

Heaven's Light is Our Guide
Rajshahi University of Engineering & Technology
Department of Computer Science & Engineering

Lab Manual

Course Code: **CSE 1204**
Course Title: Sessional based on CSE 1203 (for Sec A & B)

Module 3: (for Week 3)

Problem Statement: We know bKash is a pioneering mobile financial service in Bangladesh that has played a significant role in transforming the country's financial landscape. Launched in 2011, bKash was established as a joint venture between BRAC Bank Limited, one of Bangladesh's leading private banks, and Money in Motion LLC, a US-based technology company. Our goal is to write a similar type of program that would be very close to their functionalities. The name of our application is myCash.

Write a C++ program to create myCash application using class and objects to fulfill the following criteria.

- i. The program is capable of storing data for each member. The member data includes mobile-no, name, amount and pin.
- ii. To use the system an user must register first.
- iii. The program should be menu operated
- iv. The program starts with a login menu. If login successful then main menu appears.
- v. Define a class with data members mobile, name, amount and pin.
- vi. Treat mobile number as the key information for each member.
- vii. Create facilities for cash-in, cash-out, send money and pay bill.
- viii. The system must check for duplicate member
- ix. The application should produces appropriate error message when required (table 1)
- x. The system must use OTP (one time passcode) when more security is required like Add Member, Change pin, Send money, Cash-out and Pay bill.
- xi. The History displays the details of each transaction.

- a. The classes look like

```
class Member{  
  
    //Declare data members  
    //Write member functions  
};  
  
class History{  
  
    //Declare data members  
    //Write member functions  
}
```

- b. The login look like :

```
*** MyCash Login**
```

1. Login
2. Register
3. Exit

Enter Your Option:



```
***** MyCash Menu *****
```

1. Update Me
2. Remove Me
3. Send Money
4. Cash-in
5. Cash-out
6. Pay Bill
7. Check Balance
8. History
9. Logout

```
Enter Your Option (1-9):_
```

c. Few Snapshots:

1. Register a new member

```
Enter your option(1-3):2 <enter>
Enter Mobile No. (11-digit): 01714228567 <enter>
Enter Name: John Borris <enter>
Enter pin (5-digit): *****<enter>
Reconfirm pin: ***** <enter>
myCash OTP: 2319
Enter OTP: 2319 <enter>
Registration is Successful
Press any key go to main menu.....
```

2. Login Form

```
Enter your option(1-3):1 <enter>
Enter Mobile No. (11-digit): 01714228567 <enter>
Enter pin: ***** <enter>
Login is Successful
```

3. Update a Member

```
Enter your option(1-9):1 <enter>
Old Name: John Borris
New Name (enter to ignore):
Old pin: *****
New pin (enter to ignore): ***** <enter>
Confirm New pin: ***** <enter>
myCash OTP: 2419
Enter OTP: 2419 <enter>
Update is Successful
Press any key go to main menu.....
```

5. Remove a Member

```
Enter your option(1-9):2 <enter>
myCash OTP: 2519
Enter OTP: 2519 <enter>
Remove is Successful
Back to MyCash Login Menu
```

6. Send Money

```
Enter your option(1-9):3 <enter>
Enter Destination no. (11-digit): 01713447831 <enter>
Enter Amount: 2000 <enter>
Sending 2000 to 01713447831
Are you sure(Y/N)? Y <enter>
myCash OTP: 2619
Enter OTP: 2619 <enter>
Send Money is Successful
Press any key go to main menu.....
```

7. Cash-In

```
Enter your option(1-9):4 <enter>
Enter Amount: 4000 <enter>
Cash-in 4000
Are you sure(Y/N)? Y <enter>
Cash-in is Successful
Press any key go to main menu.....
```

8. Cash-Out

```
Enter your option(1-9):5 <enter>
Enter Amount: 2000 <enter>
Cash-out 2000
Are you sure(Y/N)? Y <enter>
myCash OTP: 2719
Enter OTP: 2719 <enter>
Cash-out is Successful
Press any key go to main menu.....
```

9. Pay Bill

```
Enter your option(1-9):6 <enter>
Enter Bill Type (Gas/Electricity/Water/Internet-1/2/3/4): 4 <enter>
Your Internet Bill: 1000
Want to pay(Y/N)? Y <enter>
myCash OTP: 2819
Enter OTP: 2819 <enter>
Bill Payment is Successful
Press any key go to main menu.....
```

10. Check Balance

```
Enter your option(1-9):7 <enter>
Balance: 2375
Press any key go to main menu.....
```

11. History

```
Enter your option(1-9):8 <enter>
Tran ID  Description      Amount  Balance
   101    Cash-in         1000    5200
   105    Send Money      3000    2200
   109    Internet Bill    1000    1200
Press any key go to main menu.....
```

Table: 1

	Message to be Displayed
1	Member already exists
2	Member NOT exists
3	Insufficient Fund
4	Invalid Mobile Number
5	OTP does NOT matched
6	Pins must be same
7	Invalid login
8	Destination Mobile no. is invalid
9	Invalid Option
10	Enter Y or N

***** Best of Luck *****