

CIS2201 Final Group Assignment: Health Proposal

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Health Proposal

A hospital company, *Health Centre* has been established to help hospital staff view medical records online. This company is subsidised by the government. This healthcare computer system, commonly known as an e-health system, is created to computerise manual operations in the hospital. The primary purpose is to digitalise patient records, to make data retrieval easy and efficient for the hospital staff.

This system will consist of a main menu including the following 3 sub-systems (methods):

1. Patient tracking system

- Record of all patients' health information (patients file: personal information, contact information, lab information, health problems, allergies, history of patient's previous visits that includes prescriptions previously given to them, appointments [date, time, place] etc.) - patients' database.
- Registration of new patients.
- A method that calculates patients' bills after they are discharged from the hospital – also stored in patients' databases.
- A method to get the total monthly bill for a patient, for multiple visit:
 - Patients take different insurance plans (X, Y, Z).
 - For plan Z, the patient pays no counterpart for service uptake.
 - For plan Y, the patient pays counterpart funding (50%) if the bill is more than a certain threshold (eg. 700 Euros).
 - For Patient X, they pay 100% of the bill out of pocket.
- A method where you can perform queries such as: search patient/s found in the patients' database by name and surname or by allergies, register new patients, make new appointments, assign a room to a patient, discharge a patient etc.

2. Staff tracking system:

- A method to record of all the hospital staffs' information categorized according to their roles such as doctors, nurses, therapists, physicians, specialists, pharmacists, social workers, and interpreters. (staff's file: personal information, contact information, role in hospital, hours worked and pay accordingly, appointments...etc.)
- A method to perform queries such as searching staff members found in the staffs' database by name and surname or by role, register new staff members, take care of staffs' payroll...
- A method to calculate staffs' payroll monthly – also stored in staffs' database as mentioned above.

3. Medication tracking system:

- A method to record of equipment like medications, vaccines, blood samples, medical instruments that are in stock - equipment database that includes the names and codes of the medications, the stock of each item, prices and if maintenance is required.

Front end: C# and Windows Form

Back end: ADO.NET as a database