

Report of Assignment 3

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1 – Problem

In this assignment we are expected design a hospital management system with the information from admission file and patient file.

2 – Algorithm

My algorithm in this assignment based on DAO pattern and Decorator pattern. For DAO pattern first I created Interface PatientDao then I created PatientDaoImp class and AdmissionDaoImp class for implement PatientDao. This classes contains AddPatient, RemovePatient, CreateAdmission and AddExamination methods.

Secondly I created Patient class and Admission class to create objects from patient and admission informations.

For Decorator pattern first I created Interface IExamination then I created Inpatient class and Outpatient class for implements IExamination. This classes contains getDescription and getCost methods for calculate cost.

Secondly, I created OperationDecorator abstract class for wrapping all the operation classes. This class implements IExamination. After that I created sub-classes for extends OperationDecorator which are testsOP, measurementsOP, imagingOP, doctorvisitOP. So this classes also contains getDescription and getCost methods for calculate cost.

Finally, I created ReadWrite class for reading patient.txt, admission.txt and input.txt files. This class also contains methods for writing patient.txt, admission.txt and output.txt

3 – UML Diagram

