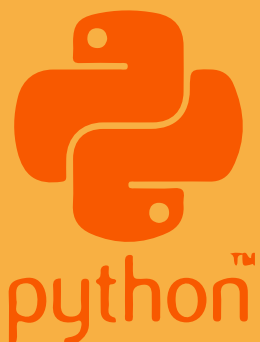


OOHS BANK

COMPUTER SCIENCE PROJECT



PARV JOSHI
XII - C



Certificate

O U R

O W N

H I G H

SCHOOL

AL WARQA'A

D U B A I

Roll No. :-

Year :- 2017-2018

Certified that Master Parv Vinod Joshi of Grade XII Section C has carried out project work in Computer Science prescribed by the CBSE, New Delhi, for the All India Secondary School Certificate Examination

Teacher In-charge

Date ____/____/____

Internal Examiner

External Examiner

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ACKNOWLEDGEMENT

I feel proud to present my project file in Computer Science on the topic "OOHS Bank app". This project would not have been feasible without the proper and rigorous guidance of my computer teacher Mr. Yadav Singh. Thereby, I would like to thank Mr. Yadav sir for guiding me on a step by step basis and in ensuring that I completed my program with ease. I would also like to thank my parents, friends and group mates for their suggestions and constructive criticism.

I also had an exciting time learning concepts that were out of the textbook by applying them, alongside CBSE requirements.

INTRODUCTION AND CHARACTERISTICS OF PYTHON

WHAT IS PYTHON?

Python is an interpreted, interactive, object-oriented programming language. It incorporates modules, exceptions, dynamic typing, very high level dynamic data types, and classes. Python combines remarkable power with very clear syntax.

It has interfaces to many system-calls and libraries, as well as to various window systems, and is extensible in C or C++. It is also usable as an extension language for applications that need programming interfaces. Finally, Python is portable across all major hardware and software platforms.

Python permits its users to write programs and files in fewer lines of code as compared to other programming languages like C++ and Java. The program can be modified at any instant in accordance with the user's requirements. Python provides the user to write clear programs both on a large and small scale.

HISTORY OF PYTHON

Python was perceived in the late 1980s and its implementation was started in December 1989 by Guido van Rossum at CWI in the Netherlands as a successor to the ABC language (itself inspired by SETL) capable of exception handling and interfacing with the Amoeba operating system. Van Rossum is Python's principal author, and his continuing central role in deciding the direction of Python is reflected in the title given to him by the Python community, benevolent dictator for life (BDFL).

Many of Python's features originated from an interpreted language called ABC. Rossum wanted to correct some of ABC's problems and keep some of its features.

Guido Van Rossum published the first version of Python code (version 0.9.0) at in February 1991. This release included already exception handling, functions, and the core data types of list, dict, str and others. It was also object oriented and had a module system.

Python version 1.0 was released in January 1994. The major new features included in this release were the functional programming tools lambda, map, filter and reduce, which Guido Van Rossum never liked.

Six and a half years later in October 2000, Python 2.0 was introduced. This release included list comprehensions, a full garbage collector and it was supporting unicode. With this release the development process was changed and became more transparent and community-backed.

Python flourished for another 8 years in the versions 2.x before the next major release as Python 3.0 (also known as "Python 3000" and "Py3K") was released. Python 3 is not backwards compatible with Python 2.x. Many of its major features have been backported to the backwards-compatible Python 2.6 and 2.7. The emphasis in Python 3 had been on the removal of duplicate programming constructs and modules.

**FEATURES THAT
MAKE PYTHON SO
POPULAR**

- It is a general-purpose programming language which can be used for both scientific and non-scientific programming.
- It is a platform independent programming language.
- It is a very simple high level language with vast library of add-on modules.
- It is excellent for beginners as the language is interpreted, hence gives immediate results.
- The programs written in Python are easily readable and understandable.

- It is suitable as an extension language for customizable applications.
- It is easy to learn and use.
- It is of open-source nature, which makes it portable as it can work on various OS.

WHERE IS PYTHON USED?

Python is used in the following places-

- In operations of Google search engine, YouTube, etc.
- Bit Torrent peer to peer file sharing is written using Python
- Intel, Cisco, HP, IBM, etc. use Python for hardware testing.
- Maya provides a Python scripting API
- I-Robot uses Python to develop commercial Robot.
- NASA and others use Python for their scientific programming task.
- The popular social media application "Instagram" was made by using just python.

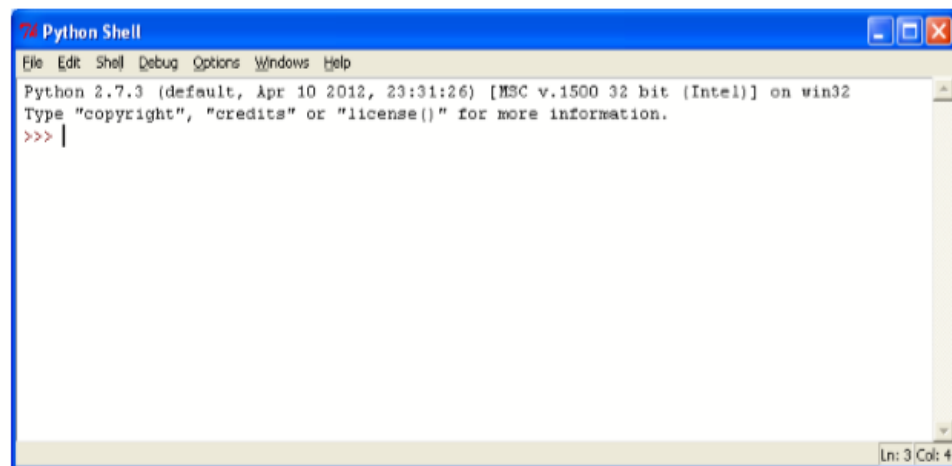
WHERE TO WRITE PYTHON PROGRAMS?

To write and run Python program, we need to have Python interpreter installed in our computer. IDLE (GUI integrated) is the standard, most popular Python development environment. IDLE is an acronym of Integrated Development Environment. It lets edit, run, browse and debug Python Programs from a single interface. This environment makes it easy to write programs.

Python shell can be used in two ways, viz., interactive mode and script mode.

Where Interactive Mode, allows us to interact with the Operating System; script mode let us create and edit python source file. Now, we will first start with interactive mode. Here, we type a Python statement and the interpreter displays the result(s) immediately.

1. Interactive Mode



For

working in the interactive mode, we will start Python on our computer. When we start up the IDLE what we see is a welcome message of Python interpreter with revision details and the Python prompt, i.e., „>>>“. This is a primary prompt indicating that the interpreter is expecting a python command. There is secondary prompt also which is „...“ indicating that interpreter is waiting for additional input to complete the current statement. Interpreter uses prompt to indicate that it is ready for instruction. Therefore, we can say, there is prompt on screen, it means IDLE is working in interactive mode.

2. Script Mode

In script mode, we type Python program in a file and then use the interpreter to execute the content from the file. Working in interactive mode is convenient for beginners and for testing small pieces of code, as we can test them immediately. But for coding more than few lines, we should always save our code so that we may modify and reuse the code.

However, the result produced by Interpreter in both the modes, viz., Interactive and script mode is exactly same.

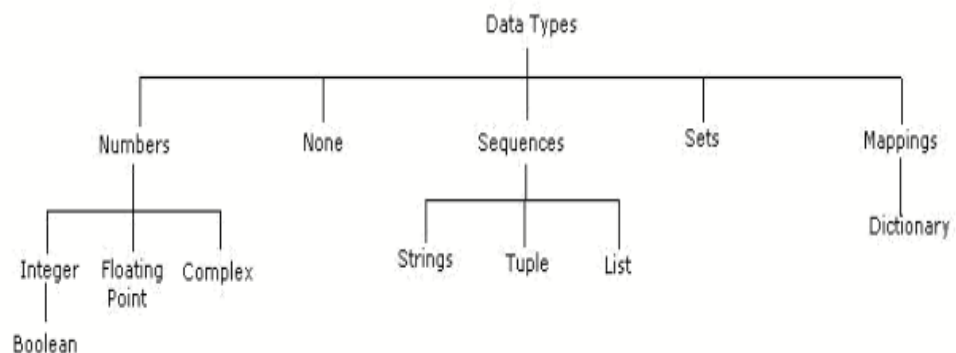
Python, in interactive mode, is good enough to learn experiment or explore, but its only drawback is that we cannot save the statements for further use and we have to retype all the statements to re-run them.

To create and run a Python script, we will use following steps in IDLE, if the script mode is not made available by default with IDLE environment.

1. File>Open OR File>New Window (for creating a new script file)
2. Write the Python code as function i.e. script
3. Save it (^S)
4. Execute it in interactive mode- by using RUN option (^F5).
5. Otherwise (if script mode is available) start from Step 2

DATA TYPES

Python the following data types –



1. Number -

Number data type stores Numerical Values. This data type is immutable i.e. value of its object cannot be changed (we will talk about this aspect later). These are of three different types:

- a) Integer & Long
- b) Float/floating point
- c) Complex

2. None -

This is special data type with single value. It is used to signify the absence of value/false in a situation. It is represented by None.

3. Sequence -

A sequence is an ordered collection of items, indexed by positive integers. It is combination of mutable and non-mutable data types. Three types of sequence data type available in Python are Strings, Lists & Tuples.

4. Sets -

Set is an unordered collection of values, of any type, with no duplicate entry. Sets are immutable.

Example

```
s = set ([1,2,34])
```

5. Mapping -

This data type is unordered and mutable. Dictionaries fall under Mappings.

PROBLEM DEFINATION

AIM To create a python program which can simulate the operations of a bank and play a versatile role in assisting the administrator along with the consumer.

OBJECTIVE To showcase the versatility of python programing in modern day banking services.

STEPS TO SOLVE THE PROBLEM

STEPS TO SOLVE THE PROBLEM At the beginning, a main menu is printed which can guide the user to the following- entering administrator account, creating and logging in into customer account, rate our app, find nearest OOHS bank office, refer a friend, send complaints/suggestions, contact us, apply for job, and exit. Using concept of files and classes, administrators can view transactions/ratings/complaints/suggestions, and edit interest rates. Opportunity for customers is given for registering and then- modify account details, search for account details, delete account details, transfer money, deposit money, withdraw money, take loan (business or personal), issue credit card, and log out. Users can rate our app, send complaints/suggestion through e-mail, apply for job, know our offices with their contact information and also refer a friend.

ALGORITHM

ALGORITHM This is the algorithm (step-by-step procedure of solving a problem) of the problem.

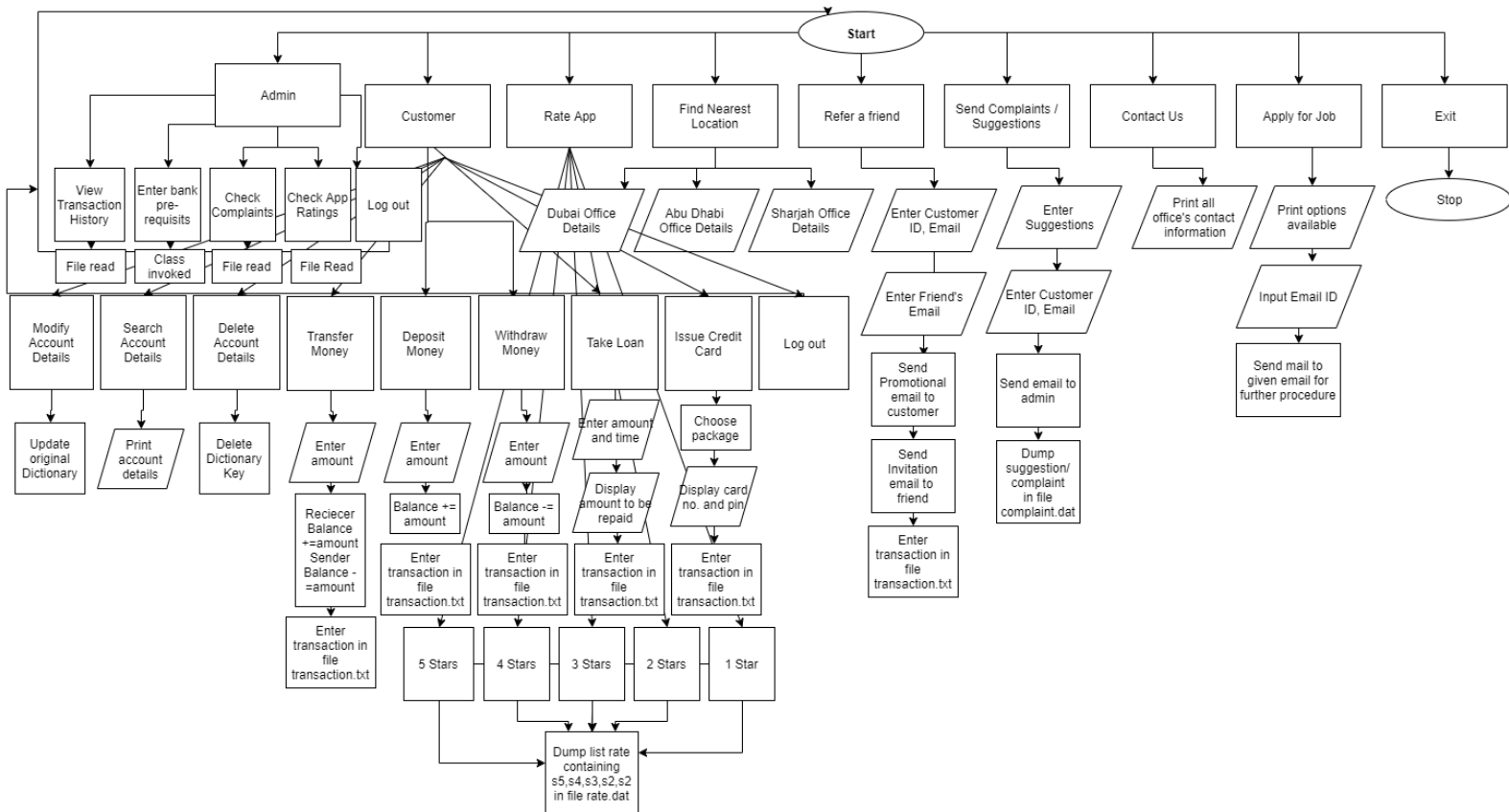
1. Start
2. Print Main Menu – Admin, Customer, Rate app, find nearest Location, refer a friend, send complaints/suggestions, contact us, apply for job, Exit
3. Input choice
4. If choice =1, go to line 13
5. If choice =2, go to line 25
6. If choice =3, go to line 45
7. If choice =4, go to line 48
8. If choice =5, go to line 49
9. If choice =6, go to line 54
10. If choice =7, go to line 59
11. If choice =8, go to line 66
12. If choice =9, go to line 70
13. Print Admin Menu – Enter bank pre-requisites, View transaction history, check for complaints/suggestions, check app ratings, log out
14. Input admin choice
15. If admin choice=1, go to line 20
16. If admin choice=2, go to line 21
17. If admin choice=3, go to line 22
18. If admin choice=4, go to line 23
19. If admin choice=5, go to line 24
20. Function customer_details(j) of class customer executed. Return to line 3
21. Print transaction.txt. Return to line 3
22. Print complaint.dat. Return to line 3
23. Print rate.dat. Return to line 3
24. Return to line 3
25. Print Customer Menu – Modify details, search details, delete account, transfer money, deposit money, withdraw money, take loan, issue credit card, log out
26. Input customer choice
27. If customer choice=1, go to line 36
28. If customer choice=2, go to line 37
29. If customer choice=3, go to line 38
30. If customer choice=4, go to line 39

31. If customer choice=5, go to line 40
32. If customer choice=6, go to line 41
33. If customer choice=7, go to line 42
34. If customer choice=8, go to line 43
35. If customer choice=9, go to line 44
36. Update original dictionary. Return to line 3
37. Print original dictionary. Return to line 3
38. Delete key from original dictionary. Return to line 3
39. Class function transfer invoked. Return to line 3
40. Class function deposit invoked. Return to line 3
41. Class function withdraw invoked. Return to line 3
42. Class function loan invoked. Return to line 3
43. Class function credit card invoked. Return to line 3
44. Return to line 3
45. Input user rating
46. Enter rate to file
47. Return to line 3
48. Print string loc. Return to line 3
49. Enter customer ID
50. Enter friend's email
51. Send invitation mail to friend
52. Send offer mail to customer
53. Return to line 3
54. Input customer ID
55. Input complaint/suggestion
56. Enter complaint/suggestion to file
57. Send complaint/suggestion confirmation mail to customer
58. Return to line 3
59. Print office contact numbers
60. Ask for sending message in variable choice1
61. If choice1=y, go to line 63
62. If choice1=n, go to line 65
63. Input message
64. Send message via mail
65. Return to line 3

66. Input job post
67. Input email id
68. Send mail to given email for further procedure
69. Return to line 3
70. Stop

FLOWCHART

FLOWCHART



FUNCTIONS USED

FUNCTIONS USED

The functions we used throughout the program are:

1. `def bank_details()`
This function stores the important values regarding the banking system such as interest rates and maximum withdrawal amount at a time.
2. `def customer_details()`
This function stores the necessary details of an customer system needed for registration of customer.
3. `main()`
It is used to call all the functions specified above and print various menus. Also, opens and uses files, and creates objects of the classes used.

DOCUMENTATION

TECHNICAL DOCUMENTATION

Our program of OOHS Bank App was coded individually by our members and was then grouped and accessed through the main function.

For coding this program, we used the following modules/features of python:

1. Random Module
We used the random module to create a random integer(`random.randint`) as a customer ID, credit card number and credit card pin codes.
2. Lists
We used lists to combine the all information of the user and join it in to the ID using dictionaries. Also, it was used to make ratings in linear order to dump it into file.
3. Global

For converting a particular variable from local scope to global scope so as to use it while defining other functions, we used global.

4. def main()

It is used to call all the functions specified above and print various menus. Also, opens and uses files, and creates objects of the classes used.

5. Dictionary

We used dictionary to map customer ID with list of all details of the customer.

6. Os module

The os module was mainly used to check if a file is created using `os.path.isfile('filename')` so as to get rid of IOError.

7. cPickle (pickle) module

Pickle module was used to dump and load information into files so as to use the information later. cPickle was used as pickle as it is 1000 times faster than pickle. The inner functioning of the it remains same.

8. Files

We used binary and text files to store information such as customer dictionary, ratings, transactions, complaints/suggestions so we could use the already existing information.

9. Smtplib Module

We used the SMTP(Simple Mail Transfer Protocol) library module to send e-mails in python in real time. This was done for contacting, registering customer, refer a friend, etc.

**USER
DOCUMENTATION**

Firstly, the user shall choose his/her option from the main menu. The options in the main menu includes entering administrator account, creating and logging in into customer account, rate our app, find nearest OOHS bank office, refer a

friend, send complaints/suggestions, contact us, apply for job, and exit. In our program, administrators can change bank pre-requisites, view transaction history, check app ratings, check complaints/suggestions and log out. Customers first have to register using their name, e-mail id, passport number, and monthly salary. Then they will receive a 6-digit code in their e-mail. Using the code, the customers can log in and then modify account details, search for account details, delete account details, transfer money, deposit money, withdraw money, take loan (business or personal), issue credit card, and log out. For any bank transaction that takes place, it is stored into files and can be viewed later. In rate option, users can rate our app on the 1-5-star rating system and then the app shows the average rating of the app. Refer a friend requires user entering their customer ID and the friend's email id. The program then sends an invitation e-mail at the friend's e-mail account and also sends an e-mail to user providing them an offer for referring a friend. Locations tab shows the OOHS Bank's offices and their locations. The complaint/suggestions section requires customer entering their account ID and entering their complaint/suggestions (max 166 characters) which will be again stored in a file so as to view it later and also an automated email will be sent to user saying your complaint/suggestion has been submitted. The contact us section gives the user the opportunity to send an email, if he/she wishes to, and also provides contact details of all the offices. This also gives an anonymous user to apply for job at OOHS Bank at any of its offices. In this way, our program not only helps administrators and customers, but also anonymous users in applying for jobs.

PROGRAM CODE

```

1.
import cPickle as pickle    # cPickle is 1000 times faster than pickle. Also, cPickle does not
    store data in ASCII format while pickle does.
2. import os
3. import random
4. import smtplib
5.
6. class bank:
7.     def __init__(self):
8.         self.s_b_a=20      # Default Value for Business Loan Interest
9.         self.pers_loan=30   # Default Value for Personal Loan Interest
10.        self.debit_card=2000 #Default Value for Maximum value that can be withdrawn at a ti
me
11.    def bank_details(self): # Function to input bank pre-requisites - For Administrator
12.        self.s_b_a=input('Enter the interest rate for Business loan =')
13.        self.pers_loan=input('Enter the interest rate for Personal loan =')
14.        self.debit_card=input('Enter the maximum amount that be withdrawn at a time =')
15. class customer(bank):
16.     def __init__(self):    # Gives default values for customer details
17.         self.cust_id=1
18.         self.cust_name=''
19.         self.cust_mid_name=''
20.         self.cust_last_name=''
21.         self.idno=''
22.         self.sal=0
23.         self.status=0
24.         self.cust_email=''
25.         self.cust_balance=0
26.         self.cust_dep=0
27.         self.cust_withdraw=0
28.         self.cust_transfer=0
29.         self.cust_loan=0
30.         self.cust_debit=[None,None]
31.     def customer_details(self,j):    # Method to input/modify customer details
32.         if j==0:    #j=0 implies user is entering details while registrering
33.             self.cust_id=random.randint(100000,1000000)    # Creates random customer ID
34.             self.cust_name=raw_input('Enter the customer name -')
35.             self.cust_mid_name=raw_input('Enter your middle initial/name : ')
36.             self.cust_last_name=raw_input('Enter your last name : ')
37.             self.idno=raw_input("Enter your passport number : ")
38.             while True:
39.                 if len(self.idno)==8 and self.idno[0].isalpha():    # Passport numbers have 8
characters and first one is a letter
40.                     break
41.                 else:
42.                     print "Wrong Passport number format! Please try again!"
43.                     self.idno=raw_input("Enter your passport number : ")
44.             self.cust_email=raw_input('Enter the customer email : ')
45.             self.sal=input("Input your monthly salary (put '0' if you do not earn!) : ")
46.             if self.sal>1500:
47.                 self.status=0    # Status = 0 refers to eligible for bank account creation
48.                 print "Thank You for registering with OOHS Bank"
49.                 print "Your Login ID will be sent to you by e-
mail shortly! Please Check your e-mail and the continue."
50.                 server = smtplib.SMTP('smtp.gmail.com', 587)    # variable server connects to
Simple Mail Transfer Protocol (SMTP) at timeout 587 sec
51.                 server.starttls()    #Puts the SMTP connection in TLS (Transport Layer Security
) mode. All SMTP commands that follow will be encrypted into codes, i.e., modulated
52.                 server.login("oohsbank@gmail.com", "admin1289")    # Logs in to email id 'ooh
sbank@gmail.com' whose password is 'admin1289'
53.                 email=self.cust_email

```

```

54.         msg = "Thank you for creating bank account with OOHS Bank \n Your customer ID
is "+str(self.cust_id)+" \n If your have not registered with OOHS bank, then please delete is e
-mail and ignore this!"
55.         server.sendmail('oohsbank@gmail.com',email, msg)      # Sends email FROM 'oohsba
nk@gmail.com' TO user input email id with CONTENT as string 'msg'
56.
57.         print "\n\n Do you wish to get promotional e-mails from OOHS Bank??"
58.         p=raw_input('Enter your choice (y/n): ')
59.         if p.lower()=='y': # promo acts as content of promotional email if choice is
'y'
60.             promo="""
61. Carry the bank in your pocket. Banking with OOHS Bank is just a touch – a user-
friendly, convenient and secure mobile banking application from OOHS Bank.
62. 1. View account summary, mini-
statement and transaction details for all your savings, current and credit card accounts
63. 2. View your credit cards’ latest, unbilled and past statements. Pay your Credit Card bill in
stantly or schedule it for a later date
64. 3. Easily access your deposit summary and loan account details
65. 4. Have complete control over you Credit and Debit Cards:
66. a. Convert Credit Card Transactions to EMI
67. b. Check eligibility for Credit Limit Increase
68. c. Block and Replace your cards
69. d. Temporarily switch your debit card on and off
70. e. Modify your debit card purchase limits as per your needs
71. 5. Make immediate or scheduled fund transfers to OOHS Bank and Other Bank customers through N
EFT and IMPS facilities.
72. 6. Safely add payees right from the app. No need to log in to internet banking to add a payee
.
73. 7. Recharge your Prepaid Mobile, Data Card and DTH connection instantly.
74. 8. Schedule/ Pay/ Auto-
Pay your utility bills for more than 200 billers. View scheduled bills on your phone calendar.
75. 9. Save your 10 frequent transactions as Favourites and repeat them in one click in future
76. 10. Personalise your account details and payee list by adding an image for them (from Facebook
, photo gallery or by taking a picture).
77. 11. Request for statement of your account, new cheque book, issued cheque status and stop cheq
ue payment. Generate your MMID and OTP for IMPS P2M transactions
78. 12. Tweet/Email feedback or Call OOHS Bank right from the application
79. 13. One click view of Special Offers only for you
80. 14. Locate OOHS Bank Branches, ATMs, Loan Centers and Cash Deposit Machines near you (through
GPS) or search them by Location
81. 15. Easily locate dining delights offers near you
82. 16. View your eDGE Loyalty Reward points balance and redeem from over 500 exciting reward opti
ons.
83. 17. Complete control over the value of transactions made from the app. Modify your transaction
limits with one click.
84. To allow us to give you a superior experience, we need your permission to access the following
:
85. • Location: To display the ATMs/Branches and Offers near you
86. • Photos and Camera: Personalise the accounts and payees added to the app
87. • Phone: To allow calling OOHS Bank Customer service from the app
88. • Device ID and Status, Mobile Number (SIM) and send SMS facility: To perform the required S
IM locking to your device for your account security by reading phone status and identity
89. • Calendar: Sync your scheduled payments
90. • SMS: To send activation SMS from your device
91. Simple steps to install and start using OOHS Mobile on your Android device
92. a. Download OOHS Mobile to your android device from Google Play Store.
93. b. Register using your Internet Banking OR Debit Card credentials. Standalone credit card use
rs can register using the Credit Card credentials
94. c. Enter the 8 digit Activation Code that you receive in your registered mobile number.
95. d. Set a six digit mPIN that you would use every time to login to OOHS Mobile. Remember this
mPIN and do not share it with anyone.
96.

```

```

97. """
98.         server.sendmail('oohsbank@gmail.com',email, promo)
99.         server.quit()
100.        else:
101.            pass
102.
103.        else:
104.            self.status=1    # Status = 1 refers to not eligible for bank account c
reacion
105.
106.
107.        if j==1:    #j=1 implies user is modifying details after registrering
108.
109.            self.cust_name=raw_input('Enter your first name : ')
110.            self.cust_mid_name=raw_input('Enter your middle initial/name : ')
111.            self.cust_last_name=raw_input('Enter your last name : ')
112.            self.idno=raw_input("Enter your passport number : ")
113.            while True:
114.                if len(self.idno)==8 and self.idno[0].isalpha():
115.                    break
116.                else:
117.                    print "Wrong Passport number format! Please try again!"
118.                    self.idno=raw_input("Enter your passport number : ")
119.            self.cust_email=raw_input('Enter the customer email : ')
120.            self.sal=input("Input your monthly salary (put '0' if you do not earn!) : "
)
121.            if self.sal>1500:
122.                status=0    # Status = 0 refers to eligible for bank account creation
123.            else:
124.                status=1    # Status = 1 refers to not eligible for bank account creati
on
125.
126.        b=bank()    # Creating object for class bank
127.        def main():
128.            print '''
129.                WELCOME TO OOHS BANK'S APP!
130.                Welcome to OOHS Bank's banking services.
131.                We are your one-stop solution to all your banking needs.
132.
133.            '''
134.            print
135.            k=1
136.            while k==1:
137.                print'\t\t===== MAIN MENU ====='
138.                print'\t\t1.    ENTER AS ADMIN'
139.                print'\t\t2.    ENTER AS CUSTOMER'
140.                print'\t\t3.    RATE OUR APP'
141.                print'\t\t4.    FIND NEAREST LOCATION'
142.                print'\t\t5.    REFER A FRIEND'
143.                print'\t\t6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE'
144.                print'\t\t7.    CONTACT US'
145.                print'\t\t8.    APPLY FOR A JOB'
146.                print'\t\t9.    EXIT'
147.                print
148.                choice=input('Please enter your choice =')
149.                if choice==1:
150.                    print'\t\tLog in-->1'
151.                    print'\t\tReturn to main menu-->2'
152.                    print
153.                    choice1=input('Please enter your choice =')
154.                    if choice1==1:
155.                        password=input('Please enter your 6-Digit ID =')
156.                        while True:

```

```

157.         if password==1289:      # Password for admininstrator is 1289
158.             print
159.             print
160.             print
161.             print'\t\t1. Enter the bank pre-requisites'
162.             print'\t\t2. View transaction history'
163.             print'\t\t3. Check app ratings'
164.             print'\t\t4. Check complaints/suggestions'
165.             print'\t\t5. Log out'
166.             print
167.             choice2=input('Please enter your choice =')
168.             if choice2==1:
169.                 #global b
170.                 b=bank()      #another local object created for class bank
171.                 b.bank_details()    # Allows administrator to enter bank pr
e-requisits
172.                 dict_bank=dict()
173.                 dict_bank[1289]=[b.s_b_a,b.pers_loan,b.debit_card]# Diction
ary is made with key 1289(administrator password) and value is a list of Business Loan Interes
t, Personal Loan Interest, and Max. amount that can be withdrawn at a time
174.                 f=open("bankdetails0.dat","wb")      #bankdetails0.dat is a
file containing dictionary with default values of bank pre-requisits
175.                 m=dict()
176.                 m.update(dict_bank)      # Updating bank pre-
requisits values in dictionary
177.                 pickle.dump(m,f)
178.                 f.close()
179.
180.             elif choice2==2 and os.path.isfile('transaction.txt')==True:
# transaction.txt - text file containing all bank transactions which took place
181.                 trans=open("transaction.txt","r+")
182.                 print
183.                 print"Transaction History - "
184.                 print
185.                 transread=trans.readlines()      # Reads text file line by l
ine
186.                 try:
187.                     for i in transread:      # i is each character in string
transread of line
188.                         for c in i.split('#'):
189.                             if c[1]=='D' or c[1]=='d':
190.                                 print '\n\n -----'
191.                                     print c
192.                     except IndexError:
193.                         pass
194.                     print
195.                     trans.close()
196.
197.             elif choice2==5:
198.                 break
199.
200.             elif choice2==3 and os.path.isfile('rate.dat')==True:
201.                 f=open('rate.dat','rb+')      # rate.dat - file where ratings
of app are stored in lists
202.                 rate=pickle.load(f) # 'rate' becomes a list with values of
ratings stored in linear order
203.                 f.close()
204.                 print "\n Number of 5 star rates: ",rate[0]
205.                 print "\n Number of 4 star rates: ",rate[1]
206.                 print "\n Number of 3 star rates: ",rate[2]
207.                 print "\n Number of 2 star rates: ",rate[3]
208.                 print "\n Number of 1 star rates: ",rate[4]

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209.                                     print "\n Avarage Rating : ", (rate[0]*5+rate[1]*4+rate[2]*
3+rate[3]*2+rate[4]*1)/float(rate[0]+rate[1]+rate[2]+rate[3]+rate[4])
210.                                     print
211.
212.                                     elif choice2==4 and os.path.isfile('complaint.dat')==True:
213.                                         f=open('complaint.dat','rb+') # complaint.dat - file wher
e all complaints are stored as strings
214.                                         try:
215.                                             while True:
216.                                                 s=pickle.load(f)
217.                                                 print s
218.                                         except:
219.                                             f.close()
220.
221.                                     else:
222.                                         print'Your request could not be satisfied. Please check the
following and try once again!'
223.                                         print "1. Check if the range if the choice entered is 1-
3"
224.                                         print "2. Make sure if any bank transaction has taken place
"
225.                                         print "3. Make sure if any one has rated the app"
226.                                         print "4. Make sure if any one has launched a complaint"
227.                                         print "\n\n"
228.                                     else:
229.                                         print'Wrong Admin Password!'
230.                                         password=input('Please enter your 6-Digit ID =')
231.                                     elif choice1==2:
232.                                         pass
233.                                     else:
234.                                         print "Invalid Choice! Please try again!"
235.                                     elif choice==2: # For customer
236.                                         print
237.                                         print'\t\t1.    Login'
238.                                         print'\t\t2.    Register'
239.                                         print'\t\t3.    Back to Menu'
240.                                         print
241.                                         choice3=input('Please enter your choice =')
242.                                         if choice3==1 and os.path.isfile('customer0.dat')==True: # customer0.dat
- file which has customer id, name and email dumped into it
243.                                             f=open("customer0.dat","rb")
244.                                             detail=pickle.load(f)
245.                                             f.close()
246.                                             id1=input('Please enter your 6-Digit ID =')
247.                                             print
248.                                             q=1
249.                                             while q==1:
250.                                                 if detail.has_key(id1)==True: # To check is bank account with use
r entered id exists
251.                                                     status=1
252.                                                     print
253.                                                     print
254.                                                     print'\t\t\t\t\t===== CUSTOMER MENU ====='
255.                                                     print'\t\t1.\t\tMODIFY ACCOUNT DETAILS'
256.                                                     print'\t\t2.\t\tSEARCH ACCOUNT DETAILS'
257.                                                     print'\t\t3.\t\tDELETE ACCOUNT DETAILS'
258.                                                     print'\t\t4.\t\tTRANSFER MONEY'
259.                                                     print'\t\t5.\t\tDEPOSIT MONEY'
260.                                                     print'\t\t6.\t\tWITHDRAW MONEY'
261.                                                     print'\t\t7.\t\tTAKE LOAN'
262.                                                     print'\t\t8.\t\tISSUE CREDIT CARD'
263.                                                     print'\t\t9.\t\tLOG OUT'
264.                                                     print

```

```

265.         choice4=input('Please enter your choice =')
266.         print
267.         q=1
268.         if choice4==1:
269.             f=open("customer0.dat","rb")
270.             dict1=pickle.load(f)
271.             f.close()
272.             id1=input('Enter you 6-Dugit customer ID: ')
273.             global p
274.             p=customer() # Local object for class customer created
275.             p.customer_details(1) # Customer enters details. Argument
# '1' refers to modifying details after creating account
276.             del dict1[id1]
277.             dict1[id1]=[p.cust_name, p.cust_mid_name, p.cust_last_name,
p.idno, p.sal, p.cust_email, p.cust_balance, p.cust_dep, p.cust_withdraw, p.cust_loan, p.cust
_debit] # Dictionary with user details created
278.             f=open("customer0.dat","wb")
279.             pickle.dump(dict1,f)
280.             f.close()
281.             print
282.             print'=====YOUR DEATILS HAS BEEN MODIFIED=====
283.             print
284.         elif choice4==2:
285.             f=open("customer0.dat","rb")
286.             dict1=pickle.load(f)
287.             f.close()
288.             print'\t=====DETAILS=====
289.             print'ID :',id1
290.             print'Name :',dict1[id1][0],dict1[id1][1],dict1[id1][2]
291.             print'Identification Document Number :', dict1[id1][3]
292.             print'Monthly Salary :',dict1[id1][4]
293.             print'E-mail :',dict1[id1][5]
294.             print'Balance :',dict1[id1][7]
295.             print'Pending loan :',dict1[id1][9]
296.             print'Credit card number :',dict1[id1][10][0],'Pincode--
>',dict1[id1][10][1]
297.             print
298.         elif choice4==3:
299.             f=open("customer0.dat","rb")
300.             dict1=pickle.load(f)
301.             f.close()
302.             f=open("customer0.dat","wb")
303.             del dict1[id1] # Deletes dictionary key with paarticular u
ser's details
304.             pickle.dump(dict1,f)
305.             f.close()
306.             print'===== YOUR ACCOUNT HAS BEEN SUCCESSFULLY DELETED =
=====
307.         elif choice4==4:
308.             f=open("customer0.dat","rb")
309.             dict1=pickle.load(f)
310.             f.close()
311.             id2=input('Enter the account to which money has to be trans
ferred =')
312.             if dict1.has_key(id2)==True: # Check is the other account
t exists
313.                 transfer=input('Enter the amount needed to be transferr
ed =')
314.                 if dict1[id1][7]>=transfer:
315.                     dict1[id2][7
316.                     ]+=transfer
317.                     dict1[id1][7]-=transfer
318.                     print'=====MONEY HAS BEEN TRANSFERRED=====

```

```

319.                                     ft=open("transaction.txt","a")
320.                                     lt=range(3)
321.                                     lt[0]='Transferrer\'s ID-
'+str(id1)+'#' # Enters transferers ID into file transaction.txt
322.                                     lt[1]='Reciever\'s ID-
'+str(id2)+'#' # Enters recievers ID into file transaction.txt
323.                                     lt[2]='Money transferred-
'+str(transfer)+'$$' # Enters amount transfered into file transaction.txt
324.                                     ft.writelines(lt)
325.                                     ft.close()
326.                                     print'=====RECIEPT=====
=====
327.                                     print'ID OF TRANSFERRER -',id1
328.                                     print'ID OF RECIEVER -',id2
329.                                     print'NAME OF TRANSFERRER -',dict1[id1][0]
330.                                     print'NAME OF RECIEVER -',dict1[id2][0]
331.                                     print'AMOUNT TRANSFERRED =',transfer
332.                                     print'ACCOUNT BALANCE OF TRANSFERRER =',dict1[id1][
7]
333.                                     print
334.                                     f=open("customer0.dat","wb")
335.                                     pickle.dump(dict1,f) # Updates original dictiona
ry
336.                                     f.close()
337.                                     else:
338.                                         print'INSUFFICIENT BALANCE'
339.                                     else:
340.                                         print'THE ACCOUNT DOESNT EXIST'
341.                                         f=open("customer0.dat","wb")
342.                                         pickle.dump(dict1,f) # overwrites already existing da
ta
343.                                         f.close()
344.                                         print
345.                                     elif choice4==5:
346.                                         f=open("customer0.dat","rb")
347.                                         dict1=pickle.load(f)
348.                                         f.close()
349.                                         dep=input('Enter the amount to be deposited =')
350.                                         ft=open("transaction.txt","a")
351.                                         lt=range(2) # Creates list
352.                                         lt[0]='id-
'+str(id1)+'#' # Changes list element 1(index=0) to 'id-ID#'
353.                                         lt[1]='Amount deposited-
'+str(dep)+'$' # Changes list element 2(index=1) to 'Amount deposited-AMOUNT$'
354.                                         ft.writelines(lt) # Updates file 'transaction.txt'
355.                                         ft.close()
356.                                         dict1[id1][7]+=dep # Updates account balance in original
dictionary
357.                                         print
358.                                         print'\t-THE AMOUNT HAS BEEN DEPOSITED-'
359.                                         print'\t=====RECIEPT=====
360.                                         print'\tID -',id1
361.                                         print'\tNAME -',dict1[id1][0]
362.                                         print'\tAMOUNT BALANCE -',dict1[id1][7]
363.                                         print
364.                                         f=open("customer0.dat","wb")
365.                                         pickle.dump(dict1,f) # Updates original dictionary
366.                                         f.close()
367.                                         print
368.                                     elif choice4==6:
369.                                         global b
370.                                         f=open("customer0.dat","rb")
371.                                         dict1=pickle.load(f)

```



```

372.         f.close()
373.         withdraw=input('Enter the amount needed to be withdrawn =')

374.         if withdraw<=dict1[id1][7] and withdraw<=b.debit_card:

375.             ft=open("transaction.txt","a")
376.             lt=range(2) # Creates list
377.             lt[0]='id-
'+str(id1)+'#' # Changes list element 1(index=0) to 'id-ID#'
378.             lt[1]='Amount withdrawn='+str(withdraw)+'$$' # Chang
es list element 2(index=1) to 'Amount deposited-AMOUNT$'
379.             ft.writelines(lt) # Updates file 'transaction.txt'
380.             ft.close()
381.             dict1[id1][7]-
=withdraw # Updates account balance in original dictionary
382.             print'\t-----MONEY WITHDRAWN-----'
383.             print'\t=====RECIEPT===== '
384.             print'\tID - ',id1
385.             print'\tNAME - ',dict1[id1][0]
386.             print'\tAMOUNT BALANCE OF TRANSFERRER -
',dict1[id1][7]
387.             print
388.             f=open("customer0.dat","wb")
389.             pickle.dump(dict1,f) # Updates original dictionary
390.             f.close()
391.             print
392.
393.         else: # clause in case error while withdrawing money occu
rs
394.             print 'Withdrawal of amount', withdraw, "could not be p
ossible. Please check the following and try again:- "
395.             print "1. Check if withdrawal amount not is greater tha
n account balance"
396.             print "2. Check if withdrawal amount not is greater tha
n maximum withdrawal amount at a time (if you don't know the maximum withdrawal amount at a t
ime, please ask an administrator)"
397.             print
398.             elif choice4==7: # Loan
399.                 f1=open("bankdetails0.dat","wb+")
400.                 try:
401.
402.                     bank1=pickle.load(f1)
403.                 except:
404.                     f1.close()
405.                 print
406.                 print'\t\t\t==== LOAN MENU===='
407.                 print'\t\t\t1. Business Loan'
408.                 print'\t\t\t2. Personal Loan'
409.                 print
410.                 choice5=input('Please enter your choice =')
411.                 if choice5==1:
412.                     f=open("customer0.dat","rb")
413.                     dict1=pickle.load(f)
414.                     f.close()
415.                     print
416.                     tem=b.s_b_a # b.s_b_a is loan interest for Business
Loans
417.
418.                     print'Interest will be compounded yearly at',tem,'rate.
',
419.                     print 'The minimum principle amount P can be minimum $1
0,000 and maximum 50% more than your current account balance.'
```

```

420.                                     print'Per annum for a minimum time period of one year .
Do you agreee.(y/n)'
421.                                     choice66=raw_input('Please enter your choice =')
422.                                     print
423.                                     if choice66.lower()=='y':
424.                                         amount=input("Enter the amount =") # amount refers
the Principle Amount P
425.                                         maxm=(150.0/100)*dict1[id1][7]
426.                                         if amount>=10000 and amount<=maxm:
427.                                             time=input('Enter the time period(IN YEARS) =')
# time refers the Time Period T
428.                                     if time>=1:
429.                                         print'YOUR LOAN HAS BEEN GRANTED'
430.                                         print
431.                                         print'Amount to be repaid =',(amount)+(amou
nt*(float(b.s_b_a)/100)**(time)) # Compound Interest Formula
432.                                         print'You need to repay this loan at our ba
nk office. To find nearest bank office, check Locations tab.'
433.                                         print
434.                                         print 'Make sure there is no type of coveri
ng on your right hand index finger when you come to repay your loan. You will requite to scan
your hand index finger at thebank office.'
435.                                         dict1[id1][9]+=(amount)+(amount*(float((b.s
_b_a))/100)**(time)) # Updates account balance in original dictionary
436.                                         ft=open("transaction0.dat","a")
437.                                         lt=range(3) # Creates List
438.                                         lt[0]='id-
'+str(id1)+'#' # Changes 1st element 1(index=0) to 'id-ID#'
439.                                         lt[0]='Type of loan - SMALL BUSINESS LOAN'+
'$$' # Changes 1st element 2(index=1) to 'Type of loan - SMALL BUSINESS LOAN$$'
440.                                         ft.writelines(lt[0])
441.                                         ft.close()
442.                                         f=open("customer0.dat","wb")
443.                                         pickle.dump(dict1,f) # Updates original
dictionary
444.                                         f.close()
445.                                     else:
446.                                         print "Invalid time period. Loan request ca
ncelled!"
447.                                     else:
448.                                         print "Loan of amount",amount,"is not allow
ed as per the rules of OOHS bank. Please try any other value later."
449.
450.                                     elif choice66.lower()=='n':
451.                                         print "Loan Request Cancelled Successfully!"
452.                                     else:
453.                                         print 'Wrong Input'
454.                                         print 'Please try again later!'
455.
456.                                     elif choice5==2:
457.                                         f=open("customer0.dat","rb")
458.                                         dict1=pickle.load(f)
459.                                         f.close()
460.                                         print
461.                                         tem=b.pers_loan # b.pers_loan is loan interest for Busi
ness Loans
462.                                         print'Interest will be compounded yearly at',tem,'rate.
'
463.                                         print 'The minimum principle amount P can be minimum $1
0,000 and maximum 50% more than your current account balance.'
464.                                         print'Per annum for a minimum time period of one year .
Do you agreee.(y/n)'
465.                                     choice66=raw_input('Please enter your choice =')

```

```

466.                                     print
467.                                     if choice66.lower()=='y':
468.                                         amount=input("Enter the amount =") # amount refers
the Principle Amount P
469.                                         maxm=(150.0/100)*(dict1[id1][7])
470.                                         if amount>=10000 and amount<=maxm:
471.                                             time=input('Enter the time period(IN YEARS) =')
# time refers the Time Period T
472.                                     if time>=1:
473.                                         print'YOUR LOAN HAS BEEN GRANTED'
474.                                         print
475.                                         print'Amount to be repaid =',(amount)+(amou
nt*(float(b.s_b_a)/100)**(time)) # Compound Interest Formula
476.                                         print'You need to repay this loan at our ba
nk office. To find nearest bank office, check Locations tab.'
477.                                         print
478.                                         print 'Make sure there is no type of coveri
ng on your right hand index finger when you come to repay your loan. You will requite to scan
your hand index finger at thebank office.'
479.                                         dict1[id1][9]+=(amount)+(amount*(float((b.s
_b_a))/100)**(time)) # Updates account balance in original dictionary
480.                                         ft=open("transaction0.dat","a")
481.                                         lt=range(3) # Creates List
482.                                         lt[0]='id-
'+str(id1)+'#' # Changes 1st element 1(index=0) to 'id-ID#'
483.                                         lt[0]='Type of loan - PERSONAL LOAN'+ '$$'
# Changes 1st element 2(index=1) to 'Type of loan - PERSONAL LOAN$$'
484.                                         ft.writelines(lt[0])
485.                                         ft.close()
486.                                         f=open("customer0.dat","wb")
487.                                         pickle.dump(dict1,f) # Updates original
dictionary
488.                                         f.close()
489.                                     elif choice66.lower()=='n':
490.                                         print "Loan Request Cancelled Successfully!"
491.                                     else:
492.                                         print 'Wrong choice'
493.                                     elif choice4==8: # For issuing credit card
494.                                         print 'Wrong choice'
495.                                     elif choice4==8: # For issuing credit card
496.                                         f=open("customer0.dat","rb")
497.                                         try:
498.                                             dict1=pickle.load(f)
499.                                         except EOFError:
500.                                             f.close()
501.                                     print "TERMS AND CONDITIONS:-"
502.                                     print # Printing terms and conditions
503.                                     print """
504.                                     You need to read this document and accept the terms and conditions hereto. It sets out
505.                                     specific terms and conditions on which we agree to provide you with credit card
506.                                     products. You must read it in conjunction with our Customer Terms, the product brochure
507.                                     and any other documents forming our banking agreement included in your Welcome Pack.
508.                                     The Welcome Pack forms an integral part of this document. To the extent of any inconsis
509.                                     tency between the terms set hereunder and our Customer Terms, these terms prevail.
510.                                     Definitions:-
511.                                     Defined Words printed in italics and defined words used in our banking agreement shall
512.                                     have the meaning ascribed to them in our Customer Terms unless otherwise defined
513.                                     herein. Some additional defined words which apply to the products referred to in these
terms and conditions hereunder shall have the same meaning ascribed to them at the end

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514. of this document.

515.

516. 1. Choosing the product that is right for you.

517. We offer a variety of credit card products designed to suit your personal banking needs which you have discussed with us. The particular types of credit cards we offer are set

518. out in the product brochures. If you need us to explain any of the features of, or the terms applying to, any credit cards, please contact us and we will be happy to give you all the

519. information that you may need.

520.

521. 2. The credit cards

522.

523. Issue of credit cards

524. 2.1 We may issue a credit card to you and, if you ask, to each supplementary cardholder

525.

526. Collection

527. 2.2 We send the credit card (and any replacement credit card) to your address last notified to us unless you notify us in writing that you want to collect the credit

528. card from us.

529.

530. Activation procedures

531. 2.3 Each cardholder must comply with any activation procedures notified from time to time.

532.

533. Using the credit card

534. The terms of our banking agreement apply to each use of a credit card. If a cardholder does not agree with those terms, they should not sign the credit card or carry out any transaction.

535.

536. 2.4 You accept the terms of our banking agreement when you first use the credit card.

537.

538. 2.5 You must ensure that only you are using the credit card. Any supplementary cards issued for other eligible persons shall be used at your sole liability and will be deemed, if used by such persons, as if used by you personally.

539. Supplementary cards

540.

541. 2.6 We send any supplementary cards, their PINs/password and all communications relating to them to you.

542.

543. 2.7 Any communication we give to you on any supplementary cardholder shall be delivered to you.

544.

545. 2.8 You shall procure that each supplementary cardholder agree to be bound by the instructions that any of you give us.

546.

547. Co-brand cards

548. 2.9 We may convert a co-brand card to another type of credit card at our discretion.

549.

550. 2.10 We are not liable for any representations, promotions or obligations made by a business alliance partner.

551.

552. 3. Credit limit

553. 3.1 We notify you of the credit limit when your application has been approved. We may vary the credit limit at any time.

554.

555. 3.2 The credit limit is an overall limit that applies to all credit cards issued to you

556.

557. 3.3 The credit limit is also dependant on the prevailing local regulations.

558.

559. Exceeding your credit limit

560. 3.4 It is your responsibility to ensure that the credit limit is not exceeded.

561.

562. 3.5 In calculating whether the credit limit has been exceeded, we may take into account

563. :

564. • any transaction made using the credit card but which has not been debited from the account for a credit card; and

565. • any authorisation we have given to a third party in connection with a proposed transaction using the credit card.

566. Credit limit exceeded

567. 3.6 If you exceed the credit limit or any temporary credit limit extension has expired, you must immediately pay us that part of the balance owing for the account for

568. the credit card which exceeds the credit limit in addition to any payment we require.

569.

570. 4. Cash advance

571. How to obtain a cash advance:

572. The Cardholder may obtain Cash Advance subject to availability of adequate credit and as may be acceptable to the Bank from time to time at its absolute discretion by

573. the following means

574.

575. 4.1 You may obtain a cash advance using your credit card at one of our branches, other financial institutions displaying the logo of a card association and any

576. OOHS BANK.

577.

578. Maximum limit on cash advance

579. 4.2 A cash advance is only available up to the maximum amount the person providing the advance permits. For details of the maximum amount we permit contact us.

580.

581. 5. Balance transfer

582. 5.1 If you ask, we may permit a balance transfer subject to any conditions we specify.

583.

584. 5.2 You should continue to make any required payments to the account from which you transfer a balance until we confirm that the account has been credited. We are not liable for any overdue payment or interest incurred relating to the

585. account from which you transfer a balance.

586.

587. 5.3 Any payment made on your account for the credit card will first be applied to reduce the balance transfer before any other balance owing.

588.

589. 6. Interest, fees and charges

590.

591. 6.1 Interest, fees and charges (including finance charges, cash advance fees, overlimit fees, annual fees and administrative fees) are set out in the Service & Price Guide.

592.

593. 6.2 Unless otherwise specified, interest is calculated on the basis of a 360 day year and compounded on monthly basis or such other basis we choose.

594.

595. 6.3 Interest is charged until the date the balance owing is paid in full.

596.

597. 6.4 You must pay all costs such as debt collection fees we incur in connection with the credit card on demand.

598.

599. 7. Liability

600.

601. General

602. 7.1 You are liable for:

603. • any failure by any cardholder to comply with the terms of our banking agreement;

604. • all transactions made using a credit card (except for disputed transactions);

605. • the balance owing for the account for a credit card (including all amounts debited and credited to the account for the credit card by any supplementary cardholder); and

606. • any transactions where we could otherwise have exercised chargeback rights if you do not notify us of the transactions and provide any further documents or information we require within the time periods required.

607.

608. Disputes between you and supplementary cardholders

609. 7.2 Our rights and obligations relating to you and each supplementary cardholder are not affected by any dispute or claim you and the supplementary cardholder may have against each other.

610. Purchase of goods or services

611.

612. 7.3 We are not liable for:

613. • Any payment terms by instalments or otherwise on the account of the credit card or any other payment arrangement you conclude with third parties with the credit card;

614. • the refusal of any merchant, financial institution or other person to accept the credit card; and

615. • any defect or deficiency in goods or services supplied to you by any merchant, financial institution or other person.

616. You must solely resolve any complaint against any merchant, financial institution or other person without any involvement from us and no claim against any of them may be set off against us.

617.

618. Additional services offered with credit cards

619. 7.4 Some types of credit cards give you access to services provided and paid for by third parties. For example, if you hold a Visa Gold Card or Visa Platinum Card you may have access to the International Emergency Assistance Service. You are liable for the cost of any medical, legal or other services provided under

620. these third party services. You acknowledge that the third party service providers do their best to provide the services to cardholders and that the services may not always be available (for example, because of time, distance

621. or location). Neither we nor the third party service provider or Visa International Service Association is liable to you for any loss in connection with any service

622. or its unavailability.

623.

624. 7.5 We are also not liable to holders of a credit card with access to Emergency Cash Withdrawal (if available) for any loss they suffer if we are unable to give immediate effect to an Emergency Cash Withdrawal, replacement card or any

625. other facilities we offer in connection with the credit card. The Customer Terms include additional provisions relating to your liability to us and exclusions or limits on our liability. See, for example, "You indemnify us"

626. and "Exclusion of liability".

627.

628. 8. Additional services for your account

629. 8.1 We may offer additional services for your account. These may include reward programmes, balance transfer schemes, payment arrangements, card protection and any other services which you can find out more about by

630. contacting us at one of our branches or by using phone banking or as we advise you from time to time.

631.

632. 8.2 If you sign up for additional services, you are bound by the terms of the additional services. To the extent of any inconsistency between the terms of the additional services and our banking agreement, our banking agreement

633. prevails unless the terms of the additional services specify otherwise.

634.

635. 8.3 For details of any bonus point scheme applying to the credit card, please refer to our banking agreement or contact us.

636.

637. 9. Payments

638.

639. Payment by due date

640. 9.1 On or before the due date set out in the statement we issue for your credit card, you must pay at least the minimum payment due as set out in the statement.

641. 9.2 Your liability to us remains even if, for any reason, you do not receive your periodic statement.

642. 9.3 If an amount is due on a day which is not a banking day, you must pay it on the next banking day.

643.

644. Calculation of minimum payment

645. 9.4 We calculate the minimum payment in accordance with our usual practice. Please refer to your statement or contact us for further information.

646.

647. Currency of transactions

648. 9.5 If any transaction made using the credit card is not denominated in the currency of Qatar, we convert the amount of the transaction to the currency of Qatar in accordance with our usual practice and our banking agreement.

649.

650. How we apply payments

651. 9.6 We may (but need not) apply payments we receive to pay:

652. • fees, charges, cash advances, interest and other charges shown on the previous statement; then

653. • fees, charges, cash advances, interest and other charges interest shown on the current statement; then

654. • any unpaid transactions shown on the previous statement; then

655. • any unpaid transactions shown on the current statement; then

656. • fees, charges, cash advances, interest, other charges and other transactions on the account not shown on the current statement.

657.

658. What happens if you do not pay

659. 9.7 If we do not receive the balance owing for the account for a credit card on or before the due date we may charge and debit from the account for a credit card finance charges as set out in the Service & price Guide or elsewhere in our

660. banking agreement.

661.

662. 9.8 If we do not receive the minimum payment on or before the due date, then:

663. • you must pay a late payment charge as set out in the Service & price Guide or elsewhere in our banking agreement;

664. • you must not use the credit card until the minimum payment has been paid;

665. • we may suspend your use of the credit card.

666.

667. Payment in full if we ask

668. 9.9 Despite any other term of our banking agreement, at any time we may demand immediate payment of the total amount of the balance owing for the account for a credit card plus interest and fees.

669. Refunds to the credit card account

670.

671. 9.10 We only credit a refund to the account for a credit card in connection with:

672. • a transaction made with the credit card; or

673. • a payment to the account for the credit card; or

674. • any other credit owing to you, when we receive the amount to be credited in Qatar and in accordance with our usual practice.

675.

676. Statement

677. 9.11 If you think there is an error on your statement you must notify us in writing with details of the error within 30 days after the date of the statement. If you do not

678. do so, we treat the statement as correct.

679.

680. 10. Cancellation and termination

681.

682. How to terminate

683. 10.1 At any time we may choose to:

684. • cancel or suspend your right to use the credit card or end the account for a credit card;

685. • refuse to authorise any transaction for which you want to use the credit card; and

686. • refuse to re-issue, renew or replace the credit card, without giving you any notice or reason.

687. 10.2 At any time, you may end the account for a credit card by notifying us in writing.

688.

689. What happens if the account is terminated

690. 10.3 If you or we end the account for a credit card, you must:

691. • cut the credit card in half; and

692. • immediately pay the balance owing for the account for the credit card together with any other amounts owing in connection with credit card transactions which have been made before termination but which have not actually been

693. debited to the account for the credit card.

694.

695. Termination of use of supplementary credit card by cardholder

696. 10.4 Either you or a supplementary cardholder may end the use of a supplementary credit card by:

697. • notifying us in writing; and

698. • cutting the card in half.

699.

700. 11. Variation

701. 11.1 If you are not comfortable with any changes we make to our banking agreement, you may terminate the account for a credit card in accordance with the procedure in clause 10.

702.

703. 11.2 If we notify you of any changes to our banking agreement in accordance with any applicable law and you keep or use the credit card, the account for the credit card or the PIN/password, you will be deemed to have agreed to the

704. changes.

705.

706. 12. Suspicious transactions

707. We may not honour suspicious transactions (and need not notify you if this is the case)

708.

709. 13. Payment Protection Insurance

710. 13.1 Application: This Clause shall apply if you have indicated in the Application Form that you want Payment Protection Insurance, but not otherwise.

711.

712. 13.2 Acceptance: We have the right to accept or reject your application for Payment

713.

714. Protection Insurance at our absolute discretion and without providing reasons for our decision.

715.

716. 13.3 Conditions If you enrol for Payment Protection Insurance

717.

718. 13.3.1 Your obligation to pay certain outstanding amounts under the Credit Card shall be deemed to be discharged in certain events (such as your accidental death, total and permanent disablement or terminal illness) and upon certain

719. additional conditions being met. The terms and conditions relating to your Payment Protection Insurance are set out in the Payment Protection Insurance Terms & Conditions and these form a part of these Credit Card

720. Terms and Conditions; and

721.

722. 13.3.2 We shall specify in the (Confirmation or Policy Cover Note), the (nonrefundable-assuming regular premium) Payment Protection Insurance premium (or fee) you shall have to pay to us each month.

723.

724. 14. Meaning of words

725. You also need to refer to our Customer Terms which also define key words used in these terms. If a word defined in these terms is also defined in our Customer Terms, the

726. definition in these terms applies for the purposes of accounts for the credit cards. balance transfer means a transaction where we debit an amount you specify from your

727. credit card and pay the amount to another credit card with us or another financial institution. cash advance means cash issued in any currency obtained by using the credit card.

728. co-

brand card means a card issued by us in conjunction with a business alliance partner. credit limit means, for an account for a credit card, the maximum amount you are entitled

729. to have outstanding on the account for the credit card. our banking agreement means the agreement between you and us formed when we accept an application from you, the terms of which include our Customer Terms and these

730. terms. supplementary card means, for an account for a credit card, a credit card issued to a person you authorise as a supplementary cardholder on your account for the credit card.

731. supplementary cardholder means each person to whom we issue a supplementary card.


```

732.         """
733.         print "\n\n\n"
734.         print 'Do you agree to the Terms and Conditions(y/n)'
735.         c=raw_input('Please enter your choice =')
736.
737.         if c=='y': # For accepting T&C
738.             f=open("customer0.dat","rb")
739.             dict1=pickle.load(f)
740.             dict1[id1][10][0]=(random.randint(1000,10000)) # Crea
tes Pin code
741.             dict1[id1][10][1]=(random.randint(1000,10000)) # Crea
tes credit card no.
742.             print "\nWHICH PACKAGE DO YOU WISH TO CHOOSE?\n"
743.             print "1. $50,000,000"
744.             print "2. $10,000,000"
745.             print "3. $1,000,000"
746.             print "4. $500,000"
747.             print "5. $100,000"
748.             print "6. $50,000"
749.             while True:
750.                 choice99=input("Enter your choice: ")
751.                 if choice99>=1 and choice99<=6:
752.                     print '\nCREDIT CARD SUCCESSFULLY ISSUED\n'
753.                     break
754.                 else:
755.                     print "Invalid Choice! Please try again!"
756.
757.             print
758.             print 'Card number :',dict1[id1][10][0]
759.             print 'Pin code :',dict1[id1][10][1]
760.             if choice99==1:
761.                 print 'Amount $50,000,000'
762.             elif choice99==2:
763.                 print 'Amount : $10,000,000'
764.             elif choice99==3:
765.                 print 'Amount : $1,000,000'
766.             elif choice99==4:
767.                 print 'Amount : $500,000'
768.             elif choice99==5:
769.                 print 'Amount : $100,000'
770.             elif choice99==6:
771.                 print 'Amount : $50,000'
772.             ft=open("transaction.txt","a")
773.             lt=range(2) # Creates list
774.             lt[0]='id-
'+str(id1)+'#' # Changes list element 1(index=0) to 'id-ID$$'
775.             lt[1]='Credit card issued'+ '$$' # Changes list elem
ent 2(index=1) to 'Credit card issued$$'
776.             ft.writelines(lt[1]) # Creates transaction record of
credit card issue
777.             ft.close()
778.             f=open("customer0.dat","wb")
779.             pickle.dump(dict1,f) # Updates original dictionary
780.             f.close()
781.         else:
782.             print 'SORRY, YOU ARE NOT ELIGIBLE FOR THE CREDIT CARD'
783.
784.         elif choice4==9:
785.             print
786.             print '=====YOU HAVE SUCCESSFULLY LOGGED OUT===== '
787.             print
788.             q=2
789.         else:

```

```

789.             print "Invalid Choice! Please try again!"
790.         else:
791.             print
792.             print 'Invalid Choice! Please Try Again!'
793.             print
794.             id1=input('Please enter your 6-Digit ID =')
795.
796.
797.         elif choice3==2:    # For customer registration
798.             s=customer()
799.             s.customer_details(0)    # invokes customer_details of class customer wi
th j=0 which implies details entering for registration (Refer line 26)
800.             dict_customer=dict()    # Empty distionary created
801.             dict_customer[s.cust_id]=[s.cust_name,s.cust_mid_name,s.cust_last_name,
s.idno, s.sal,s.cust_email,s.cust_balance,s.cust_dep,s.cust_withdraw,s.cust_loan,s.cust_debit]
            # Account created
802.         try:
803.             f=open("customer0.dat","rb")
804.             m=pickle.load(f)    # Reads default dictionary
805.             f.close()
806.             m.update(dict_customer)    # Modifies dictionary
807.             f=open("customer0.dat","wb")
808.             pickle.dump(m,f)    # New dictionary dumped
809.             f.close()
810.
811.         except: # In case there is no file 'customer0.dat' created
812.             f=open("customer0.dat","wb")
813.             pickle.dump(dict_customer,f)    #New dictionary dumped
814.             f.close()
815.
816.             print
817.             print
818.         elif choice==9:
819.             print 'Exiting OOHS Bank.....'
820.             print 'Hope you have enjoyed!'
821.             print 'Feel free to come back! Have a nice day!'
822.             exit()
823.
824.         elif choice==3:    # For rating app
825.             print "Thank You to choose to rate app. Please rate app on the following -
\n"
826.             print "1. 5 stars"
827.             print "2. 4 stars"
828.             print "3. 3 stars"
829.             print "4. 2 stars"
830.             print "5. 1 star \n"
831.             choice44=input('Enter your choice: ')
832.             if os.path.isfile('rate.dat')==False:    # When file doesnot exist
833.                 s1=s2=s3=s4=s5=0    # All default rating values are 0
834.                 if choice44==1:
835.                     s5+=1
836.                 elif choice44==2:
837.                     s4+=1
838.                 elif choice44==3:
839.                     s3+=1
840.                 elif choice44==4:
841.                     s2+=1
842.                 elif choice44==5:
843.                     s1+=1
844.                 else:
845.                     print "Invalid Choice! Please try again later!"
846.                     rate=range(5)    # Creates sample list
847.                     rate[0]=s5

```

```

848.         rate[1]=s4
849.         rate[2]=s3
850.         rate[3]=s2
851.         rate[4]=s1
852.         f=open('rate.dat','wb+')
853.         pickle.dump(rate,f) # updated list dumps list
854.         f.close()
855.         elif os.path.isfile('rate.dat')==True: # When file exists
856.             f=open('rate.dat','rb+')
857.             rate=pickle.load(f) # Takes already existing rates and then modifies
those values
858.             s5=rate[0]
859.             s4=rate[1]
860.             s3=rate[2]
861.             s2=rate[3]
862.             s1=rate[4]
863.             if choice44==1:
864.                 s5+=1
865.             elif choice44==2:
866.                 s4+=1
867.             elif choice44==3:
868.                 s3+=1
869.             elif choice44==4:
870.                 s2+=1
871.             elif choice44==5:
872.                 s1+=1
873.             else:
874.                 print "Invalid Choice! Please try again later!"
875.             rate[0]=s5
876.             rate[1]=s4
877.             rate[2]=s3
878.             rate[3]=s2
879.             rate[4]=s1
880.             f=open('rate.dat','wb+')
881.             pickle.dump(rate,f) # Dumps updated list
882.             f.close()
883.
884.             print "Thank you for your opinion! We will improve accordingly!\n\n\n"
885.
886.         elif choice==4: # Locations Tab
887.             print ""
888.             Our Offices are all over UAE:
889.
890.             1. DUBAI OFFICE
891.
892.
893.             PO BOX 82954
894.             305, Ascot Building,
895.             Mankhool Road, Bur Dubai
896.             Dubai, UAE
897.
898.             2. SHARJAH OFFICE
899.
900.             PO BOX 37904
901.             502, AKM Building,
902.             Sheikh Khalid Bin Mohammed Al Qassimi Street
903.             Sharjah, UAE
904.
905.             3. ABU DHABI OFFICE
906.
907.             PO BOX 94857
908.             818, AD Tower,
909.             E 611 road

```

```

910.     Abu Dhabi, UAE
911.
912.     You should come to your nearest head office in order to repay loans (if any) !\n\n\n
913.     """"
914.         elif choice==5:      # Refer a friend
915.             id1=input("Enter your ID: ")      # Asks for user's id
916.             try:
917.                 f=open('customer0.dat','rb+')
918.                 dict1=pickle.load(f)
919.                 eid1=dict1[id1][5]      # finds user's email id
920.             except:
921.                 f.close()
922.                 eid2=raw_input("Enter e-mail id of friend: ")      # takes friend's email id
923.                 server = smtplib.SMTP('smtp.gmail.com', 587)
924.                 server.starttls()
925.                 server.login("oohsbank@gmail.com", "admin1289") #msg1 - content for mail se
nt to friend
926.                 msg1= "Your are invited by "+dict1[id1][0]+" to join OOHS Bank \n Please Re
ply to this e-
mail if you wish to have a bank account with OOHS Bank \n Thank You, Best Regards \n OOHS Bank
"
927.                 server.sendmail('oohsbank@gmail.com',eid2, msg1)      # sends email to friend
# msg2 - content for mail sent to user of the gift of referring a friend
928.                 msg2='For refering a friend of yours, you get 450 MB Data Balance of AED 50
for free alongwith 450 MB of free social data for 30 days from Du. \n To validate this offer,
please reply to this email id! \n Thank You, Best Regards \n OOHS Bank'
929.                 server.sendmail('oohsbank@gmail.com',eid1, msg2)      #sends email to user
930.                 server.quit()
931.                 print "Thank You for refering a friend! Your friend will recieve an invitat
ion by OOHS Bank on behalf of you using e-mail!"
932.                 print "We have sent you an offer from Du to your e-
mail. To redeem your offer, please follow directions sent in your mail.\n\n\n"
933.
934.         elif choice==6:      # For complaint
935.             print "===== COMPLAINT/SUGGESTION CENTRE ====="
936.             id1=input("Enter your ID: ")      # asks user's id
937.             try:
938.                 f=open('customer0.dat','rb+')
939.                 dict1=pickle.load(f)
940.                 email=dict1[id1][5]      # finds user'd email id
941.             except:
942.                 f.close()
943.             print "Please describe your complaint/suggestion in detail: (in 1 line = ma
x 166 characters)"
944.             complaint=raw_input()
945.             server = smtplib.SMTP('smtp.gmail.com', 587)
946.             server.starttls()
947.             server.login("oohsbank@gmail.com", "admin1289")
948.             msg="Complaint/Suggestion from "+str(dict1[id1][0])+", ID no. - "+str(id1)+
" : "+complaint      # msg - the coplaint with user's name and id -
- this acts as content for confirmation email and also string which will be dumped in the file
949.             server.sendmail('oohsbank@gmail.com',email, "\n\nYour complaint submited -
\n"+msg)
950.             server.quit()
951.             if os.path.isfile('complaint.dat')==False:
952.                 f=open("complaint.dat","wb+")
953.                 pickle.dump(msg,f)
954.                 f.close()
955.             else:
956.                 f=open("complaint.dat","ab")
957.                 pickle.dump(msg,f)
958.                 f.close()

```

```

959.         print "Your complaint/suggestion has been successfully been sent. We will re
vert to you within 2 working days."
960.         print "Thank you for your complaint/suggestion!\n\n"
961.
962.         elif choice==7:
963.             print "CONTACT US"
964.             print "\nTelephoe Numbers - "
965.             print "DUBAI - 043739377"
966.             print "ABU DHABI - 043739397"
967.             print "SHARJAH - 043739347"
968.             print "Do you want to send us something by mail?"
969.             choice88=raw_input("Enter your choice (y/n): ")
970.             if choice88.lower()=='y':
971.                 print "Please describe your message in detail: (in 1 line = max 166 cha
racters)"
972.                 send=raw_input()
973.                 server = smtplib.SMTP('smtp.gmail.com', 587)
974.                 server.starttls()
975.                 server.login("oohsbank@gmail.com", "admin1289")
976.                 server.sendmail('oohsbank@gmail.com','oohsbank@gmail.com', send)
977.                 server.quit()
978.                 print "Your message has been sent. Thank you!\n\n"
979.
980.             elif choice==8:
981.                 name=raw_input("Enter your full name: ")
982.                 email=raw_input("Enter a valid e-mail id: ")
983.                 print "What post are you planing to apply???"
984.                 print "1. Financial Analyst"
985.                 print "2. Bank Teller"
986.                 print "3. Financial Analyst"
987.                 print "4. Loan Officer"
988.                 print "5. Customer care"
989.                 print "6. Accounts Manager"
990.                 choice121=input('\n\nEnter your choice: ')
991.                 if choice121>=1 and choice121<=6:
992.                     loc=raw_input("Enter your nearest bank center (Abu Dhabi, Dubai, Sharja
h): ")
993.                     print "Thank you for your request. You will recieve an e-
mail shortly regarding our job requirements!"
994.                     print "Kindly follow our the directions sent to you my mail!\n\n\n"
995.                     server = smtplib.SMTP('smtp.gmail.com', 587)
996.                     server.starttls()
997.                     send='Thank you for your request for serving OOHs Bank\nYou are request
ed to attach your resume and reply to this mail\nIf approved, you may be called to have an int
erview at '+loc+' head office!\n Thank You,\n Best Regards \n OOHs Bank'
998.                     server.login("oohsbank@gmail.com", "admin1289")
999.                     server.sendmail('oohsbank@gmail.com',email, send)
1000.                     server.quit()
1001.
1002.             else:
1003.                 print "Invalid Choice! Please try again!"
1004.
1005.
1006.     main()

```

PROGRAM OUTPUT

```

1.         WELCOME TO OOHs BANK'S APP!
2.         Welcome to OOHs Bank's banking services.
3.         We are your one-stop solution to all your banking needs.
4.

```

```

5.
6.
7.      ===== MAIN MENU =====
8.      1.    ENTER AS ADMIN
9.      2.    ENTER AS CUSTOMER
10.     3.    RATE OUR APP
11.     4.    FIND NEAREST LOCATION
12.     5.    REFER A FRIEND
13.     6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
14.     7.    CONTACT US
15.     8.    APPLY FOR A JOB
16.     9.    EXIT
17.
18. Please enter your choice =2
19.
20.     1.    Login
21.     2.    Register
22.     3.    Back to Menu
23.
24. Please enter your choice =2
25. Enter the customer name -Parv
26. Enter your middle initial/name : V
27. Enter your last name : Joshi
28. Enter your passport number : N1234567
29. Enter the customer email : parv192000@gmail.com
30. Input your monthly salary (put '0' if you do not earn!) : 9000
31. Thank You for registering with OOHS Bank
32. Your Login ID will be sent to you by e-mail shortly! Please Check your e-
    mail and the continue.
33.
34.
35. Do you wish to get promotional e-mails from OOHS Bank??
36. Enter your choice (y/n): y
37.
38.
39.      ===== MAIN MENU =====
40.     1.    ENTER AS ADMIN
41.     2.    ENTER AS CUSTOMER
42.     3.    RATE OUR APP
43.     4.    FIND NEAREST LOCATION
44.     5.    REFER A FRIEND
45.     6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
46.     7.    CONTACT US
47.     8.    APPLY FOR A JOB
48.     9.    EXIT
49.
50. Please enter your choice =2
51.
52.     1.    Login
53.     2.    Register
54.     3.    Back to Menu
55.
56. Please enter your choice =1
57. Please enter your 6-Digit ID =641626
58.
59.
60.
61.      ===== CUSTOMER MENU =====
62.     1.    MODIFY ACCOUNT DETAILS
63.     2.    SEARCH ACCOUNT DETAILS
64.     3.    DELETE ACCOUNT DETAILS
65.     4.    TRANSFER MONEY
66.     5.    DEPOSIT MONEY

```

```

67.          6.  WITHDRAW MONEY
68.          7.  TAKE LOAN
69.          8.  ISSUE CREDIT CARD
70.          9.  LOG OUT
71.
72. Please enter your choice =1
73.
74. Enter you 6-Dugit customer ID: 641626
75. Enter your first name : Parv
76. Enter your middle initial/name : Vinod
77. Enter your last name : Joshi
78. Enter your passport number : N9876543
79. Enter the customer email : parv192000@gmail.com
80. Input your monthly salary (put '0' if you do not earn!) : 99000
81.
82. =====YOUR DEATILS HAS BEEN MODIFIED=====
83.
84.
85.
86.          ===== CUSTOMER MENU =====
87.          1.  MODIFY ACCOUNT DETAILS
88.          2.  SEARCH ACCOUNT DETAILS
89.          3.  DELETE ACCOUNT DETAILS
90.          4.  TRANSFER MONEY
91.          5.  DEPOSIT MONEY
92.          6.  WITHDRAW MONEY
93.          7.  TAKE LOAN
94.          8.  ISSUE CREDIT CARD
95.          9.  LOG OUT
96.
97. Please enter your choice =2
98.
99.          ====DETAILS====
100.         ID : 641626
101.         Name : Parv Vinod Joshi
102.         Identification Document Number : N9876543
103.         Monthly Salary : 99000
104.         E-mail : parv192000@gmail.com
105.         Balance : 0
106.         Pending loan : 0
107.         Credit card number : None Pincode--> None
108.
109.
110.
111.         ===== CUSTOMER MENU =====
112.         1.  MODIFY ACCOUNT DETAILS
113.         2.  SEARCH ACCOUNT DETAILS
114.         3.  DELETE ACCOUNT DETAILS
115.         4.  TRANSFER MONEY
116.         5.  DEPOSIT MONEY
117.         6.  WITHDRAW MONEY
118.         7.  TAKE LOAN
119.         8.  ISSUE CREDIT CARD
120.         9.  LOG OUT
121.
122.         Please enter your choice =5
123.
124.         Enter the amount to be deposited =800000
125.
126.         -THE AMOUNT HAS BEEN DEPOSITED-
127.         =====RECIEPT=====
128.         ID - 641626
129.         NAME - Parv

```

```

130.          AMOUNT BALANCE - 800000
131.
132.
133.
134.
135.          ===== CUSTOMER MENU =====
136.          1.  MODIFY ACCOUNT DETAILS
137.          2.  SEARCH ACCOUNT DETAILS
138.          3.  DELETE ACCOUNT DETAILS
139.          4.  TRANSFER MONEY
140.          5.  DEPOSIT MONEY
141.          6.  WITHDRAW MONEY
142.          7.  TAKE LOAN
143.          8.  ISSUE CREDIT CARD
144.          9.  LOG OUT
145.
146.          Please enter your choice =6
147.
148.          Enter the amount needed to be withdrawn =9999999999
149.          Withdrawal of amount 9999999999 could not be possible. Please check the following and
try again:-
150.          1. Check if withdrawal amount not is greater than account balance
151.          2. Check if withdrawal amount not is greater than maximum withdrawal amount at a time (
if you don't know the maximum withdrawal amount at a time, please ask an administrator)
152.
153.
154.
155.          ===== CUSTOMER MENU =====
156.          1.  MODIFY ACCOUNT DETAILS
157.          2.  SEARCH ACCOUNT DETAILS
158.          3.  DELETE ACCOUNT DETAILS
159.          4.  TRANSFER MONEY
160.          5.  DEPOSIT MONEY
161.          6.  WITHDRAW MONEY
162.          7.  TAKE LOAN
163.          8.  ISSUE CREDIT CARD
164.          9.  LOG OUT
165.
166.          Please enter your choice =6
167.
168.          Enter the amount needed to be withdrawn =500
169.          -----MONEY WITHDRAWN-----
170.          =====RECIEPT=====
171.          ID - 641626
172.          NAME - Parv
173.          AMOUNT BALANCE OF TRANSFERRER - 799500
174.
175.
176.
177.
178.
179.          ===== CUSTOMER MENU =====
180.          1.  MODIFY ACCOUNT DETAILS
181.          2.  SEARCH ACCOUNT DETAILS
182.          3.  DELETE ACCOUNT DETAILS
183.          4.  TRANSFER MONEY
184.          5.  DEPOSIT MONEY
185.          6.  WITHDRAW MONEY
186.          7.  TAKE LOAN
187.          8.  ISSUE CREDIT CARD
188.          9.  LOG OUT
189.
190.          Please enter your choice =2

```



```

191.
192.      ====DETAILS====
193.      ID : 641626
194.      Name : Parv Vinod Joshi
195.      Identification Document Number : N9876543
196.      Monthly Salary : 99000
197.      E-mail : parv192000@gmail.com
198.      Balance : 799500
199.      Pending loan : 0
200.      Credit card number : None Pincode--> None
201.
202.
203.
204.      ===== CUSTOMER MENU =====
205.      1.  MODIFY ACCOUNT DETAILS
206.      2.  SEARCH ACCOUNT DETAILS
207.      3.  DELETE ACCOUNT DETAILS
208.      4.  TRANSFER MONEY
209.      5.  DEPOSIT MONEY
210.      6.  WITHDRAW MONEY
211.      7.  TAKE LOAN
212.      8.  ISSUE CREDIT CARD
213.      9.  LOG OUT
214.
215.      Please enter your choice =7
216.
217.
218.      ===== LOAN MENU=====
219.      1. Business Loan
220.      2. Personal Loan
221.
222.      Please enter your choice =1
223.
224.      Interest will be compounded yearly at 20 rate.
225.      The minimum principle amount P can be minimum $10,000 and maximum 50% more than your cu
rent account balance.
226.      Per annum for a minimum time period of one year .Do you agreee.(y/n)
227.      Please enter your choice =y
228.
229.      Enter the amount =10005
230.      Enter the time period(IN YEARS) =2
231.      YOUR LOAN HAS BEEN GRANTED
232.
233.      Amount to be repaid = 10405.2
234.      You need to repay this loan at our bank office. To find nearest bank office, check Loca
tions tab.
235.
236.      Make sure there is no type of covering on your right hand index finger when you come to
repay your loan. You will requite to scan your hand index finger at thebank office.
237.
238.
239.      ===== CUSTOMER MENU =====
240.      1.  MODIFY ACCOUNT DETAILS
241.      2.  SEARCH ACCOUNT DETAILS
242.      3.  DELETE ACCOUNT DETAILS
243.      4.  TRANSFER MONEY
244.      5.  DEPOSIT MONEY
245.      6.  WITHDRAW MONEY
246.      7.  TAKE LOAN
247.      8.  ISSUE CREDIT CARD
248.      9.  LOG OUT
249.
250.      Please enter your choice =2

```

```

251.
252.      ====DETAILS====
253.      ID : 641626
254.      Name : Parv Vinod Joshi
255.      Identification Document Number : N9876543
256.      Monthly Salary : 99000
257.      E-mail : parv192000@gmail.com
258.      Balance : 799500
259.      Pending loan : 10405.2
260.      Credit card number : None Pincode--> None
261.
262.
263.
264.      ===== CUSTOMER MENU =====
265.      1.  MODIFY ACCOUNT DETAILS
266.      2.  SEARCH ACCOUNT DETAILS
267.      3.  DELETE ACCOUNT DETAILS
268.      4.  TRANSFER MONEY
269.      5.  DEPOSIT MONEY
270.      6.  WITHDRAW MONEY
271.      7.  TAKE LOAN
272.      8.  ISSUE CREDIT CARD
273.      9.  LOG OUT
274.
275.      Please enter your choice =8
276.
277.      TERMS AND CONDITIONS:-
278.
279.
280.
281.      You need to read this document and accept the terms and conditions hereto. It sets out
282.      specific terms and conditions on which we agree to provide you with credit card
283.      products. You must read it in conjunction with our Customer Terms, the product brochure
284.      and any other documents forming our banking agreement included in your Welcome Pack.
285.      The Welcome Pack forms an integral part of this document. To the extent of any inconsis
286.      tency between the terms set hereunder and our Customer Terms, these terms prevail.
287.
288.      Definitions:-
289.      Defined Words printed in italics and defined words used in our banking agreement shall
290.      have the meaning ascribed to them in our Customer Terms unless otherwise defined
291.      herein. Some additional defined words which apply to the products referred to in these
292.      terms and conditions hereunder shall have the same meaning ascribed to them at the end
293.      of this document.
294.
295.      1. Choosing the product that is right for you.
296.      We offer a variety of credit card products designed to suit your personal banking needs
297.      which you have discussed with us. The particular types of credit cards we offer are set
298.      out in the product brochures. If you need us to explain any of the features of, or the
299.      terms applying to, any credit cards, please contact us and we will be happy to give you all th
300.      e
301.      information that you may need.
302.
303.      2. The credit cards
304.
305.      Issue of credit cards
306.      2.1 We may issue a credit card to you and, if you ask, to each supplementary cardholder
307.      .
308.
309.      Collection
310.      2.2 We send the credit card (and any replacement credit card) to your address last noti
311.      fied to us unless you notify us in writing that you want to collect the credit
312.      card from us.
313.

```

304. Activation procedures

305. 2.3 Each cardholder must comply with any activation procedures notified from time to time.

306.

307. Using the credit card

308. The terms of our banking agreement apply to each use of a credit card. If a cardholder does **not** agree with those terms, they should **not** sign the credit card **or** carry out any transaction.

309.

310. 2.4 You accept the terms of our banking agreement when you first use the credit card.

311.

312. 2.5 You must ensure that only you are using the credit card. Any supplementary cards issued **for** other eligible persons shall be used at your sole liability **and** will be deemed, **if** used by such persons, as **if** used by you personally.

313. Supplementary cards

314.

315. 2.6 We send any supplementary cards, their PINs/password **and** all communications relating to them to you.

316.

317. 2.7 Any communication we give to you on any supplementary cardholder shall be delivered to you.

318.

319. 2.8 You shall procure that each supplementary cardholder agree to be bound by the instructions that any of you give us.

320.

321. Co-brand cards

322. 2.9 We may convert a co-brand card to another type of credit card at our discretion.

323.

324. 2.10 We are **not** liable **for** any representations, promotions **or** obligations made by a business alliance partner.

325.

326. 3. Credit limit

327. 3.1 We notify you of the credit limit when your application has been approved. We may vary the credit limit at any time.

328.

329. 3.2 The credit limit is an overall limit that applies to all credit cards issued to you.

330.

331. 3.3 The credit limit is also dependant on the prevailing local regulations.

332.

333. Exceeding your credit limit

334. 3.4 It **is** your responsibility to ensure that the credit limit **is not** exceeded.

335.

336. 3.5 In calculating whether the credit limit has been exceeded, we may take into account :

337. • any transaction made using the credit card but which has **not** been debited **from** the account **for** a credit card; **and**

338. • any authorisation we have given to a third party **in** connection with a proposed transaction using the credit card.

339.

340. Credit limit exceeded

341. 3.6 If you exceed the credit limit **or** any temporary credit limit extension has expired, you must immediately pay us that part of the balance owing **for** the account **for**

342. the credit card which exceeds the credit limit **in** addition to any payment we require.

343.

344. 4. Cash advance

345. How to obtain a cash advance:

346. The Cardholder may obtain Cash Advance subject to availability of adequate credit **and** as may be acceptable to the Bank **from** time to time at its absolute discretion by

347. the following means

348.

349. 4.1 You may obtain a cash advance using your credit card at one of our branches, other financial institutions displaying the logo of a card association **and** any

350. OOHS BANK.

351.

352. Maximum limit on cash advance

353. 4.2 A cash advance is only available up to the maximum amount the person providing the advance permits. For details of the maximum amount we permit contact us.

354.

355. 5. Balance transfer

356. 5.1 If you ask, we may permit a balance transfer subject to any conditions we specify.

357.

358. 5.2 You should **continue** to make any required payments to the account **from** which you transfer a balance until we confirm that the account has been credited. We are **not** liable **for** any overdue payment **or** interest incurred relating to the

359. account **from** which you transfer a balance.

360.

361. 5.3 Any payment made on your account **for** the credit card will first be applied to reduce the balance transfer before any other balance owing.

362.

363. 6. Interest, fees **and** charges

364.

365. 6.1 Interest, fees **and** charges (including finance charges, cash advance fees, overlimit fees, annual fees **and** administrative fees) are set out **in** the Service & Price Guide.

366.

367. 6.2 Unless otherwise specified, interest is calculated on the basis of a 360 day year **and** compounded on monthly basis **or** such other basis we choose.

368.

369. 6.3 Interest is charged until the date the balance owing is paid in full.

370.

371. 6.4 You must pay all costs such as debt collection fees we incur **in** connection with the credit card on demand.

372.

373. 7. Liability

374.

375. General

376. 7.1 You are liable **for**:

377. • any failure by any cardholder to comply with the terms of our banking agreement;

378. • all transactions made using a credit card (**except for** disputed transactions);

379. • the balance owing **for** the account **for** a credit card (including all amounts debited **and** credited to the account **for** the credit card by any supplementary cardholder); **and**

380. • any transactions where we could otherwise have exercised chargeback rights **if** you do **not** notify us of the transactions **and** provide any further documents **or** information we require within the time periods required.

381.

382. Disputes between you **and** supplementary cardholders

383. 7.2 Our rights **and** obligations relating to you **and** each supplementary cardholder are **not** affected by any dispute **or** claim you **and** the supplementary cardholder may have against each other.

384. Purchase of goods **or** services

385.

386. 7.3 We are **not** liable **for**:

387. • Any payment terms by instalments **or** otherwise on the account of the credit card **or** any other payment arrangement you conclude with third parties with the credit card;

388. • the refusal of any merchant, financial institution **or** other person to accept the credit card; **and**

389. • any defect **or** deficiency **in** goods **or** services supplied to you by any merchant, financial institution **or** other person.

390. You must solely resolve any complaint against any merchant, financial institution **or** other person without any involvement **from** us **and** no claim against any of them may be set off against us.

391.

392. Additional services offered with credit cards

393. 7.4 Some types of credit cards give you access to services provided **and** paid **for** by third parties. For example, **if** you hold a Visa Gold Card **or** Visa Platinum Card you may have access

s to the International Emergency Assistance Service. You are liable **for** the cost of any medical, legal **or** other services provided under

394. these third party services. You acknowledge that the third party service providers do their best to provide the services to cardholders **and** that the services may **not** always be available (**for** example, because of time, distance

395. **or** location). Neither we nor the third party service provider **or** Visa International Service Association **is** liable to you **for** any loss **in** connection with any service

396. **or** its unavailability.

397.

398. 7.5 We are also **not** liable to holders of a credit card with access to Emergency Cash Withdrawal (if available) **for** any loss they suffer if we are unable to give immediate effect to an Emergency Cash Withdrawal, replacement card **or** any

399. other facilities we offer **in** connection with the credit card. The Customer Terms include additional provisions relating to your liability to us **and** exclusions **or** limits on our liability. See, **for** example, "You indemnify us"

400. **and** "Exclusion of liability".

401.

402. 8. Additional services **for** your account

403. 8.1 We may offer additional services **for** your account. These may include reward programmes, balance transfer schemes, payment arrangements, card protection **and** any other services which you can find out more about by

404. contacting us at one of our branches **or** by using phone banking **or** as we advise you **from** time to time.

405.

406. 8.2 If you sign up **for** additional services, you are bound by the terms of the additional services. To the extent of any inconsistency between the terms of the additional services **and** our banking agreement, our banking agreement

407. prevails unless the terms of the additional services specify otherwise.

408.

409. 8.3 For details of any bonus point scheme applying to the credit card, please refer to our banking agreement **or** contact us.

410.

411. 9. Payments

412.

413. Payment by due date

414. 9.1 On **or** before the due date set out **in** the statement we issue **for** your credit card, you must pay at least the minimum payment due as set out **in** the statement.

415. 9.2 Your liability to us remains even if, **for** any reason, you do **not** receive your periodic statement.

416. 9.3 If an amount **is** due on a day which **is not** a banking day, you must pay it on the next banking day.

417.

418. Calculation of minimum payment

419. 9.4 We calculate the minimum payment **in** accordance with our usual practice. Please refer to your statement **or** contact us **for** further information.

420.

421. Currency of transactions

422. 9.5 If any transaction made using the credit card **is not** denominated **in** the currency of Qatar, we convert the amount of the transaction to the currency of Qatar **in** accordance with our usual practice **and** our banking agreement.

423.

424. How we apply payments

425. 9.6 We may (but need **not**) apply payments we receive to pay:

426. • fees, charges, cash advances, interest **and** other charges shown on the previous statement; then

427. • fees, charges, cash advances, interest **and** other charges interest shown on the current statement; then

428. • any unpaid transactions shown on the previous statement; then

429. • any unpaid transactions shown on the current statement; then

430. • fees, charges, cash advances, interest, other charges **and** other transactions on the account **not** shown on the current statement.

431.

432. What happens if you do **not** pay

433. 9.7 If we do **not** receive the balance owing **for** the account **for** a credit card on **or** before the due date we may charge **and** debit **from** the account **for** a credit card finance charges as set out **in** the Service & price Guide **or** elsewhere **in** our

434. banking agreement.

435.

436. 9.8 If we do **not** receive the minimum payment on **or** before the due date, then:

437. • you must pay a late payment charge as set out **in** the Service & price Guide **or** elsewhere **in** our banking agreement;

438. • you must **not** use the credit card until the minimum payment has been paid;

439. • we may suspend your use of the credit card.

440.

441. Payment **in** full **if** we ask

442. 9.9 Despite any other term of our banking agreement, at any time we may demand immediate payment of the total amount of the balance owing **for** the account **for** a credit card plus interest **and** fees.

443. Refunds to the credit card account

444.

445. 9.10 We only credit a refund to the account **for** a credit card **in** connection with:

446. • a transaction made with the credit card; **or**

447. • a payment to the account **for** the credit card; **or**

448. • any other credit owing to you, when we receive the amount to be credited **in** Qatar **and** **in** accordance with our usual practice.

449.

450. Statement

451. 9.11 If you think there **is** an error on your statement you must notify us **in** writing with details of the error within 30 days after the date of the statement. If you do **not**

452. do so, we treat the statement as correct.

453.

454. 10. Cancellation **and** termination

455.

456. How to terminate

457. 10.1 At any time we may choose to:

458. • cancel **or** suspend your right to use the credit card **or** end the account **for** a credit card;

459. • refuse to authorise any transaction **for** which you want to use the credit card; **and**

460. • refuse to re-issue, renew **or** replace the credit card, without giving you any notice **or** reason.

461. 10.2 At any time, you may end the account **for** a credit card by notifying us **in** writing.

462.

463. What happens **if** the account **is** terminated

464. 10.3 If you **or** we end the account **for** a credit card, you must:

465. • cut the credit card **in** half; **and**

466. • immediately pay the balance owing **for** the account **for** the credit card together with any other amounts owing **in** connection with credit card transactions which have been made before termination but which have **not** actually been

467. debited to the account **for** the credit card.

468.

469. Termination of use of supplementary credit card by cardholder

470. 10.4 Either you **or** a supplementary cardholder may end the use of a supplementary credit card by:

471. • notifying us **in** writing; **and**

472. • cutting the card **in** half.

473.

474. 11. Variation

475. 11.1 If you are **not** comfortable with any changes we make to our banking agreement, you may terminate the account **for** a credit card **in** accordance with the procedure **in** clause 10.

476.

477. 11.2 If we notify you of any changes to our banking agreement **in** accordance with any applicable law **and** you keep **or** use the credit card, the account **for** the credit card **or** the PIN/password, you will be deemed to have agreed to the

478. changes.

479.

480. 12. Suspicious transactions
481. We may **not** honour suspicious transactions (**and need not** notify you **if this is** the case)
482.
483. 13. Payment Protection Insurance
484. 13.1 Application: This Clause shall apply **if** you have indicated **in** the Application Form
that you want Payment Protection Insurance, but **not** otherwise.
485.
486. 13.2 Acceptance: We have the right to accept **or** reject your application **for** Payment
487. Protection Insurance at our absolute discretion **and** without providing reasons **for** our d
ecision.
489.
490. 13.3 Conditions If you enrol **for** Payment Protection Insurance
491.
492. 13.3.1 Your obligation to pay certain outstanding amounts under the Credit Card shall b
e deemed to be discharged **in** certain events (such as your accidental death, total **and** permanen
t disablement **or** terminal illness) **and** upon certain
493. additional conditions being met. The terms **and** conditions relating to your Payment Prot
ection Insurance are set out **in** the Payment Protection Insurance Terms & Conditions **and** these
form a part of these Credit Card
494. Terms **and** Conditions; **and**
495.
496. 13.3.2 We shall specify **in** the (Confirmation **or** Policy Cover Note), the (nonrefundable-
assuming regular premium) Payment Protection Insurance premium (**or** fee) you shall have to pay
to us each month.
497.
498. 14. Meaning of words
499. You also need to refer to our Customer Terms which also define key words used **in** these
terms. If a word defined **in** these terms **is** also defined **in** our Customer Terms, the
500. definition **in** these terms applies **for** the purposes of accounts **for** the credit cards. ba
lance transfer means a transaction where we debit an amount you specify **from** your
501. credit card **and** pay the amount to another credit card with us **or** another financial inst
itution. cash advance means cash issued **in** any currency obtained by using the credit card.
502. co-
brand card means a card issued by us **in** conjunction with a business alliance partner. credit l
imit means, **for** an account **for** a credit card, the maximum amount you are entitled
503. to have outstanding on the account **for** the credit card. our banking agreement means the
agreement between you **and** us formed when we accept an application **from** you, the terms of whic
h include our Customer Terms **and** these
504. terms. supplementary card means, **for** an account **for** a credit card, a credit card issued
to a person you authorise as a supplementary cardholder on your account **for** the credit card.
505. supplementary cardholder means each person to whom we issue a supplementary card.
506.
507.
508.
509.
510.
511. Do you agree to the Terms **and** Conditions(y/n)
512. Please enter your choice =y
513.
514. WHICH PACKAGE DO YOU WISH TO CHOOSE?
515.
516. 1. \$50,000,000
517. 2. \$10,000,000
518. 3. \$1,000,000
519. 4. \$500,000
520. 5. \$100,000
521. 6. \$50,000
522. Enter your choice: 3
523.
524. CREDIT CARD SUCCESSFULLY ISSUED

```

525.
526.
527.      Card number : 9906
528.      Pin code : 3677
529.      Amount : $1,000,000
530.
531.
532.      ===== CUSTOMER MENU =====
533.      1.  MODIFY ACCOUNT DETAILS
534.      2.  SEARCH ACCOUNT DETAILS
535.      3.  DELETE ACCOUNT DETAILS
536.      4.  TRANSFER MONEY
537.      5.  DEPOSIT MONEY
538.      6.  WITHDRAW MONEY
539.      7.  TAKE LOAN
540.      8.  ISSUE CREDIT CARD
541.      9.  LOG OUT
542.
543.      Please enter your choice =2
544.
545.      ====DETAILS====
546.      ID : 641626
547.      Name : Parv Vinod Joshi
548.      Identification Document Number : N9876543
549.      Monthly Salary : 99000
550.      E-mail : parv192000@gmail.com
551.      Balance : 799500
552.      Pending loan : 10405.2
553.      Credit card number : 9906 Pincode--> 3677
554.
555.
556.
557.      ===== CUSTOMER MENU =====
558.      1.  MODIFY ACCOUNT DETAILS
559.      2.  SEARCH ACCOUNT DETAILS
560.      3.  DELETE ACCOUNT DETAILS
561.      4.  TRANSFER MONEY
562.      5.  DEPOSIT MONEY
563.      6.  WITHDRAW MONEY
564.      7.  TAKE LOAN
565.      8.  ISSUE CREDIT CARD
566.      9.  LOG OUT
567.
568.      Please enter your choice =9
569.
570.
571.      =====YOU HAVE SUCCESSFULLY LOGGED OUT=====
572.
573.      ===== MAIN MENU =====
574.      1.  ENTER AS ADMIN
575.      2.  ENTER AS CUSTOMER
576.      3.  RATE OUR APP
577.      4.  FIND NEAREST LOCATION
578.      5.  REFER A FRIEND
579.      6.  SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
580.      7.  CONTACT US
581.      8.  APPLY FOR A JOB
582.      9.  EXIT
583.
584.      Please enter your choice =2
585.
586.      1.  Login
587.      2.  Register

```



```

588.          3.    Back to Menu
589.
590.    Please enter your choice =2
591.    Enter the customer name -Tanmay
592.    Enter your middle initial/name : S
593.    Enter your last name : Pathak
594.    Enter your passport number : K9999999
595.    Enter the customer email : parv192000@gmail.com
596.    Input your monthly salary (put '0' if you do not earn!) : 89980000
597.    Thank You for registering with OOHS Bank
598.    Your Login ID will be sent to you by e-mail shortly! Please Check your e-
mail and the continue.
599.
600.
601.    Do you wish to get promotional e-mails from OOHS Bank??
602.    Enter your choice (y/n): n
603.
604.
605.          ===== MAIN MENU =====
606.          1.    ENTER AS ADMIN
607.          2.    ENTER AS CUSTOMER
608.          3.    RATE OUR APP
609.          4.    FIND NEAREST LOCATION
610.          5.    REFER A FRIEND
611.          6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
612.          7.    CONTACT US
613.          8.    APPLY FOR A JOB
614.          9.    EXIT
615.
616.    Please enter your choice =2
617.
618.          1.    Login
619.          2.    Register
620.          3.    Back to Menu
621.
622.    Please enter your choice =1
623.    Please enter your 6-Digit ID =641626
624.
625.
626.
627.          ===== CUSTOMER MENU =====
628.          1.    MODIFY ACCOUNT DETAILS
629.          2.    SEARCH ACCOUNT DETAILS
630.          3.    DELETE ACCOUNT DETAILS
631.          4.    TRANSFER MONEY
632.          5.    DEPOSIT MONEY
633.          6.    WITHDRAW MONEY
634.          7.    TAKE LOAN
635.          8.    ISSUE CREDIT CARD
636.          9.    LOG OUT
637.
638.    Please enter your choice =4
639.
640.    Enter the account to which money has to be transferred =455980
641.    Enter the amount needed to be transferred =900
642.    =====MONEY HAS BEEN TRANSFERRED=====
643.    =====RECIEPT=====
644.    ID OF TRANSFERRER - 641626
645.    ID OF RECIEVER - 455980
646.    NAME OF TRANSFERRER - Parv
647.    NAME OF RECIEVER - Tanmay
648.    AMOUNT TRANSFERRED = 900
649.    ACCOUNT BALANCE OF TRANSFERRER = 798600

```

```

650.
651.
652.
653.
654.          ===== CUSTOMER MENU =====
655.          1.  MODIFY ACCOUNT DETAILS
656.          2.  SEARCH ACCOUNT DETAILS
657.          3.  DELETE ACCOUNT DETAILS
658.          4.  TRANSFER MONEY
659.          5.  DEPOSIT MONEY
660.          6.  WITHDRAW MONEY
661.          7.  TAKE LOAN
662.          8.  ISSUE CREDIT CARD
663.          9.  LOG OUT

```

```

664.
665.      Please enter your choice =2
666.

```

```

667.          ====DETAILS====
668.      ID : 641626
669.      Name : Parv Vinod Joshi
670.      Identification Document Number : N9876543
671.      Monthly Salary : 99000
672.      E-mail : parv192000@gmail.com
673.      Balance : 798600
674.      Pending loan : 10405.2
675.      Credit card number : 9906 Pincode--> 3677
676.
677.
678.

```

```

679.          ===== CUSTOMER MENU =====
680.          1.  MODIFY ACCOUNT DETAILS
681.          2.  SEARCH ACCOUNT DETAILS
682.          3.  DELETE ACCOUNT DETAILS
683.          4.  TRANSFER MONEY
684.          5.  DEPOSIT MONEY
685.          6.  WITHDRAW MONEY
686.          7.  TAKE LOAN
687.          8.  ISSUE CREDIT CARD
688.          9.  LOG OUT

```

```

689.
690.      Please enter your choice =3
691.

```

```

692.          ===== YOUR ACCOUNT HAS BEEN SUCCESSFULLY DELETED =====
693.

```

```

694.
695.          ===== CUSTOMER MENU =====
696.          1.  MODIFY ACCOUNT DETAILS
697.          2.  SEARCH ACCOUNT DETAILS
698.          3.  DELETE ACCOUNT DETAILS
699.          4.  TRANSFER MONEY
700.          5.  DEPOSIT MONEY
701.          6.  WITHDRAW MONEY
702.          7.  TAKE LOAN
703.          8.  ISSUE CREDIT CARD
704.          9.  LOG OUT

```

```

705.
706.      Please enter your choice =9
707.

```

```

708.
709.          =====YOU HAVE SUCCESSFULLY LOGGED OUT=====
710.

```

```

711.          ===== MAIN MENU =====
712.          1.  ENTER AS ADMIN

```

```

713.          2.    ENTER AS CUSTOMER
714.          3.    RATE OUR APP
715.          4.    FIND NEAREST LOCATION
716.          5.    REFER A FRIEND
717.          6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
718.          7.    CONTACT US
719.          8.    APPLY FOR A JOB
720.          9.    EXIT
721.
722.    Please enter your choice =2
723.
724.          1.    Login
725.          2.    Register
726.          3.    Back to Menu
727.
728.    Please enter your choice =3
729.    ===== MAIN MENU =====
730.          1.    ENTER AS ADMIN
731.          2.    ENTER AS CUSTOMER
732.          3.    RATE OUR APP
733.          4.    FIND NEAREST LOCATION
734.          5.    REFER A FRIEND
735.          6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
736.          7.    CONTACT US
737.          8.    APPLY FOR A JOB
738.          9.    EXIT
739.
740.    Please enter your choice =3
741.    Thank You to choose to rate app. Please rate app on the following -
742.
743.    1. 5 stars
744.    2. 4 stars
745.    3. 3 stars
746.    4. 2 stars
747.    5. 1 star
748.
749.    Enter your choice: 1
750.    Thank you for your opinion! We will improve accordingly!
751.
752.
753.
754.    ===== MAIN MENU =====
755.          1.    ENTER AS ADMIN
756.          2.    ENTER AS CUSTOMER
757.          3.    RATE OUR APP
758.          4.    FIND NEAREST LOCATION
759.          5.    REFER A FRIEND
760.          6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
761.          7.    CONTACT US
762.          8.    APPLY FOR A JOB
763.          9.    EXIT
764.
765.    Please enter your choice =3
766.    Thank You to choose to rate app. Please rate app on the following -
767.
768.    1. 5 stars
769.    2. 4 stars
770.    3. 3 stars
771.    4. 2 stars
772.    5. 1 star
773.
774.    Enter your choice: 2
775.    Thank you for your opinion! We will improve accordingly!

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776.
777.
778.
779.          ===== MAIN MENU =====
780.          1.    ENTER AS ADMIN
781.          2.    ENTER AS CUSTOMER
782.          3.    RATE OUR APP
783.          4.    FIND NEAREST LOCATION
784.          5.    REFER A FRIEND
785.          6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
786.          7.    CONTACT US
787.          8.    APPLY FOR A JOB
788.          9.    EXIT
789.
790.    Please enter your choice =3
791.    Thank You to choose to rate app. Please rate app on the following -
792.
793.    1. 5 stars
794.    2. 4 stars
795.    3. 3 stars
796.    4. 2 stars
797.    5. 1 star
798.
799.    Enter your choice: 2
800.    Thank you for your opinion! We will improve accordingly!
801.
802.
803.
804.          ===== MAIN MENU =====
805.          1.    ENTER AS ADMIN
806.          2.    ENTER AS CUSTOMER
807.          3.    RATE OUR APP
808.          4.    FIND NEAREST LOCATION
809.          5.    REFER A FRIEND
810.          6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
811.          7.    CONTACT US
812.          8.    APPLY FOR A JOB
813.          9.    EXIT
814.
815.    Please enter your choice =4
816.
817.    Our Offices are all over UAE:
818.
819.    1. DUBAI OFFICE
820.
821.
822.    PO BOX 82954
823.    305, Ascot Building,
824.    Mankhool Road, Bur Dubai
825.    Dubai, UAE
826.
827.    2. SHARJAH OFFICE
828.
829.    PO BOX 37904
830.    502, AKM Building,
831.    Sheikh Khalid Bin Mohammed Al Qassimi Street
832.    Sharjah, UAE
833.
834.    3. ABU DHABI OFFICE
835.
836.    PO BOX 94857
837.    818, AD Tower,
838.    E 611 road

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839.      Abu Dhabi, UAE
840.
841.      You should come to your nearest head office in order to repay loans (if any) !
842.
843.
844.
845.
846.      ===== MAIN MENU =====
847.      1.      ENTER AS ADMIN
848.      2.      ENTER AS CUSTOMER
849.      3.      RATE OUR APP
850.      4.      FIND NEAREST LOCATION
851.      5.      REFER A FRIEND
852.      6.      SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
853.      7.      CONTACT US
854.      8.      APPLY FOR A JOB
855.      9.      EXIT
856.
857.      Please enter your choice =5
858.      Enter your ID: 455980
859.      Enter e-mail id of friend: parv192000@gmail.com
860.      Thank You for refering a friend! Your friend will recieve an invitation by OOHS Bank on
      behalf of you using e-mail!
861.      We have sent you an offer from Du to your e-
      mail. To redeem your offer, please follow directions sent in your mail.
862.
863.
864.
865.      ===== MAIN MENU =====
866.      1.      ENTER AS ADMIN
867.      2.      ENTER AS CUSTOMER
868.      3.      RATE OUR APP
869.      4.      FIND NEAREST LOCATION
870.      5.      REFER A FRIEND
871.      6.      SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
872.      7.      CONTACT US
873.      8.      APPLY FOR A JOB
874.      9.      EXIT
875.
876.      Please enter your choice =6
877.      ===== COMPLAINT/SUGGESTION CENTRE =====
878.      Enter your ID: 455980
879.      Please describe your complaint/suggestion in detail: (in 1 line = max 166 characters)
880.      OOHS Bank is awesome!
881.      Your complaint/suggestion has been successfully been sent. We will revert to you within
      2 working days.
882.      Thank you for your complaint/suggestion!
883.
884.
885.      ===== MAIN MENU =====
886.      1.      ENTER AS ADMIN
887.      2.      ENTER AS CUSTOMER
888.      3.      RATE OUR APP
889.      4.      FIND NEAREST LOCATION
890.      5.      REFER A FRIEND
891.      6.      SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
892.      7.      CONTACT US
893.      8.      APPLY FOR A JOB
894.      9.      EXIT
895.
896.      Please enter your choice =6
897.      ===== COMPLAINT/SUGGESTION CENTRE =====
898.      Enter your ID: 455980

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899.      Please describe your complaint/suggestion in detail: (in 1 line = max 166 characters)
900.      This program is nice!
901.      Your complaint/suggestion has been successfully been sent. We will revert to you within
902.      2 working days.
903.      Thank you for your complaint/suggestion!
904.
905.      ===== MAIN MENU =====
906.      1.      ENTER AS ADMIN
907.      2.      ENTER AS CUSTOMER
908.      3.      RATE OUR APP
909.      4.      FIND NEAREST LOCATION
910.      5.      REFER A FRIEND
911.      6.      SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
912.      7.      CONTACT US
913.      8.      APPLY FOR A JOB
914.      9.      EXIT
915.
916.      Please enter your choice =7
917.      CONTACT US
918.
919.      Telephoe Numbers -
920.      DUBAI - 043739377
921.      ABU DHABI - 043739397
922.      SHARJAH - 043739347
923.      Do you want to send us something by mail?
924.      Enter your choice (y/n): y
925.      Please describe your message in detail: (in 1 line = max 166 characters)
926.      Hi
927.      Your message has been sent. Thank you!
928.
929.
930.      ===== MAIN MENU =====
931.      1.      ENTER AS ADMIN
932.      2.      ENTER AS CUSTOMER
933.      3.      RATE OUR APP
934.      4.      FIND NEAREST LOCATION
935.      5.      REFER A FRIEND
936.      6.      SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
937.      7.      CONTACT US
938.      8.      APPLY FOR A JOB
939.      9.      EXIT
940.
941.      Please enter your choice =8
942.      Enter your full name: Parv V Joshi
943.      Enter a valid e-mail id: parv192000@gmail.com
944.      What post are you planing to apply???
945.      1. Financial Analyst
946.      2. Bank Teller
947.      3. Financial Analyst
948.      4. Loan Officer
949.      5. Customer care
950.      6. Accounts Manager
951.
952.
953.      Enter your choice: 2
954.      Enter your nearest bank center (Abu Dhabi, Dubai, Sharjah): Abu Dhabi
955.      Thank you for your request. You will recieve an e-
956.      mail shortly regarding our job requirements!
957.      Kindly follow our the directions sent to you my mail!
958.
959.

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960.          ===== MAIN MENU =====
961.          1.    ENTER AS ADMIN
962.          2.    ENTER AS CUSTOMER
963.          3.    RATE OUR APP
964.          4.    FIND NEAREST LOCATION
965.          5.    REFER A FRIEND
966.          6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
967.          7.    CONTACT US
968.          8.    APPLY FOR A JOB
969.          9.    EXIT
970.
971.    Please enter your choice =1
972.          Log in-->1
973.          Return to main menu-->2
974.
975.    Please enter your choice =1
976.    Please enter your 6-Digit ID =1289
977.
978.
979.
980.          1. Enter the bank pre-requisites
981.          2. View transaction history
982.          3. Check app ratings
983.          4. Check complaints/suggestions
984.          5. Log out
985.
986.    Please enter your choice =2
987.
988.    Transaction History -
989.
990.
991.
992.    -----
993.    id-641626
994.    Amount deposited-800000$id-641626
995.    Amount withdrawn=500$$Credit card issued$$Transferrer's ID-641626
996.    Reciever's ID-455980
997.    Money transfered-900$$
998.
999.
1000.
1001.
1002.          1. Enter the bank pre-requisites
1003.          2. View transaction history
1004.          3. Check app ratings
1005.          4. Check complaints/suggestions
1006.          5. Log out
1007.
1008.    Please enter your choice =3
1009.
1010.          Number of 5 star rates:  1
1011.
1012.          Number of 4 star rates:  2
1013.
1014.          Number of 3 star rates:  0
1015.
1016.          Number of 2 star rates:  0
1017.
1018.          Number of 1 star rates:  0
1019.
1020.    Avarage Rating :  4.3333333333
1021.
1022.

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1023.
1024.
1025.          1. Enter the bank pre-requisites
1026.          2. View transaction history
1027.          3. Check app ratings
1028.          4. Check complaints/suggestions
1029.          5. Log out
1030.
1031.      Please enter your choice =1
1032.      Enter the interest rate for Business loan =4
1033.      Enter the interest rate for Personal loan =6
1034.      Enter the maximum amount that be withdrawn at a time =3000
1035.
1036.
1037.
1038.          1. Enter the bank pre-requisites
1039.          2. View transaction history
1040.          3. Check app ratings
1041.          4. Check complaints/suggestions
1042.          5. Log out
1043.
1044.      Please enter your choice =5
1045.          ===== MAIN MENU =====
1046.          1.    ENTER AS ADMIN
1047.          2.    ENTER AS CUSTOMER
1048.          3.    RATE OUR APP
1049.          4.    FIND NEAREST LOCATION
1050.          5.    REFER A FRIEND
1051.          6.    SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
1052.          7.    CONTACT US
1053.          8.    APPLY FOR A JOB
1054.          9.    EXIT
1055.
1056.      Please enter your choice =2
1057.
1058.          1.    Login
1059.          2.    Register
1060.          3.    Back to Menu
1061.
1062.      Please enter your choice =1
1063.      Please enter your 6-Digit ID =455980
1064.
1065.
1066.
1067.          ===== CUSTOMER MENU =====
1068.          1.    MODIFY ACCOUNT DETAILS
1069.          2.    SEARCH ACCOUNT DETAILS
1070.          3.    DELETE ACCOUNT DETAILS
1071.          4.    TRANSFER MONEY
1072.          5.    DEPOSIT MONEY
1073.          6.    WITHDRAW MONEY
1074.          7.    TAKE LOAN
1075.          8.    ISSUE CREDIT CARD
1076.          9.    LOG OUT
1077.
1078.      Please enter your choice =6
1079.
1080.      Enter the amount needed to be withdrawn =9000
1081.      Withdrawal of amount 9000 could not be possible. Please check the following and try aga
in:-
1082.          1. Check if withdrawal amount not is greater than account balance
1083.          2. Check if withdrawal amount not is greater than maximum withdrawal amount at a time (
if you don't know the maximum withdrawal amount at a time, please ask an administrator)

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1084.
1085.
1086.
1087.          ===== CUSTOMER MENU =====
1088.          1.  MODIFY ACCOUNT DETAILS
1089.          2.  SEARCH ACCOUNT DETAILS
1090.          3.  DELETE ACCOUNT DETAILS
1091.          4.  TRANSFER MONEY
1092.          5.  DEPOSIT MONEY
1093.          6.  WITHDRAW MONEY
1094.          7.  TAKE LOAN
1095.          8.  ISSUE CREDIT CARD
1096.          9.  LOG OUT
1097.
1098.      Please enter your choice =6
1099.
1100.      Enter the amount needed to be withdrawn =40
1101.      -----MONEY WITHDRAWN-----
1102.      =====RECIEPT=====
1103.      ID - 455980
1104.      NAME - Tanmay
1105.      AMOUNT BALANCE OF TRANSFERRER - 860
1106.
1107.
1108.
1109.
1110.
1111.          ===== CUSTOMER MENU =====
1112.          1.  MODIFY ACCOUNT DETAILS
1113.          2.  SEARCH ACCOUNT DETAILS
1114.          3.  DELETE ACCOUNT DETAILS
1115.          4.  TRANSFER MONEY
1116.          5.  DEPOSIT MONEY
1117.          6.  WITHDRAW MONEY
1118.          7.  TAKE LOAN
1119.          8.  ISSUE CREDIT CARD
1120.          9.  LOG OUT
1121.
1122.      Please enter your choice =7
1123.
1124.
1125.          ===== LOAN MENU=====
1126.          1. Business Loan
1127.          2. Personal Loan
1128.
1129.      Please enter your choice =2
1130.
1131.      Interest will be compounded yearly at 6 rate.
1132.      The minimum principle amount P can be minimum $10,000 and maximum 50% more than your cu
rrrent account balance.
1133.      Per annum for a minimum time period of one year .Do you agreee.(y/n)
1134.      Please enter your choice =y
1135.
1136.      Enter the amount =15000
1137.
1138.
1139.          ===== CUSTOMER MENU =====
1140.          1.  MODIFY ACCOUNT DETAILS
1141.          2.  SEARCH ACCOUNT DETAILS
1142.          3.  DELETE ACCOUNT DETAILS
1143.          4.  TRANSFER MONEY
1144.          5.  DEPOSIT MONEY
1145.          6.  WITHDRAW MONEY

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1146.          7. TAKE LOAN
1147.          8. ISSUE CREDIT CARD
1148.          9. LOG OUT
1149.
1150.      Please enter your choice =7
1151.
1152.
1153.          ===== LOAN MENU=====
1154.          1. Business Loan
1155.          2. Personal Loan
1156.
1157.      Please enter your choice =2
1158.
1159.      Interest will be compounded yearly at 6 rate.
1160.      The minimum principle amount P can be minimum $10,000 and maximum 50% more than your cu
rent account balance.
1161.      Per annum for a minimum time period of one year .Do you agreee.(y/n)
1162.      Please enter your choice =n
1163.
1164.      Loan Request Cancelled Successfully!
1165.
1166.
1167.          ===== CUSTOMER MENU =====
1168.          1. MODIFY ACCOUNT DETAILS
1169.          2. SEARCH ACCOUNT DETAILS
1170.          3. DELETE ACCOUNT DETAILS
1171.          4. TRANSFER MONEY
1172.          5. DEPOSIT MONEY
1173.          6. WITHDRAW MONEY
1174.          7. TAKE LOAN
1175.          8. ISSUE CREDIT CARD
1176.          9. LOG OUT
1177.
1178.      Please enter your choice =5
1179.
1180.      Enter the amount to be deposited =999999999
1181.
1182.      -THE AMOUNT HAS BEEN DEPOSITED-
1183.      =====RECIEPT=====
1184.      ID - 455980
1185.      NAME - Tanmay
1186.      AMOUNT BALANCE - 1000000859
1187.
1188.
1189.
1190.
1191.          ===== CUSTOMER MENU =====
1192.          1. MODIFY ACCOUNT DETAILS
1193.          2. SEARCH ACCOUNT DETAILS
1194.          3. DELETE ACCOUNT DETAILS
1195.          4. TRANSFER MONEY
1196.          5. DEPOSIT MONEY
1197.          6. WITHDRAW MONEY
1198.          7. TAKE LOAN
1199.          8. ISSUE CREDIT CARD
1200.          9. LOG OUT
1201.
1202.      Please enter your choice =7
1203.
1204.
1205.          ===== LOAN MENU=====
1206.          1. Business Loan
1207.          2. Personal Loan

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1208.
1209.     Please enter your choice =2
1210.
1211.     Interest will be compounded yearly at 6 rate.
1212.     The minimum principle amount P can be minimum $10,000 and maximum 50% more than your cu
    rrent account balance.
1213.     Per annum for a minimum time period of one year .Do you agreee.(y/n)
1214.     Please enter your choice =y
1215.
1216.     Enter the amount =10000
1217.     Enter the time period(IN YEARS) =3
1218.     YOUR LOAN HAS BEEN GRANTED
1219.
1220.     Amount to be repaid = 10000.64
1221.     You need to repay this loan at our bank office. To find nearest bank office, check Loca
    tions tab.
1222.
1223.     Make sure there is no type of covering on your right hand index finger when you come to
    repay your loan. You will requite to scan your hand index finger at thebank office.
1224.
1225.
1226.     ===== CUSTOMER MENU =====
1227.     1.  MODIFY ACCOUNT DETAILS
1228.     2.  SEARCH ACCOUNT DETAILS
1229.     3.  DELETE ACCOUNT DETAILS
1230.     4.  TRANSFER MONEY
1231.     5.  DEPOSIT MONEY
1232.     6.  WITHDRAW MONEY
1233.     7.  TAKE LOAN
1234.     8.  ISSUE CREDIT CARD
1235.     9.  LOG OUT
1236.
1237.     Please enter your choice =9
1238.
1239.
1240.     =====YOU HAVE SUCCESSFULLY LOGGED OUT=====
1241.
1242.     ===== MAIN MENU =====
1243.     1.  ENTER AS ADMIN
1244.     2.  ENTER AS CUSTOMER
1245.     3.  RATE OUR APP
1246.     4.  FIND NEAREST LOCATION
1247.     5.  REFER A FRIEND
1248.     6.  SEND COMPLAINTS/SUGGESTIONS TO HEAD OFFICE
1249.     7.  CONTACT US
1250.     8.  APPLY FOR A JOB
1251.     9.  EXIT
1252.
1253.     Please enter your choice =9
1254.     Exiting OOHS Bank.....
1255.     Hope you have enjoyed!
1256.     Feel free to come back! Have a nice day!

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PROGRAM LIMITATIONS

LIMITATIONS

- 1) Account exists momentarily even after deletion.
- 2) User can't set the bank account id/password.
- 3) Customer cannot view their own transaction history.
- 4) Email ID validity cannot be verified

SUGGESTIONS FOR IMPROVEMENT

SUGGESTIONS FOR IMPROVEMENT

- 1) Additional Security features may be added.
- 2) Online payment options could be created.

BIBLIOGRAPHY

BIBLIOGRAPHY

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