

CSC 325 Software Engineering

Week04 – Lab work and assignment - Group assignment

Check the class hierarchy shown below. The classes represent various types of employees that might be employed at a typical agency that contains a main driver class that creates a Staff of employees and invokes the payday method to pay them all.

The program output includes information about each employee and how much each is paid (if anything – Intern gets 0). The Staff class maintains an array of objects that represent individual employees of various kinds. Note that the array is declared to hold StaffMember references, but it is actually filled with objects created from several other classes, such as Executive and StaffEmployee (fulltime paid employee).

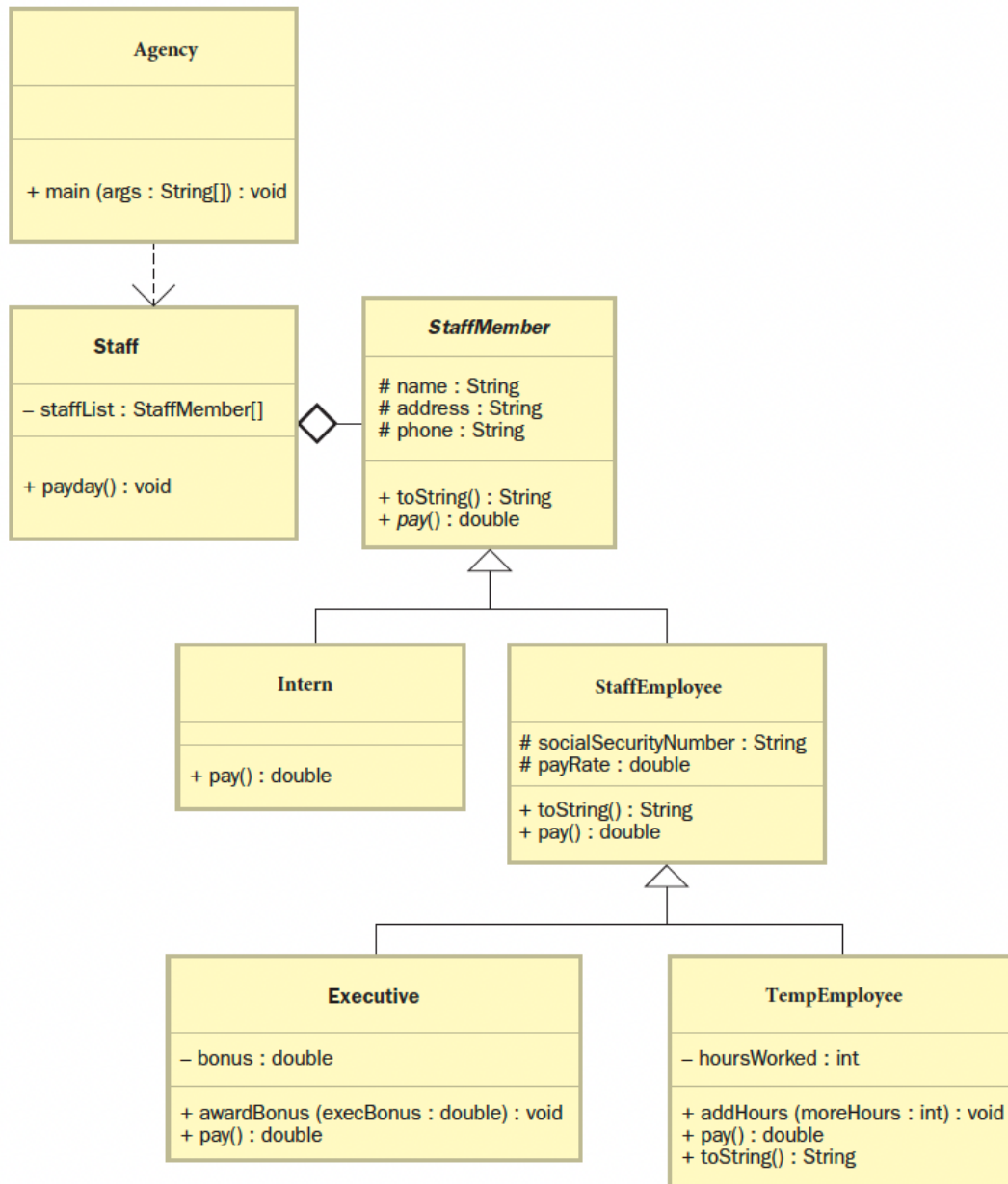
These classes are all descendants of the StaffMember class, so the assignments are valid. The staffList array is filled with polymorphic references. The payday method of the Staff class scans through the list of employees, printing their information and invoking their pay methods to determine how much each employee should be paid. The invocation of the pay method is polymorphic, because each class has its own version of the pay method.

The StaffMember class is abstract. It does not represent a particular type of employee and is not intended to be instantiated. Rather, it serves as the ancestor of all employee classes and contains information that applies to all employees.

Each employee has a name, address, and phone number, so variables to store these values are declared in the StaffMember class and are inherited by all descendants.

Skeleton code is available here: https://github.com/moaathalrajab/HW_W4_CSC325

- You must discuss the skeleton code with your group. Imagine you jointed a company that has an existing code.
- Check the UML class diagram below.
- Check the sample output.
- Complete all Todos in the project.
- Project manager to assign work.
- Make sure to create branches and once work complete do a pull request.
- Team members should work in a group or 2. One write code for 15 mins and the other check for correctness then they switch roles.
- Use the “Tasks” and “Action Items” available in NetBeans.
- Push the code to your group GitHub
- Submit the URL here.



Sample Report:

Employee - 1
Name: Moaath Alrajab
Address: 25 New Tree Line
Phone: 516-101-3131
Social Security Number: 000-000-1234
Paid: 21900.5
+++++

Employee - 2
Name: John
Address: 456 Off Line
Phone: 516-555-0101
Social Security Number: 516-65-4321
Paid: 1546.15
+++++

Employee - 3
Name: William
Address: 789 Off Rocker
Phone: 516-555-0000
Social Security Number: 631-20-3040
Paid: 1669.23
+++++

Employee - 4
Name: Sam
Address: 678 Fifth Ave.
Phone: 516-555-0690
Social Security Number: 516-47-3625
Current hours: 40
Paid: 622.0
+++++

Employee - 5
Name: Alex
Address: 987 Wood Blvd.
Phone: 516-555-8374
-- DONE ---!
+++++

Employee - 6
Name: Ahmad
Address: 321 Elm Lane
Phone: 516-555-7282
-- DONE ---!
+++++

Employee - 7
Name: Maya
Address: 1 Wood Blvd.
Phone: 516-555-4312
-- DONE ---!
+++++

Employee - 8
Name: Shahan
Address: 4 Elm Lane
Phone: 516-555-7222
-- DONE ---!
+++++
