Mobile Recharge System

Enter Personal Information

In [13]:
```
# With the help of below code we have requested the input for name and mobile number of the customer
while True:

    name = input('Enter your name - ')
    try:
        integern_input = float(name)
        print("Enter a valid name")
    except:
        break

while True:
    number = input('Enter your mobile number - ')

# Checking if the number is of 10 digits , starts with 6,7,8 or 9 and also conatins only numbers.

    if len(number) == 10 and number[0] in ['6','7','8','9'] and number.isdigit():
        #print(number)
        break

    else:
        print('invalid number')
```

```
Enter your name - aman
Enter your mobile number - 9872335577
```

Select Circle

In [14]:

```
# Storing the data of all the given circle along with their codes in a dictionary

circles = {'AP':'Andhra Pradesh & Telangana', 'AS':'Assam', 'BR':'Bihar & Jharkhand', 'DL':'Delhi', 'GJ':'Gujrat', 'H
P':'Himachal Pradesh', 'HR':'Haryana', 'JK':'Jammu and Kashmir', 'KL':'Kerela and Lakshadweep', 'KA':'Karnataka','KO':
'Kolkata', 'MH':'Maharashtra and Goa', 'MP':'Madhya Pradesh and Chhattisgarh', 'MU':'Mumbai', 'NE':'North East', 'OR':
'Orissa', 'PB':'Punjab', 'RJ':'Rajasthan', 'TN':'Tamil Nadu', 'UE':'UP (East)', 'UW':'UP (West)', 'WB':'West Bengal',
'GB':'Ghaziabad and Noida'}

#print(circles)

# Printing every circle code along with their circle name
for state_code in circles:
    state_name = circles[state_code]
    print(state_code,':',state_name)


# Validation Step
while True:

    circle_code = input('Enter your circle code - ').upper()
    if circle_code in circles:
        break
    else:
        print('invalid circle code')




print('you have selected the circle -', circles[circle_code])


# with the help of above code we have created a list of circles and their respective circle names
# and requested for the input for the customer's circle.
```

```
AP : Andhra Pradesh & Telangana
AS : Assam
BR : Bihar & Jharkhand
DL : Delhi
GJ : Gujrat
HP : Himachal Pradesh
HR : Haryana
JK : Jammu and Kashmir
KL : Kerela and Lakshadweep
KA : Karnataka
KO : Kolkata
MH : Maharashtra and Goa
MP : Madhya Pradesh and Chhattisgarh
MU : Mumbai
NE : North East
OR : Orissa
PB : Punjab
RJ : Rajasthan
TN : Tamil Nadu
UE : UP (East)
UW : UP (West)
WB : West Bengal
GB : Ghaziabad and Noida
Enter your circle code - pb
you have selected the circle - Punjab
```

Recharge Type

In [15]:
```
# Requesting user to select a type of recharge and also validating if the entered recharge type is a valid one.

while True:
    recharge_type = input('Enter your recharge type(postpaid or prepaid) - ' ).lower()

    if recharge_type == 'postpaid' or recharge_type == 'prepaid':
        break
    else:
        print("Please enter 'Prepaid' or 'Postpaid' as your recharge type ")
```

```
Enter your recharge type(postpaid or prepaid) - postpaid
```

Postpaid option

In [16]:
```
# If the user selects postpaid then it will ask for the bill amount to be paid

if recharge_type == 'postpaid':
    while True:

        bill_amount = float(input('Please enter your bill amount in digits , INR : '))

        if bill_amount > 0:
            break
        else:
            print('please enter valid bill amount')
```

```
Please enter your bill amount in digits , INR : 930.24
```

Prepaid Recharge Plans

In [17]:
```
# Recharge Plans for prepaid customers

full_recharge = {250:'Unlimited calls(local/national) + 1.5GB data/day + 100 SMS/ day. Val = 28 days' , 400 : 'Unlimit
ed calls(local/national) + 3 GB data/day + 100 SMS/ day. Val = 28 days', 450 : 'Unlimited calls(local/national) + 1.5G
B data/day + 100 SMS/ day. Val = 56 days', 500:'Unlimited calls(local/national) + 1.5GB data/day + 100 SMS/ day. Val =
70 days', 550:'Unlimited calls(local/national) + 1.5GB data/day + 100 SMS/ day. Val = 77days'}
#print(full_recharge)

#for full_recharge_pack in full_recharge:
#    pack_type = full_recharge[full_recharge_pack]
#    print('INR', full_recharge_pack, '-', pack_type)

talktime_only = {100:'Talktime: Rs. 82  Val = 28 days', 50:'Talktime: Rs. 39  Val = 28 days', 30:'Talktime: Rs. 22  Va
l = 28 days', 20:'Talktime: Rs. 14  Val = 28 days', 10:'Talktime: Rs. 7  Val = 28 days'}
#print(talktime_only)

#for talktime_only_pack in talktime_only:
 #   pack_details = talktime_only[talktime_only_pack]
  #  print('INR', talktime_only_pack, '-', pack_details)


data_packs = {1200:'240 GB data Val= 240 days', 600:'72 GB data Val= 70 days', 250:'50 GB data Val= 28 days', 100:'12
 GB data Val= 28 days', 50:'6 GB data Val= 28 days'}
#print(data_packs)

#for data_pack_type in data_packs:
 #   data_pack_details = data_packs[data_pack_type]
 #   print('INR', data_pack_type, '-', data_pack_details)
```

Prepaid Plan

In [18]:
```
# If the users selected prepaid plan then the code will ask for the recharge type and also validate at the same time
# using the while loop


if recharge_type == 'prepaid':
    print('We have the following recharge packs \n 1.Full recharge \n 2.Talktime only \n 3.Data packs')

    while True:

        recharge_pack = input('Please select correct number of your recharge pack - ')

        if recharge_pack in ['1','2','3']:
            break


        else:
            print('invalid recharge pack option number')


    if recharge_pack == '1':
        selected_pack = full_recharge

        for full_recharge_pack in full_recharge:
            pack_type = full_recharge[full_recharge_pack]
            print('INR', full_recharge_pack, '-', pack_type)


    elif recharge_pack == '2':
        selected_pack = talktime_only

        for talktime_only_pack in talktime_only:
            pack_details = talktime_only[talktime_only_pack]
            print('INR', talktime_only_pack, '-', pack_details)




    elif recharge_pack == '3':
        selected_pack = data_packs
```

```
        for data_pack_type in data_packs:
            data_pack_details = data_packs[data_pack_type]
            print('INR', data_pack_type, '-', data_pack_details)



    while True :


        pack_cost = float(input('Enter the desired recharge amount - '))

        if pack_cost in selected_pack:

            break
        else:
             print('invalid pack cost')
```

Payment options

In [19]:
```
# Creating a list of all the available payment options

payment_methods = ['Credit card', 'Debit card', 'UPI', 'Net Banking', 'Cash']
```

In [20]:
```
# Printing out the available payment options for the user to selct from and also validating using the while loop

for methods in range(len(payment_methods)):
    print(methods+1, payment_methods[methods])

while True:
    method = int(input('PLease select your desired option number for mode of payment - '))

    if method in [1,2,3,4,5]:
        break
    else:
        print('you have selected an invalid payment method')

print('You have selected the mode of payment as - ', payment_methods[method - 1])
```

```
1 Credit card
2 Debit card
3 UPI
4 Net Banking
5 Cash
PLease select your desired option number for mode of payment - 2
You have selected the mode of payment as -  Debit card
```

Printing Invoice

In [21]:
```
# Now in the final step we will be printing the invoice generated from the customer's data

print('*****************************************************************************************************
********')

print('                                          K.K Telecom Services
')

print('*****************************************************************************************************
********')

print('Dear', name+',')

print('                Thank you for choosing K.K Telecom Services. We sincerely appreciate your business.
')

print('----------------------------------------Invoice Details-----------------------------------------------
--------')

print('*****************************************************************************************************
********')

print('Customer Name :',  name)
print('Phone Number:', number)
print('Customer Circle', ':', circles[circle_code])
print('Recharge Type', ':',  recharge_type)

if recharge_type == 'postpaid':
    print('Outstanding Bill :' ,bill_amount)
    cost = bill_amount

else:
    print('Package : Rs.',pack_cost, selected_pack[pack_cost])
    cost = pack_cost

print('Mode of Payment', ':',  payment_methods[method - 1])

print('-----------------------------------------------------------------------------------------------------
--------')

# Rounding the tax calculated from the formula
```

```
tax = round((18/100) * cost, 2 )
total_amount = round(cost + tax,2)

print('Cost','- Rs.',cost)
print('GST(18%)', '- Rs.', tax)
print('Total Amount', '- Rs.', total_amount)

print('**********************************************************************************************************
*********')

print('                                        Thank you
')
print('                                     Visit us again !')
print('**********************************************************************************************************
*********')
```

****
**
K.K Telecom Services
****
**
Dear aman,
Thank you for choosing K.K Telecom Services. We sincerely appreciate your business.
----------Invoice Details----------
--
****
**
Customer Name : aman
Phone Number: 9872335577
Customer Circle : Punjab
Recharge Type : postpaid
Outstanding Bill : 930.24
Mode of Payment : Debit card

--
Cost - Rs. 930.24
GST(18%) - Rs. 167.44
Total Amount - Rs. 1097.68
****
***
Thank you
Visit us again !
****
***