

# CS665 Module4 Assignment

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The following document should not be disseminated outside the purview of its intended purpose.

This assignment is a continuation of the previous assignments.

Consider the **structural** patterns for this assignment. For each of the problems below, identify the patterns and show the class structure when the pattern is applied and provide justification. Write the Java implementation for the classes and provide the test results.

## Part1 (40 points)

The transactions for each account could be simple transactions, or transactions with logging capability, security capability, or a combination of any of these or more in the future.

## Part2 (40 points)

The bank would like to provide statements to the customer. These could be monthly statements, quarterly statements, half-yearly, full year, or multi-year statements. Each higher level statement would recursively include its component statements.

## Part3 (20 points)

The bank uses an external package for customer verification. These packages and its interfaces could change in the future.

## **General Rules for Homework Assignments**

- You must work on your assignments individually. You are not allowed to copy the answers from the others. Please review the Academic Conduct Code.
- Each assignment has a strict deadline. Late submissions will carry a penalty.
- When the term *lastName* and *firstName* is referenced in an assignment, please replace it with your last name and first name respectively.

### **Submission:**

- **Submit one Zip file of the IntelliJ IDEA project or Eclipse project**
- **The zip file should be named cs665\_hw4\_lastName.zip**
- **Upload the zip file to the Assignment4 submission**