

CSCE 145: Lab 9

Creating Classes

Objectives

In this lab you will learn

- How to create a Java class with all of its methods.

Program Specification

Develop and implement a class **SavingsAccount** that represents a savings account. A **SavingsAccount** object should have three attributes: the *name* of the account (a String), the *owner* of the account (a String), and the current *balance* (a double). The class should provide the following constructors and methods:

- **SavingsAccount()**: configures a new savings account with name "name", owner "owner", and balance 0.0.
- **SavingsAccount(String s, String t, double b)**: configures a new account with name s, owner t, and balance b.
- **void deposit(double b)**: adds amount b to the current balance of the associated account.
- **void withdraw(double b)**: subtracts amount b from the current balance of the associated account.
- **void close()**: zeroes out the account balance and sets the owner to "".
- **String getAccountName()**: returns the name of the associated account.
- **String getOwner()**: returns the owner of the associated account.
- **double getBalance()**: returns the balance of the associated account.
- **void setName(String s)**: sets the name of the associated account to s.
- **void setOwner(String s)**: sets the owner of the associated account to s.
- **String toString()**: returns a textual representation of the attributes of the associated account.

Include a *main* method in your SavingsAccount class that tests all of the constructors and methods you have defined.

Show your program to the TA when you are done and upload your Java source code to the dropbox at <https://dropbox.cse.sc.edu>.