CSC 232 Project 1 – Keegan Maynard and Nathan Obert

**OOP Concepts**

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| Abstraction | There are several header files included in the project so that the C++ only has the information required to run the user interface. |
| Encapsulation | The different aspects of the bank account were divided into separate classes for organizational and implementational needs. Each class created the specific methods and members it requires to perform the necessary functions. |
| Inheritance | A common parent class (BankAccount.h) was used to create the common members and methods, and the child classes inherited these members and methods from the parent class. |
| Polymorphism | There was not a great need for polymorphism in this project, largely because each class performed its own unique operations, or the shared methods were identical and did not require alteration. |

**Contributions**

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| Nathan O. | 60% | Largely responsible for the creation and implementation of BankAccount.h, BearBank.cpp, CheckingAccount.h, OS.h, and Bear Bank.pdf. |
| Keegan M. | 40% | Largely responsible for the creation and implementation of SavingAccount.h, editing and commenting the other header files and the C++ file, and the creation of this document. |

**How To**

BankAccount.h – This header file is the parent class for the other header files, and it contains the common class members and methods needed for performing operations and storing information.

BearBank.cpp – This C++ file contains the main loop that controls the user interface, and makes calls to the header files in order to use their operations.

CheckingAccount.h – This header file is a child class of BankAccount.h, and contains the members and methods used to perform operations and store information for the checking accounts created by the user.

OS.h – This header file is a child class of BankAccount.h and contains the members and methods used to unite the account header files into a working banking system.

SavingsAccount.h – This header file is a child class of BankAccount.h and contains the members and methods used to perform operations and store information for the savings accounts created by the user.

TotallyNotBankInfo.txt – This text file is a document used to store user account information, and is updated as the user continues to perform operations.

Bear Bank.pdf – This pdf file is used to display the members and methods of the header files and C++ files used in the project.

To run the program, insert the files listed above, excluding the pdf, into the Cygwin operator on the desired computer. After that has been completed, compile the BearBank.cpp file and run it.

Type the following lines into Cygwin after the files have been added to the compiler:

g++ BearBank.cpp -o BearBank

./BearBank

Check this/reword some parts of it before submitting the file