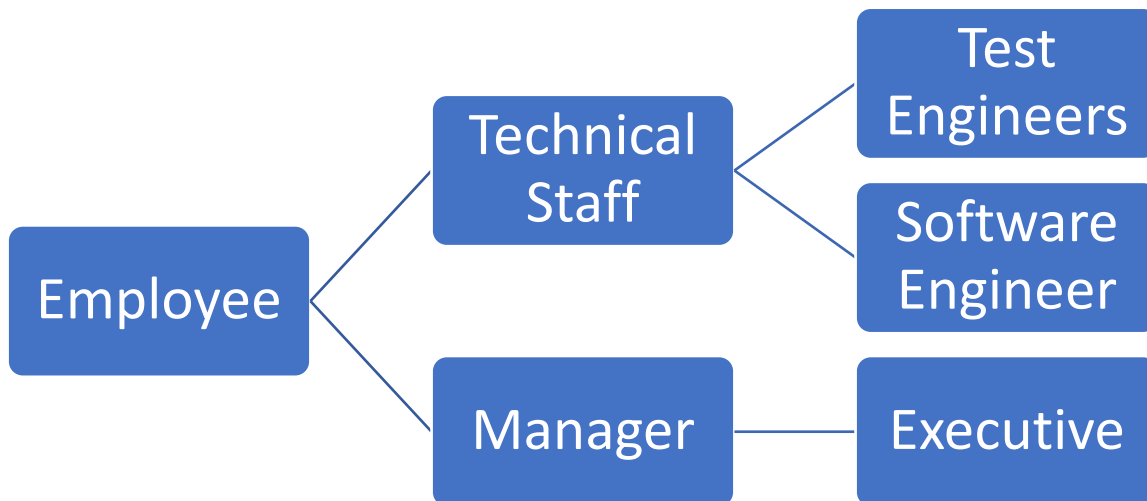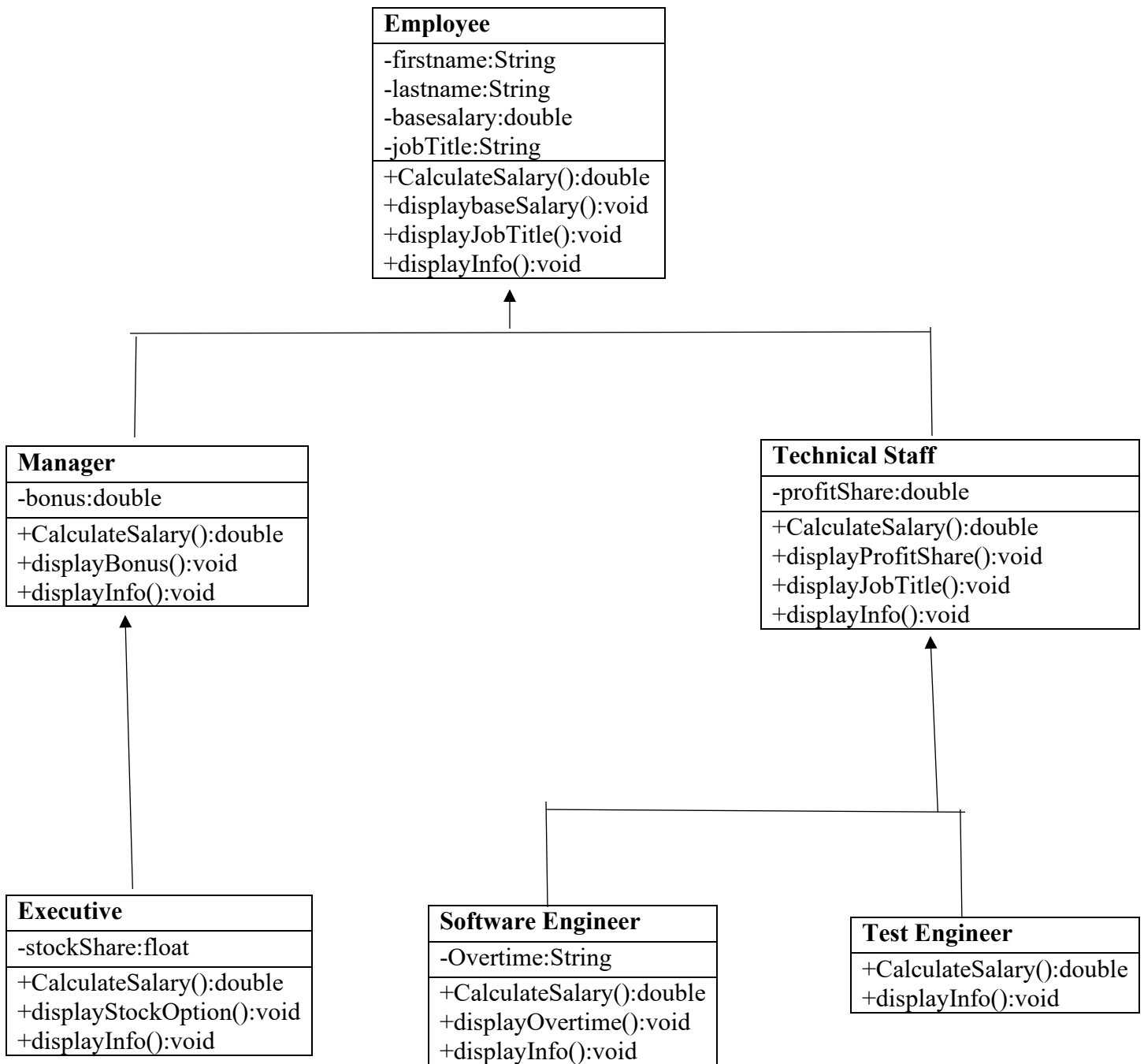Jeremy Scheuerman

COSC 220

Dr. Wang

17-March-2021

Lab 8 writeup

Hierarchy Chart (Rough draft I before UML diagram)

*UML does not contain getters and setters due to repetitiveness it is unnecessary

Employee

-firstname:String
-lastname:String
-basesalary:double
-jobTitle:String

+CalculateSalary():double
+displaybaseSalary():void
+displayJobTitle():void
+displayInfo():void

Manager

-bonus:double

+CalculateSalary():double
+displayBonus():void
+displayInfo():void

Technical Staff

-profitShare:double

+CalculateSalary():double
+displayProfitShare():void
+displayJobTitle():void
+displayInfo():void

Executive

-stockShare:float

+CalculateSalary():double
+displayStockOption():void
+displayInfo():void

Software Engineer

-Overtime:String

+CalculateSalary():double
+displayOvertime():void
+displayInfo():void

Test Engineer

+CalculateSalary():double
+displayInfo():void

Output and Testing

Linking process

Make program file

```
root@DESKTOP-Q5H0GRD:/mnt/d/Documents/School/Year 3 semester 2/Cosc 220
computer science 2/labs/Lab_8# g++ -o lab8 Lab_8.o Lab_8main.o
```

The first set of output

```
Info
First:Bill
Last:Muhlenfeld
Title:CFO
Salary:100000

Info
First:Kevin
Last:Weller
Title:Head Developer
Salary:150000

Info
First:Andrew
Last:McGinnity
Title:Head Tester
Salary:1.5e+06
```

This displays only the base class print functions

Second set of output

```
Info
First:Bill
Last:Muhlenfeld
Title:CFO
Salary:100000
Bonus:6500

Info
First:Kevin
Last:Weller
Title:Head Developer
Salary:150000
Profit Share:350010000

Info
First:Andrew
Last:McGinnity
Title:Head Tester
Salary:1.5e+06
Profit Share:4500
```

The second set of output is the print function from the derived class which includes bonus and profit share