Hacettepe University

Computer Science and Engineering Department

Name and Surname : Selçuk Yılmaz **Identify Number :** 21828035

Course : BBM104 Laboratory **Experiment :** Java Assignment 3

Subject : Decorator Pattern and Data Acces Object

Due Date : 22.05.2020 (23:59)

Advisors : Nebi Yılmaz

E-mail : selcukyilmaz2000@hotmail.com

WHAT IS THE PROBLEM ?

Problem is managing hospital patient informations and making admissions for them

WHAT ARE CLASSES DOING ?

Main class is the reach class to all code.

Input class is taking all the input files.

Output class is creating all the output files.

ClientDAOimplement class is where we use and get all the informations.

Client class is for the patient objects.

Admission class is for the admission objects.

Doctorvisit, Tests, Imaging, Inpatient, Measurement, Operation, Outpatient,TopDecorator ,TopDecorator2 class is operation decorator class.

OperationInt is operation decorator interface.

ClientDAO class is Data Acces Object interface.

HOW TO SOLVE THIS PROBLEM ?

1-First we read all the patient files like patient.txt and admission.txt.

2-We put all informations into their specified arraylist

3-We reset all the files because now we have informations in our arraylists and we can make files from the beginning.

4-We read input.txt and we take actions for the input words.

5-If input.txt says "add ,remove ,etc…" we just changing the arraylists.

6-We use decorator pattern for calculating costs and writing the examinations.

7-We write all the informations to the files.

UML DIAGRAM ?

ClientDAO «interface»
- create(int, String, String, String, String) : void
- delete(String) : void
- patientlist() : void
- createAdmission(int, String) : void
- addExamination(String, String, ArrayList<String>, OperationInt) : void
- totalcost(String) : void
- readadmission(int, String) : void
- readexamination(String, String, ArrayList<String>, OperationInt) : void
- readclient(int, String, String, String, String) : void
- printadmission() : void
- printclient() : void

ClientDAOImplement
- clients : ArrayList<Client>
- admissions : ArrayList<Admission>
- output : Output
- words : String[]

- create(int, String, String, String, String) : void
- delete(String) : void
- patientlist() : void
- createAdmission(int, String) : void
- addExamination(String, String, ArrayList<String>, OperationInt) : void
- totalcost(String) : void
- readadmission(int, String) : void
- readexamination(String, String, ArrayList<String>, OperationInt) : void
- readclient(int, String, String, String, String) : void
- printadmission() : void
- printclient() : void

OperationInt «interface»
- getExamination() : String
- getOperation() : String
- getCost() : int

Client
- pId : int
- pSurname : String
- pName : String
- pAddress : String
- pPhonenumber : String

- getpId() : int
- setpId(int) : void
- getpSurname() : String
- setpSurname(String) : void
- getpName() : String
- setpName(String) : void
- getpAddress() : String
- setpAddress(String) : void
- getpPhonenumber() : String
- setpPhonenumber(String) : void

TopDecorator2
- tempOperation : OperationInt

- getOperation() : String
- getCost() : int
- getExamination() : String

TopDecorator
- tempOperation : OperationInt

- getOperation() : String
- getCost() : int
- getExamination() : String

Operation
- getExamination() : String
- getOperation() : String
- getCost() : int

Inpatient
- getExamination() : String
- getCost() : int

Outpatient
- getExamination() : String
- getCost() : int

Imaging
- getOperation() : String
- getCost() : int

Measurement
- getOperation() : String
- getCost() : int

DoctorVisit
- getOperation() : String
- getCost() : int

Tests
- getOperation() : String
- getCost() : int

Admission
- AdmissionId : int
- pId : String
- operations : ArrayList<ArrayList<String>>
- totalcost : int

- getOperations() : ArrayList<ArrayList<String>>
- setOperations(ArrayList<ArrayList<String>>) : void
- getAdmissionId() : int
- setAdmissionId(int) : void
- getpId() : String
- setpId(String) : void
- getTotalcost() : int
- setTotalcost(int) : void

Input
- words : String[]
- clientdaoimplement : ClientDAOImplement

- readFile(String) : String[]
- reader(String) : void
- clientreader(String) : void
- admissionreader(String) : void

Output
- clientwrite(Client) : void
- admissionwrite(Admission) : void
- clientreset() : void
- admissionreset() : void
- hospitaloutputreset() : void
- hospitaloutput(String) : void

Main
- main(String[]) : void

Powered by yFiles