

RIPHAH INTERNATIONAL UNIVERSITY, LAHORE CAMPUS.

SCHOOL OF COMPUTING & INNOVATION (RSCI)



OBJECT ORIENTED PROGRAMMING LAB 05

Date: 15-03-2023
Semester: SPRING 2023
Submission: In Lab
CLASS: BSCS - 2B

Objectives:

- More exercises on object oriented paradigm of programming.
- Focus on constructors and types.
- Accessors and Mutators.
- Implementation of classes using UML Class Diagram.

Task 1:

Implement a class **Account** having data members and functions given in following UML Class Diagram.

Account

- accno	: string
- acctitle	: string
- amount	: double
- acctype	: char
+ Account()	
+ Account (string, string, double, char)	
+ Account (const Account &)	
+ deposit (double) : void	
+ withdraw (double) : void	
+ changeType() : void	
+ checkBalance () : double	
+ displayAccountInfo () : void	
+ getAccNo() : string	
+ getAccTitle() : string	
+ getAmount() : double	
+ getAccType() : char	
+ setAccNo(string) : void	
+ setAccTitle(string) : void	
+ setAmount(double) : void	
+ setAccType(char) : void	
+ ~ Account()	

Instructor: Noor Ullah Khan

+ Account()	Default Constructor
+ Account (string, string, double, char)	Parameterized Constructor
+ Account (const Account &)	Copy Constructor
+ deposit (double) : void	Takes amount and deposit in account.
+ withdraw (double) : void	Takes amount and withdraw from account if account has sufficient amount.
+ changeType() : void	Changes the type of account.
+ checkBalance () : double	Displays current balance of account.
+ displayAccountInfo () : void	Display all account information
+ getAccNo() : string	Getters (Accessors)
+ getAccTitle() : string	
+ getAmount() : double	
+ getAccType() : char	
+ setAccNo(string) : void	Setters (Mutators)
+ setAccTitle(string) : void	
+ setAmount(double) : void	
+ setAccType(char) : void	
+ ~ Account()	Destructor

Write a main function to do the following:

- Create an Account class object 'a1' with values of your choice.
- Display current account balance.
- Deposit 1000 PKR in account a1.
- Display current account balance again to verify amount is added successfully.
- Withdraw 700 PKR from account a1.
- Display current account balance again to verify amount is subtracted successfully.
- User wants to change its account type. Change account type.
- Display all account information.
- Create another account 'a2' with the similar data in a1.
- Deposit 5000 PKR in a2 account.
- Now display both accounts complete information.

GOOD LUCK 😊