Object Oriented Analysis and Design using Java (UE18CS353)

Assignment-2: Design Patterns

A Company has a Manager, TechLead and Developer as its Employee. The Company creates Task for its Employee. This Task contains attributes such as taskName, taskType, taskStatus, taskLevel, taskSize, effortRequired. After the Task gets created by the Company it will be given to its Employee. Task can be Opened and Executed by the Employee. If the taskLevel is 3, then it will be Opened and Executed by Manager, if it is 2, it will be Opened by the Manager (meaning manager has a task clearance level of 3 and 2) and Executed by the TechLead, and if 1 will be Opened by the TechLead and Executed by the Developer. Design the UML and implement the same using appropriate design patterns.

Note: Design the application in such a way that extensibility is easy. It should be easy to add new types of Employee, new actions that can be performed on the task (Opened, Executed, etc.).