Programming II

Comp 111

Spring 2020



Department of Computer Science

Forman Christian College University

Lab 7

Composition and Aggregation

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| **Question #** | **Total Marks** |
| Question 1 | 5 |
| Question 2 | 5 |
| Question 3 | 5 |
| Question 3 | 5 |

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# **Lab Problem**

**Question 1 (Composition):**

Create a class Customer with name, id and address ( Address type). Create another class Address with following information House number, street, city and country. There should be a different function DisplayAddress in the address class.

Customer information cannot be completed without address information. Customer should have the function DisplayInfo which display all the instance variable of Customer classes including address.

**Question 2 (Aggregation):**

A class called Actor is designed to model a movie’s actor. It contains three instance variables: name (String), dateofBirth (String), and gender (char of either 'm' or 'f'). There should be getter and setter function for all instance variables. Function *Display* should print all the Createinformation of actor.

A class called Movie is designed to model a movie. Movie is not complete without the cast so it contains four instance variables: name (String), actor\_hero (object of the class Actor), actor\_villon (object of the class Actor) and genre (string). There should be methods getName(), getHero(), getVillon(), setgenre(), getgenre(), setname() and Displaymovie().

Write a test driver to test all the methods in the class Movie.

**Question 3 (Aggregation):**

Write a class Company with the following attributes

• Name

• Business type

• Headquarter address

And, and employee class with the following attributes

• Name

• Address

• Cell number

Write a main() which create 5 employee objects and two company objects. Write code here to aggregate 3 employees in one company and two into other company. Then show a report displaying the employees of each company.