

CS102**Summer 2014/2015**

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Criteria	TA/Grader	Instructor
Presentation		
Overall		

Detailed Design Report**(final)****30 July 2015****1. Introduction**

Dr.Me is a desktop application that makes healthcare easier and more accessible. In Dr.Me patients can search for illnesses by choosing some symptoms, which they suffer from; doctors can see their appointments, which are made by patients; and health officers can inform users about recent news (blood need etc.) and provide the communication between patients and doctors.

2. Core Design Details

Dr.Me has three core classes under the abstract User class (Patient, Officer and Doctor). Patient and Doctor Classes are also implement the Searchable interface.

Searchable interface has two method, designed to search for illnesses and symptoms easily:

- searchSymptom()
- searchIllness()

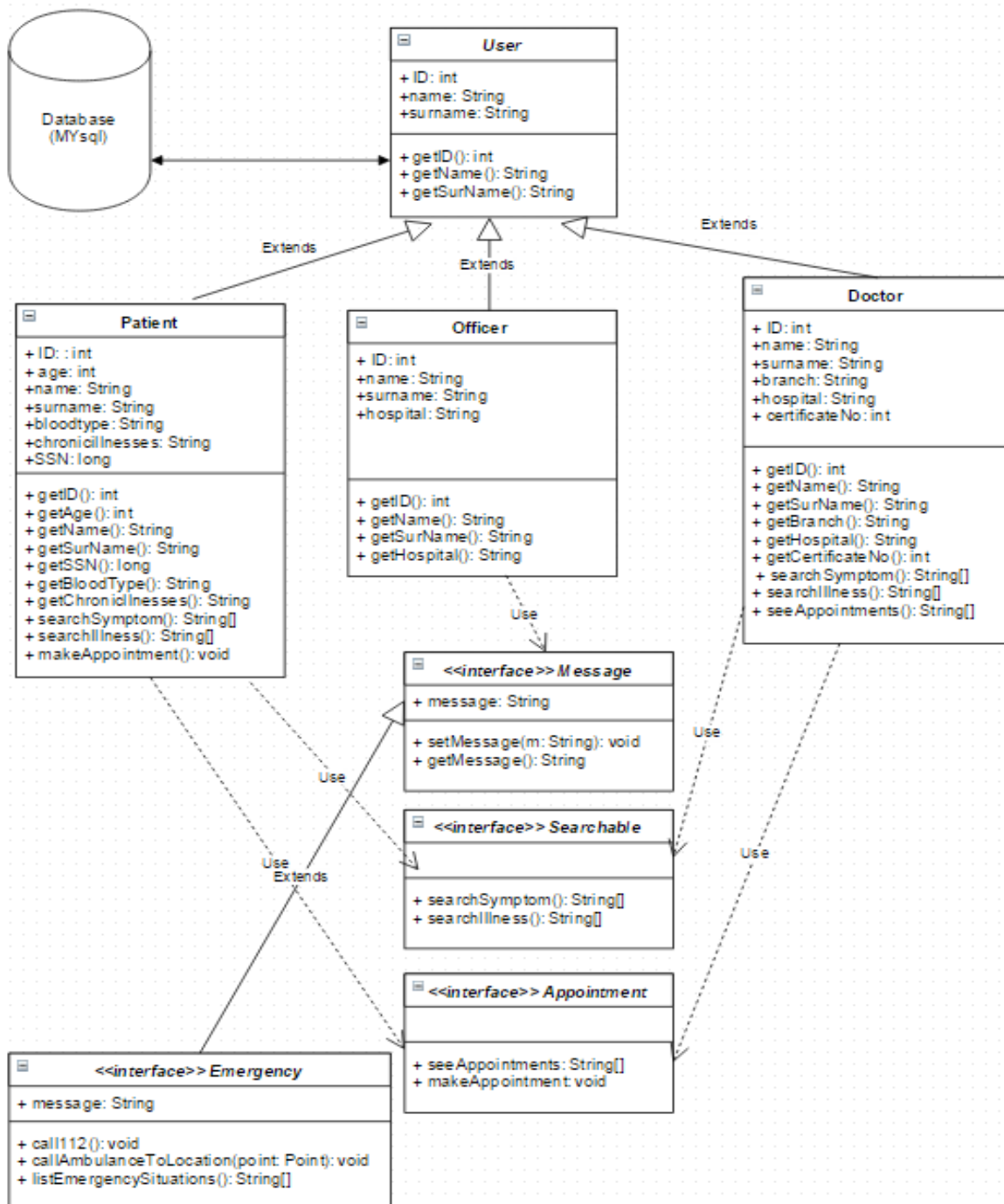


Figure 1: UML design(1)

All of these core classes also implement DBConnectable interface. There is also a IllnessSearch-DBConnect class, which extends DBConnect to connect to database(MySQL) and implements Searchable interface.

In Searchable interface, since Doctor and Patient classes implement it, patients and doctors are able to search for specific illnesses via searchIllness() method and search for symptoms specifically by searchSmptom method.

By Appointment interface, patients can make appointments for doctors via makeAppointment() method and doctors can see their appointments by seeAppointments() method because they both (Patient and Doctor classes) implement it.

Message interface, which extends Emergency interface, allow Officer objects to set the messages that will be displayed in main menu for all users.

IllnessSearchDBonnnect class:

IllnessDBConnect(tablename: String);

This class is used to communicate with database (mySQL).

+searchSymptom(symptom: String): String[] illnesses;

This method does the core function of symptom chck. It takes a String symptom and returns which illnesses contain this symptom.

+searchIllness(illness: String): String String[] bodyparts;

This method takes illness and returns the bodyparts of the illness.

+searchSymptoms(bodypart: String): String[] symptoms;

Takes a bodypart and returns all symptoms that are included in yhe bodypart.

+getSymptomsIllness(illness: String): ArrayList<String> symptoms;

Takes an illness and returns all symptoms of it.

DBConnect class:

DBConnect(tablename: String);

This class manages doctor, patient and officers by connecting to database(mySQL) by JDBC.

+getPatientInfo(name: String): ArrayList<String>;

Takes patient's name and returns all information about that patient.

+getDoctorInfo(name:String): ArrayList<String>;

Takes doctor's name and returns all information about that doctor.

+getIDs(): int[] ;

Returns all IDson the table such as doctors or patients.

+addPatient(p: Patient): void ;

Adds patient to the patients table.

+addDoctor(d: Doctor): void ;

Adds doctor to the doctors table.

`+getName(ID: int): String name;`

Takes ID of the user and returns the name of that user.

`+getID(name: String): int ID;`

Takes name of a user and returns the ID of that user.

`+seeAppointments(name: String): ArrayList<String>;`

Returns all appointments that are made by patients.

`+makeAppointment(name: String): void;`

Adds the doctor name and patient name to the appointments table.

`+getDoctorsbyBranch(branch: String): ArrayList<String>;`

Returns doctors that are on the branch that is given as a parameter.

3. System Overview

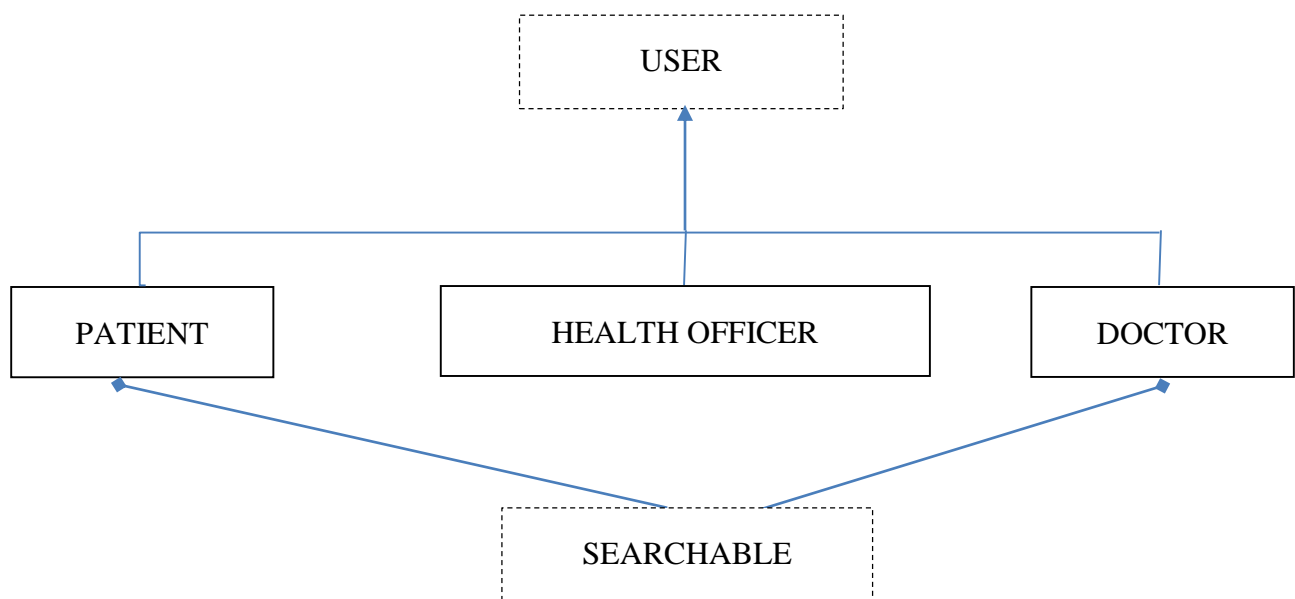


Figure 2: System overview schema

4. Task Assignment

Berat Tuna Karlı: Graphical User Interface Design main-phase, User Class. Unified GUI parts for classes.

Deniz Polatkaya: Data for mySQL(2), Additional tests –elders. User interface of Emergency.

Sarp Saatçioğlu: Patient & Doctor class, Searchable & Appointment Interface, JDBC database connection with Java.

Zülal İlayda Özcan: Data for mySQL(2), Additional tests–psychology. User interface of Emergency.

5. References

- 1- www.draw.io
- 2- http://www.medicinenet.com/symptoms_and_signs/article.htm#introView