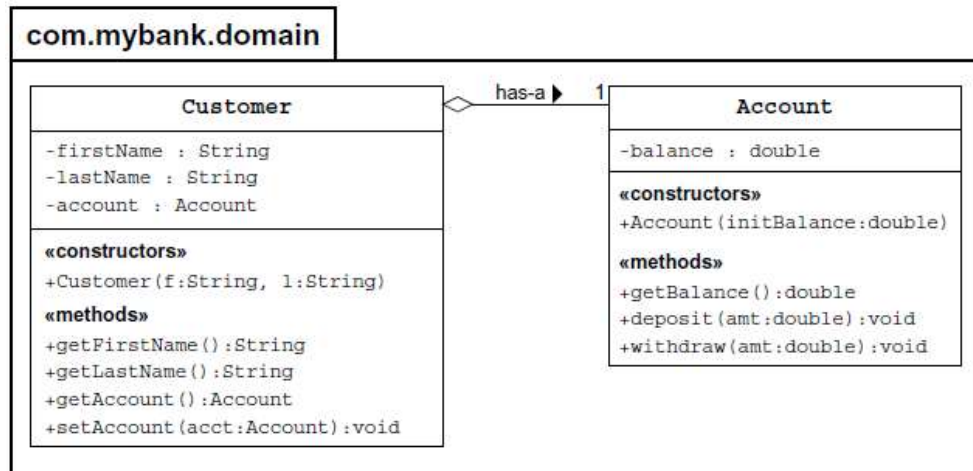


Identifiers, Keywords, and Types

Lab 5: Creating Customer Accounts

In this exercise, you are going to expand the BankProject by adding a Customer class.

Figure below shows UML diagram of the Customer class and its relationship to the Account class. This relationship can be read as: A customer has one account.



1. Create a new Java class in `com.mybank.domain` package called `Customer`. Make sure the class definition satisfy the UML diagram above.
2. In the `Customer` class constructor, initialize the `firstName` and `lastName` instance variables with the constructor parameters.
3. Add the test class called `TestBanking` in the `com.mybank.test` package. Complete the test class with below codes.

```
package com.mybank.test;
```

```
import com.mybank.domain.*;
```

```
/*
```

```
 * This class creates the program to test the banking classes.
 * It creates a new Customer and Account (with an initial balance),
 * and performs a series of transactions with the Account object.
 */
```

```
public class TestBanking {
```

```
    public static void main(String[] args) {
```

```
        Customer customer;
```

```

Account account;

// Create an account that can has a 500.00 balance and type savings.
System.out.println("Creating the customer Jane Smith.");
customer = new Customer("Jane", "Smith");
System.out.println("Creating her account with a 500.00 balance.");
customer.setAccount(new Account(500.00));

account = customer.getAccount();
System.out.println("Withdraw 150.00");
account.withdraw(150.00);

System.out.println("Deposit 22.50");
account.deposit(22.50);

System.out.println("Withdraw 47.62");
account.withdraw(47.62);

// Print out the final account balance
System.out.println("Customer [" + customer.getLastName()
    + ", " + customer.getFirstName()
    + "] has a balance of " + account.getBalance());
}
}

```

4. Run the TestBanking class. If there are compilation errors, you should correct them first.

The output of the test program should be similar to the following.

```

Creating the customer Jane Smith.
Creating her account with a 500.00 balance.
Withdraw 150.00
Deposit 22.50
Withdraw 47.62
Customer [Smith, Jane] has a balance of 324.88

```