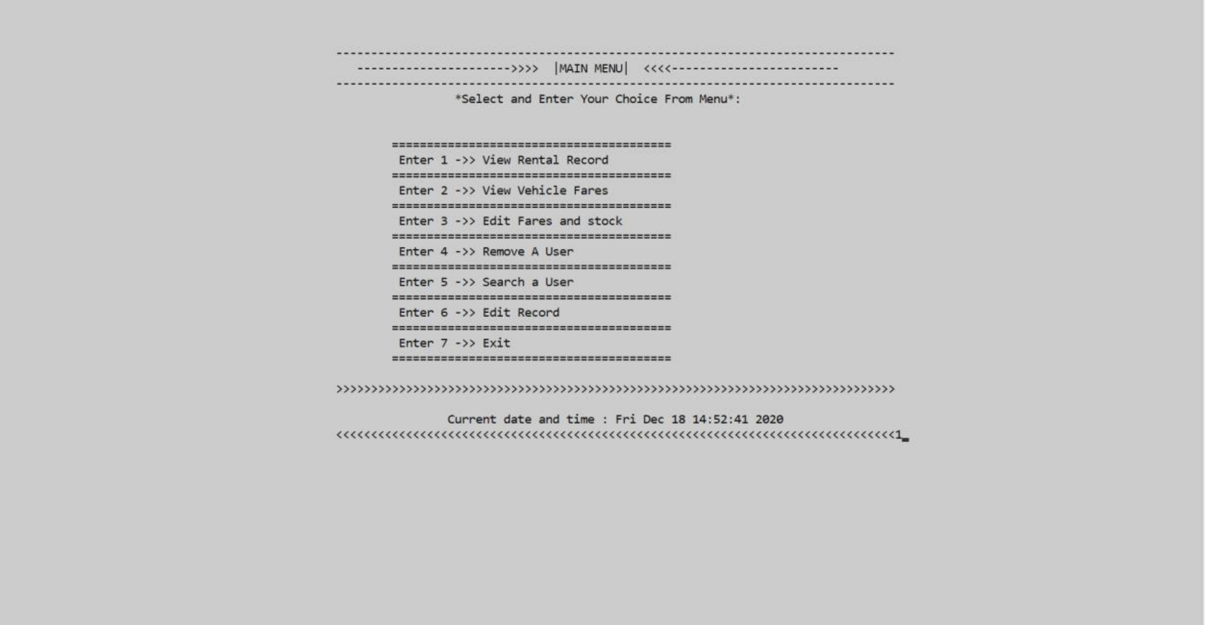
```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:30:19 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<4
```



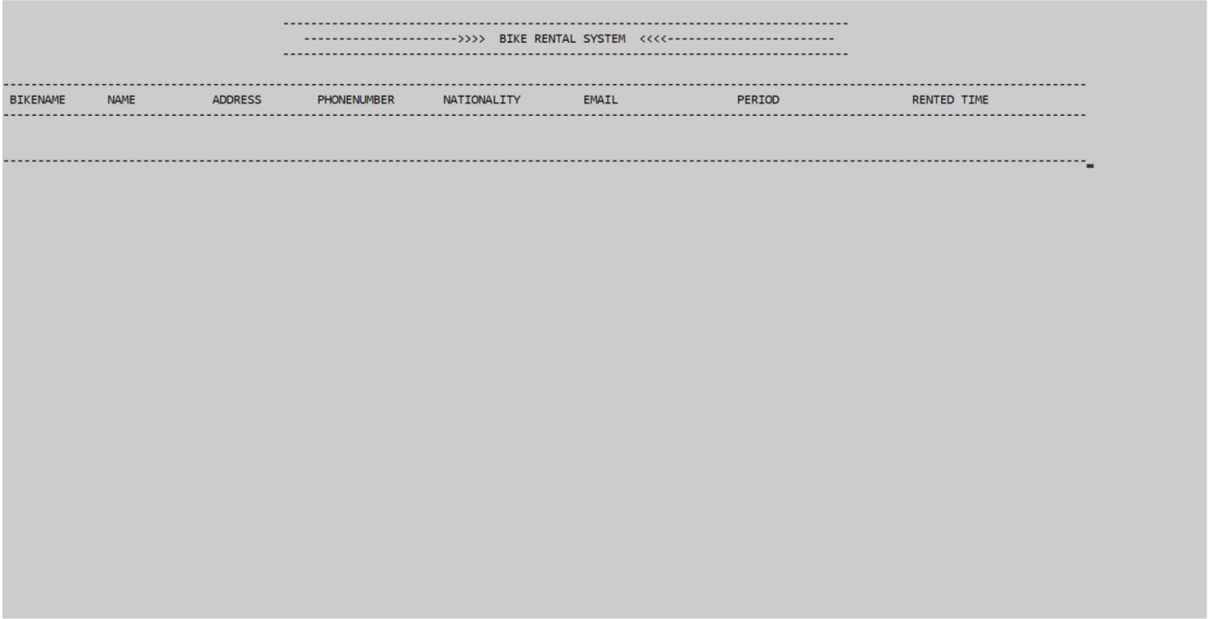
```
--------------------------------------------------------------------------------
   ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------



                ENTER USERNAME OF COSTUMER TO DELETE : HASINI


                 RECORDS OF THIS COSTUMER ARE NOT FOUND !
```



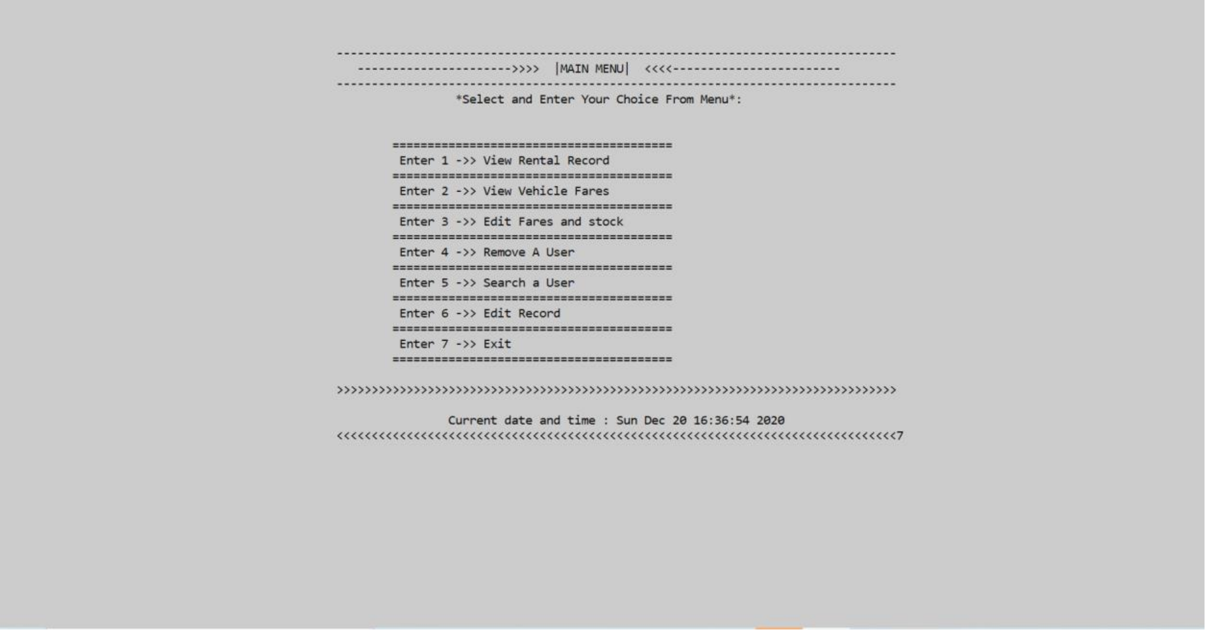
```
--------------------------------------------------------------------------------
   --------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
--------------------------------------------------------------------------------



                ENTER USERNAME OF COSTUMER TO DELETE : SHRAVANI



                ---------- SUCCESSFULLY DELETED ----------
```



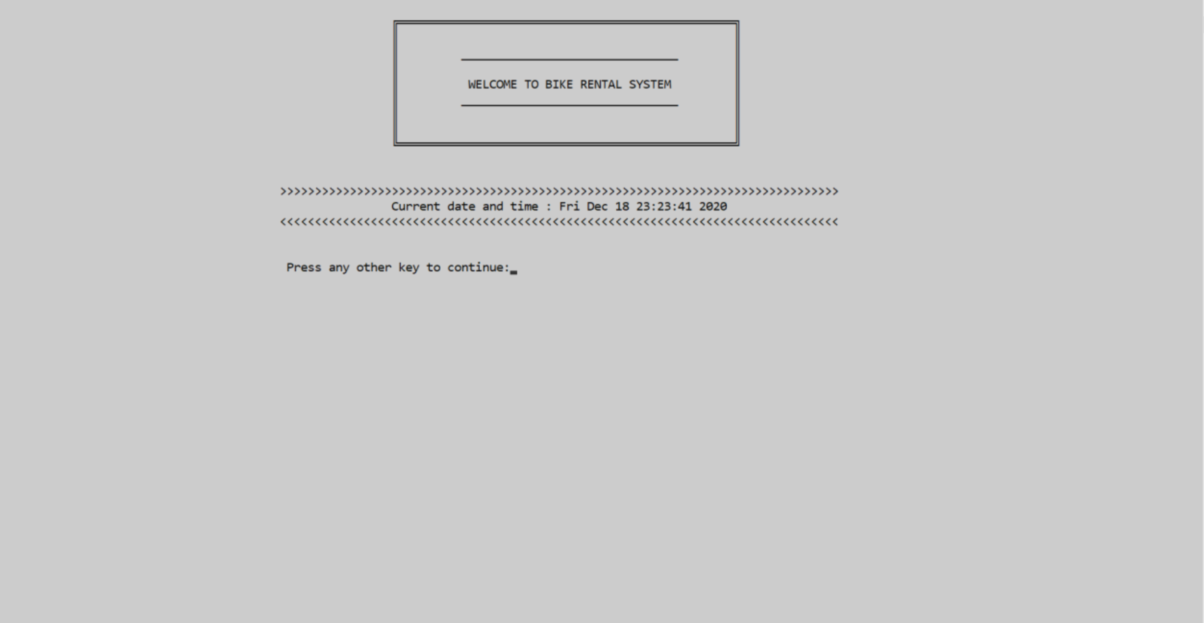
```
--------------------------------------------------------------------------------
   --------------------->>>>  |MAIN MENU|  <<<<------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Fri Dec 18 14:52:41 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<1
```



```
                                        --------------------------------------------------------------------------------
                                           ---------------------->>>>  BIKE RENTAL SYSTEM  <<<<------------------------
                                        --------------------------------------------------------------------------------

----------------------------------------------------------------------------------------------------------------------------------------------------------------
BIKENAME      NAME          ADDRESS       PHONENUMBER      NATIONALITY       EMAIL                PERIOD                 RENTED TIME
----------------------------------------------------------------------------------------------------------------------------------------------------------------


----------------------------------------------------------------------------------------------------------------------------------------------------------------
```



```
--------------------------------------------------------------------------------
   ---------------------->>>>  |MAIN MENU|  <<<<------------------------
--------------------------------------------------------------------------------
                 *Select and Enter Your Choice From Menu*:


        ========================================
         Enter 1 ->> View Rental Record
        ========================================
         Enter 2 ->> View Vehicle Fares
        ========================================
         Enter 3 ->> Edit Fares and stock
        ========================================
         Enter 4 ->> Remove A User
        ========================================
         Enter 5 ->> Search a User
        ========================================
         Enter 6 ->> Edit Record
        ========================================
         Enter 7 ->> Exit
        ========================================

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

                Current date and time : Sun Dec 20 16:36:54 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<7
```



```
WELCOME TO BIKE RENTAL SYSTEM

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
                Current date and time : Fri Dec 18 23:23:41 2020
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<


 Press any other key to continue:_
```

What is the additional knowledge gained as a result of implementing this mini project apart from the syllabus covered in the course programming for problem solving?

Apart from the syllabus covered in the course programming for problem solving we have learnt how to change the background colour of the console also we have learnt how to set the curser position at desired location in c program. We have also learnt the functionality of <time.h> header file which contains time and date function declarations to provide standardized access to time/date.

This project really helped us to know the various real world application of c programming and know the essence of this language.

Conclusion and Future work

While making of the project "BIKE RENTAL SYSTEM” we made our progress by solving a number of problems. Solution to each problem by ourselves was the most important part of the project and this provided us with experiences which will help us in future.

We came to know that how we can use concept of files in c programming language in storing data ,reading and writing in file as well . Also we learnt the use of structures , arrays in solving real life problems

Some important things that we learned include designing a good program architecture and converting real life situations into an efficient code, and how to write an good looking easily readable and understandable as well as time and memory efficient code.

Also, in future we are thinking to build a feature called Rent for friend which allows users friend to rent a bike through users account and also we are thinking to set up this console based project as an application based project

References

The References we used in this project are

1. www.google.com
2. www.geeksforgeeks.org c
3. Kernighan and Ritchie "The C Programming Language", 2nd ed, 1988, (The "K&R". The Bible for the C language)