CIT Lab Project - Dentist Surgery System

Whenever new patients are seen for the first time, they complete a patient information form that asks their name, address, phone number and brief medical history, which are stored in the patient information file.

The patients’ information file also contains a list of all invoices incurred. These invoices contain the details of the procedures carried out during the visit, for example the patient could have had an x-ray and a filling.

When a patient calls to schedule a new appointment or change an existing appointment, the receptionist checks the appointment file for an available time. Once a good time is found for the patient, the appointment is scheduled. If the patient is a new patient, an incomplete entry is made in the patient file; the full information will be collected when they arrive for their appointment. Because appointments are often made so far in advance, the receptionist usually mails a reminder postcard to each patient two weeks before their appointment.

The patient will be issued with an invoice on leaving the practice which they may pay for in part or in total.

Finally reports are run detailing different aspects of the system such as the number of people who attended the clinic in a particular month, how frequently a patient attended in a given time period and what treatments they had at this time.

Case Diagram and the second is the State Diagram.





List \* = choose to implement whatever you wish to suit the situation. You might need to add other instance variables if needed.

History

histID: int

conditionName: String

dateOccured: Date

medication: String

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Invoice

invoice#: int

invoiceAmt: double

invoiceDate: Date

(you’re choose)

invoiceIsPaid: boolean

procList (List \*)

Invoice(Date)

Gets,sets,toString,print and any other methods you may need.

Patient

patient#: int

patientName: String

patientAdd: String

patientPhone: String

p\_History (List \*)

p\_Invoice(List \*)

Patient(String,String,String)

Gets,sets,toString,print and any methods you may need

Procedure

proc#: int

procName: String

procCost: double

Procedure(String,double)

Gets,sets,toString,print and any other you may need

PatientList

patientList (List \*)

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You’re task is as follows:

1. Create the classes outlined above and test them. **Completed by the 5th of October**
2. Create a suitable interface that will allow you to carry out the necessary task bearing in mind that you will need to set up options to allow you to
   1. not store patient info at all;
   2. store your patient info to a file and
   3. store your info to a database.

**Interface completed by the 26th of October**

**Primary Implementation completed by 9th November**

**Implementation must be completed in full by the week starting the 26th November.**

A test case based on requirements will be created. Together we will run your code and you will be questioned on the result.