

Assignment

There are 3 modules in this application

- HR Module
- Sysadmin Module
- Payroll Module

Classes related to each module will be in their respective package.

Requirement:

When an employee is recruited, the HR module should notify the other modules. SysAdmin module on receiving the notification would order a PC for the employee. Payroll module on receiving the notification would create a bank account for the employee. The modules interested in knowing when an employee is added would register with the HRModule as an EmployeeListener, and the HRModule would notify them when an employee is recruited.

HRModule should have a addEmployee(Employee e) method with which an Employee would get recruited. When an employee is added, all the registered listeners must be notified.

Modules can register for the notification by calling the registerListener(EmployeeListener listener) method in HRModule class.

Sysadmin module would be a registered listener. Sysadmin module should have a list of Computers. Sysadmin module on receiving the notification should check if the employee is a manager or not. If its a manager then a new laptop should be created for that manager. If its not a manager then a new desktop should be created for that employee.



Classes / Interfaces

HR Module

All classes in this module must be in com.pratian.hr package

- class Employee
 - o String name
 - o long empID
 - String gender
- interface EmployeeListener
 - o void employeeAdded(Employee e)
- class HRModule
 - o static List of Employees
 - o static List of EmployeeListeners
 - static void registerListener(EmployeeListener listener)
 - o static void addEmployee(Employee e)

Sysadmin Module

All classes in this module must be in *com.pratian.sysadmin* package

- abstract class Computer
 - String ip
- class Laptop extends Computer
- class Desktop extends Computer
- class SysAdminModule
 - o static Map() of IP,Computer
 - static boolean isIPPresent(String ip)

TestMain

- Check if the listeners are getting notified. You may add a PayrollListener and see if that's also getting notified
- Print all the Employees with the IP address of their Computer. (You may have a field named Computer in Employee)
- Check if SysAdminModule.isIPPresent(String ip) is working