

LAB 211 Assignment

Type:	Long Assignment
Code:	J1.L.P0015
LOC:	300
Slot(s):	N/A

Title

Hospital Management Upgrade

Background

You were asked to build a Hospital management application. The program must have the basic functions of adding, deleting and editing departments, doctors, patients, record medical examination and treatment, medical examination results, The doctor.dat file is used to store information of all doctor in the hospital. The department.dat file has stored department information. The relational model is shown as follows: one doctor belongs to only one department; one department can have many doctors.

Upgrade version.2, support more functions: add patients, record medical examination and treatment, medical examination results, real-time update processing.

Program Specifications

Build a management program. With the following basic functions

0. Show medical examination result
1. Add new patients
2. Record medical examination
3. Real-time update processing

Others- Quit

Each menu choice should invoke an appropriate function to perform the selected menu item. Your program must display the menu after each task and wait for the user to select another option until the user chooses to quit the program.

Each department has the following information: departmentID, name, createDate, lastUpdateDate

Each doctor has the properties such that doctorID, name, sex, address, departmentID, createDate, lastUpdateDate

Each patient has the following information: patientID, name, age, address. Patient information is stored in patient.dat file

examination.dat file has stored examination information include: examinationID, doctorID, patientID, result, date.

Features:

This system contains the following functions:

Display a menu and ask users to select an option.

– Function 1: Show medical examination result- 50LOC

- ✓ The admin enters patientID.
- ✓ The system searches the examination list, and returns the examination information that has patientID equal the input text.
- ✓ Show information of examination.
- ✓ The program returns to the main screen.

– **Function 2: Add new patient- 100 LOC**

- ✓ Create a submenu that allows the admin add new patient.
- ✓ Need to enter the doctorID who will perform the examination for this patient:
doctorID must be existed in the department list
- ✓ **Remember that the constraints must be checked: patientID can not duplicate.**
- ✓ Add the new patient to patient.dat file.
- ✓ Add new record into examination.dat file: result, date is empty.
- ✓ Ask to continuous create new patient or go back to the main menu.

– **Function 3: Record medical examination-100 LOC**

- ✓ Require enter the doctorID, patientID. The system will check if there is exist this medical examination, then continue, otherwise, it will report an error: this “examination does not exist”.
- ✓ Input the result of examination and update the information of this record: result, date is current date.
- ✓ System must print out the result of the updating.
- ✓ After updating, the program returns to the main screen.

- **Function 8: Real-time update processing- 50LOC**

- ✓ Modify the above functions so that when each function is completed, the system must immediately update to the files.

✚ The above specifications are only basic information; you must perform a requirements analysis step and build the application according to real requirements.

✚ The lecturer will explain the requirement only once on the first slot of the assignment.