**OOP2 Comp7013**

**Assignment Work Semester 2 :-**

Develop an application to manage a doctor’s surgery.

1. The doctor will have to be authenticated to gain access to the system.
2. The doctor will be presented with a list of their patients when they login.
3. The doctor will need to review a patient’s details, update patients details, add new patients.
   1. Patient details include, name, address, number, patient history (details of each visit/procedure/serious illness + dates)
   2. A database should be used to store the patient data
4. The doctor should be able to search for a patient under patient name or patient id
5. Backup and Restore : The doctor will need to be able to backup all patient details to a file and restore from this file if necessary. The file should be labelled with the date of backup.

**Note** :-

In assessing project work :-

* One third of the marks will be given for well documented and robust code.
* One third of the marks will be given for minimum required functionality operating correctly
* One third of the marks will be given for good design and implementation

1. Design and Develop the gui for the system (as initially there is no functionality behind the gui, simply pop up a message to say the function has been completed). (14%)
   1. Hard code the data where it is required
   2. Verify data is correct on input and give appropriate error messages if not
2. Develop the classes required for the application –sample UML diagram provided (14%)
3. Fully implement the functionality of the system and persist the data to a mysql database. (12%)
4. Using serialisation, implement the backup and restore (10%)

* **There will be reviews of each student’s work with the lecturer in week 4 and week 8.**
* **The final submission and review of all work will be done in week 11.**
* **Students should discuss with the lecturer any issues with their progress on the online discussion forum or in the labs as appropriate**
* **The competed assignment work should be submitted on Blackboard (unless otherwise instructed by your lecturer) by the 7th of April 2014.**
* **Marks will not be given for any project unless the completed work is demoed to and reviewed with the lecturer.**
* **Please ensure that you submit a zip file of the full project folder – marks will be deducted if you do not submit correctly on time.**

Patient(String,String,String,Date)

doctorsVisit()

Getters and Setters

patientId Integer

patientName String

patientAddress String

patientPhone String

patientDOB Date

arrayList History

Doctor(String, Integer, String)

Getters and Setters

doctorId Integer

doctorName String

surgeryId Integer

doctorPasswd String

Doctor Patient

historyId Integer

patientId Integer

doctorId Integer

visitDate Date

description String

medicine String

procedure String

PatientHistory(integer,integer, String, String, String)

Getters and Setters

addPatient()

addDoctor()

updatePatient()

updateDoctor()

savePatientsFile()

restorePatientsFromFile()

login()

surgeryId Integer

surgeryAdd String

arrayList Patient

arrayList Doctor

Surgery

PatientHistory