**CSC241**

**Object Oriented Programming**

**Project Report**

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| Class | **3B** |
| Instructor's Name |  |

# **Semester Project**

## Introduction:

In this project I first make a parent class in which the variables that store information about the account handler are stored. Then I make to child classes that store different account type’s information. One is saving account and the other is current account. Then in main() program I create an ifstream object which loop throw prompt the user to enter data of account holders, that I open an ofstream object, read and display all the data, if account holder holds current account then just display data, if account holder holds saving account then display data with three months interest rate, per annum interest rate, and terminate the program.

## Abstract:

1. I first make a parent class in which the variables that store information about the account handler are stored.Then in two base classes I just use the variables that I declared earlier in the parent class and also initialize the values with current or 2000 and in other childe class I also initialize the saving and also describe the interest rate.
2. I use these variables in the Function to convert the class variable form string to int and also function to check , whether the account will be "CURRENT" or "SAVING" by comparing it with the minimum balance . in main I ask the user enters information with the help of cout command, it is stored directly in the parent class variables but the base class can access them also.
3. I open fstream object which store every account holder’s data with positive auto increment number in unsigned short and display it with account holder’s data. For this I Create method/function which prompt for account holder’s number or auto increment number, after entering that number user can modify account holder’s data and display with all data.
4. In the main function I use three case that manage three main functions of the program which are add account, show detail and modify information. Ask user to select one of them by entering number of the case. In first case I ask use to enter number of accounts so that when limit reach it terminate the case and go back to the choice because I use do while to use the program until user terminate it. Then I open ofstream file which store the information of the account so that when e need to access it, we have it in place.
5. Then in second case I open all the ifstream file that I make in the first case and print its information on the screen. If it’s a saving account the it also print it interest rate of 3 months and 12 months.

**CONCLUSION:**

In this project I use the concept of base and childe class and constructor to initialize the variable. And then use to function to check the conditions. In main make the object of the classes and use the objects to perform tasks. Cout command is use to print on screen and in the end use if/else to check the conditions.

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| **Lab Assessment** | | | | |
| **Pre-Lab** | | | **/1** | **/10** |
| **In-Lab** | | | **/5** |
| **Post-Lab** | **Data Analysis** | **/4** | **/4** |
| **Data Presentation** | **/4** |
| **Writing Style** | **/4** |
| **Instructor Signature and Comments** | | | | |