INTRODUCTION TO PROGRAMMING USING C

PROJECT REPORT ON

TAXI BOOKING

SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE IN

BACHELOR OF TECHNOLOGY

IN

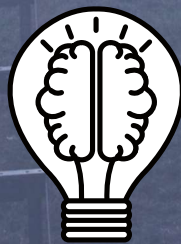### COMPUTER SCIENCE AND ENGINEERING

SUBMITTED BY

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OBJECTIVES

The aim of this project is to book a safe and comfortable taxi in a jiffy !

THIS PROGRAM IS HAVING AN OPTION WHICH ENABLES THE USER TO SELECT THE MODE OF TAXI ACCORDING TO HIS/HER CONVENIENCE. (BIKE/CAR)

ABSTRACT

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Over the last few years, the concept of traditional taxi services has become almost non-existent. Evolution of incredible taxi booking app development has taken over the market by a storm.

In a lot of places, especially metropolitan cities, the concept of hiring a taxi has become extremely prevalent. Hiring a taxi not only fails cheaper than owning your car but it also spares you from the troubles of jam-packed roads and car repairs .

Moving on, companies like Uber, Ola, Lyft, and more have made getting a ride just one tap away. These apps have dominated the market and are certainly here to stay. So, if you are looking to venture into your taxi booking service , there is no better time than today.

taking all this into consideration we have designed a mini project dealing with the concept of hiring a taxi !

INTRODUCTION

TAXI

A taxi, also known as a cab or a taxicab, is a type of vehicle for hire with a driver, used by a single passenger or small group of passengers, often for a non-shared ride. A taxicab allows passengers between locations of their choice. This differs from public transport .Here the pick-up and drop-off locations are decided by the customers, not by the service providers.
. Taxi services are typically provided by automobiles, but in some countries even boats (such as water taxies or gondolas) are also used or have been used historically.

Now, in modern times a taxi can be booked by anyone just by using a phone. Taxi can be hired by any individual and get transported from any location to any where the customer wishes for. And the cost of the ride will differ based on the mode of the transport(car, bike, auto etc...) and the distance going to be travelled by the customer.
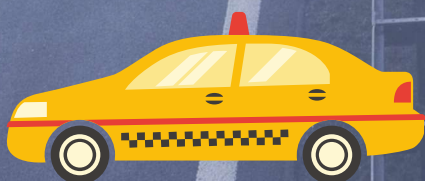
ALGORITHM

STEP-1 START

STEP-2 Take the first and last names of the user.

STEP-3 Take the phone number.

STEP-4 Ask for pickup and destination points.

STEP-5 Display the taxi mode selection as
a)Press 1 to book a car
b)Press 2 to book a bike

STEP-6 After the selection, display the price details
according to the mode opted as
a)Car charges Rs.23/km
b)Bike charges Rs.11/km

STEP-7 Display the taxi details and time limit.

STEP-8 Display the end ride otp.

STEP-9 Ask the user to enter end ride otp to complete the
ride

STEP-10 Take the number of kms travelled from the user.

STEP-11 Calculate the fare accordingly and display the final
bill.

STEP-12 END

CODING

```c
#include<stdio.h>
#include<string.h>
#include<time.h>
#include<math.h>
#include<stdlib.h>
#define c 23
#define b 11
int i,x,u,otp;
char ch;
struct user
{
    int start,e;
    long int num;
    long long int phn;
    char
n[20],location[50],name[100],lname[100],destination[150];
}a;
struct taxi
{
    float km,co,tc,tax;
}t;
int inputotp()
{
    srand(time(0));
    otp=rand()%9999;
    return otp;

}
void input()
{
    printf("Enter your first name :");
    fflush(stdin);
    gets(a.name);
    printf("\nEnter last name : ");
    fflush(stdin);
    gets(a.lname);
    printf("\nEnter phone number : ");
    scanf("%lld",&a.phn);
    printf("\nEnter pickup location : ");
    fflush(stdin);
    gets(a.location);
    printf("\nEnter the destination : ");
    fflush(stdin);
    gets(a.destination);
}
void display()
```

```c
}
void display()
{
    for(i=1;i<=20;i++) printf("x");
    printf("BILL DETAILS");
    for(i=1;i<=20;i++) printf("x");

    printf("\nNAME\t\t:\t%s",strcat(strcat(a.lname,"
"),a.name));
    printf("\nPhone Number\t:\t%lld",a.phn);
    printf("\nLocation\t:\t%s",a.location);
    printf("\nDestination\t:\t%s\n",a.destination);
    for(i=1;i<=52;i++) printf("x");
    printf("\nBase Fare\t:\t%.3f",t.co);
    printf("\nTax\t\t:\t%.3f",t.tax);
    printf("\nTotal Payable\t:\t%.3f",t.tc);
}
int main()
{
    input();
    do
    {printf("\nPress '1' to book a car/ '2' to book a bike :
");
     scanf("%d",&a.num);
     if(a.num==1)
     {
        printf("\nCost per km is RS.23");

     }
     else if (a.num==2)
     {
        printf("\nCost per km is RS.11");
     }
     else
     {
        printf("\ninvalid");
     }
      if(a.num==1 || a.num==2) break;
    }while(1);

    if(a.num==1)
    {
        printf("\nYour Car taxi AP39LP8143 Reaches you in 5
mins");
    }
    else printf("\nYour Bike taxi AP39LP8141 Reaches you in 5
```

```c
        if(a.num==1 || a.num==2) break;
    }while(1);

    if(a.num==1)
    {
        printf("\nYour Car taxi AP39LP8143 Reaches you in 5
mins");
    }
    else printf("\nYour Bike taxi AP39LP8141 Reaches you in 5
mins");

    x=inputotp();
     printf("\n End ride otp: %d",x);
    do
    {

    printf("\tEnter End ride otp to terminate the the ride :
");
    scanf("%d",&a.e);
    if(a.e==x&&a.num==1)
    {
        printf("\nRide completed successfully");
        printf("\nEnter no.of Kilometers travelled : ");
        scanf("%f",&t.km);
        t.co=t.km*c;
        t.tax=t.co*5/100;
        t.tc=t.co+t.tax;
    }
    else if(a.e==x&&a.num==2)
    {
        printf("\nRide completed successfully");
        printf("\nEnter no.of Kilometers travelled :");
        scanf("%f",&t.km);
        t.co=t.km*b;
        t.tax=t.co*5/100;
        t.tc=t.co+t.tax;
    }
    else printf("invalid");
    if(a.e==x) break;
    } while(1);
    display();

}
```

SAMPLE INPUT/OUTPUT

SAMPLE 1

```
Enter your first name :ABC

Enter last name : XYZ

Enter phone number : 1234567890

Enter pickup location : ADF Street , Green Fields

Enter the destination : B Block , Silk Board

Press '1' to book a car/ '2' to book a bike : 1

Cost per km is RS.23
Your Car taxi AP39LP8143 Reaches you in 5 mins
 End ride otp: 6730      Enter End ride otp to terminate the the ride : 6730

Ride completed successfully
Enter no.of Kilometers travelled : 25
xxxxxxxxxxxxxxxxxxxxxBILL DETAILSxxxxxxxxxxxxxxxxxxxxxx
NAME            :       XYZ ABC
Phone Number    :       1234567890
Location        :       ADF Street , Green Fields
Destination     :       B Block , Silk Board
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Base Fare       :       575.000
Tax             :       28.750
Total Payable   :       603.750
Process returned 0 (0x0)   execution time : 73.809 s
Press any key to continue.
```

SAMPLE 2
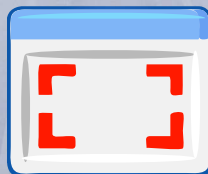
```
Enter your first name :XYZ

Enter last name : ABC

Enter phone number : 9876543210

Enter pickup location : Dayout Park , Croma Street

Enter the destination : Viceroy Boulevard , Delcross

Press '1' to book a car/ '2' to book a bike : 2

Cost per km is RS.11
Your Bike taxi AP39LP8141 Reaches you in 5 mins
 End ride otp: 7389      Enter End ride otp to terminate the the ride : 7389

Ride completed successfully
Enter no.of Kilometers travelled :15
xxxxxxxxxxxxxxxxxxxxxBILL DETAILSxxxxxxxxxxxxxxxxxxxxxx
NAME            :       ABC XYZ
Phone Number    :       9876543210
Location        :       Dayout Park , Croma Street
Destination     :       Viceroy Boulevard , Delcross
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Base Fare       :       165.000
Tax             :       8.250
Total Payable   :       173.250
Process returned 0 (0x0)   execution time : 152.401 s
```

CONCLUSION

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Through this mini project our team has got a vivid idea of the concepts in C programming comprising of Functions, Loops, Structure, Decision making, Else if and Strings.

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THANK YOU!