

**Group Assignment** 

IT3030 – Programming Applications and Frameworks Year 3, Semester I, 2020



# **Group Assignment Feedback Report**<u>Health Care System</u>

**Group Number: Group S1.01.1.11** 

Batch: Y3S1.01

	Student Registration Number	Student Name	Service
1	IT19234458	Vithanage E.D	Appointment Service
2	IT17001762	Rajapaksha I.S	Hospital Service
3	IT18057584	Kulathunge K.M.T.A	Payment Service
4	IT18064032	Wanniarachchi L.D	Laboratory Service
5	IT18054064	Bandara H.M.S.A	Doctor Service
6	IT18053906	Wijethunge R.S	Patient Service



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#### **Introduction to Health Care System**

Health care management system is a web application developed for hospitals to manage staff data and patients' data effectively. The main aim of developing "HEALTH CARE MANAGEMENT SYSTEM" is to computerize the front office management of hospital.

Hospital Management System is designed for multi-specialty hospitals, to cover a wide range of hospital administration and management processes.

The project Hospital Management system includes services such as hospital services, doctor services, patient services, appointment services, payment services and laboratory services. The software has the facility to give a unique id for every doctor, patient and laboratory and stores the details automatically. The main intention of introducing this system is to reduce the manual work at Health center counters.



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#### **Services of the System**

- 1. Hospital Service
- 2. Doctor Service
- 3. Patient Service
- 4. Appointment Service
- 5. Laboratory Service
- 6. Payment Service

#### 1. Hospital Service

The Health Care System want to manage hospital services of all Hospitals in the system. When Admin want to add a hospital or hospital details to the system, a new hospital will be added to the system using AddHostpital() function. If the admin has to change or update hospitals or hospital details, it can be changed using UpdareDetails() function from the system. When Admin wants to view details of hospitals system will show the hospital details from ViewDetails() function. Admin can remove the hospitals or hospital details and the system will remove information using DeleteHospital() function.

#### 2. Doctor Service

The system has doctor details. A new doctor has to create a new profile in the system with the use of CreateNew() function. Once the doctor wants to change their profile details, then he or she can update the profile using the UpdateProfile() function. Then system will display the updated details correctly. If a doctor wants to see their profile, he or she can view the profile with the ViewProfile() function. That function helps to see the details which they entered or updated earlier. When a doctor leaving from the system, the doctor can delete his or her profile using DeleteProfile() function. Then system will hide the details, but if an emergency, admin can check the profile details in the system.



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#### 3. Patient Service

The system has patient management to control patients flow. This can be used to register patients and to make appointments. If a new patient is going to make an appointment, he has to register to the system first and if a patient is already a registered patient, that patient can login to the system properly with their user name and password. After the new patient is logged to the system the patient should have to add the patient details to the system for make an appointment and the AddDetails() function will be use to add details to the system. If the patient wants to change their profile details, he or she can update the profile using the UpdateProfile() function. If the patient wants to see their profile, he or she can view their profile with the ViewProfile() function. When the patient makes an appointment and if the patient wants to cancel the appointment, he or she can cancel it by using the DeleteProfile() function. If the appointment is already made, patient have to pay channeling fee.

#### 4. Appointment Service

Once the patient is logged in to the system he can make an appointment by selecting the doctor he/she needs to channel and the respective hospital where the patient needs to get medication from. Once the patient submits them, the patient can view the appointment details before proceeding to payment. At this point the patient can update the appointment details if any alterations need to be made. The patient can cancel the appointment before the payment is made and after made.

#### 5. Laboratory Service

Lab reports show the test results of the particular patient in the hospital. Laboratory data entry specialist can add new lab report to the system. AddNew() function will enter each and every lab report of patients to the system. When laboratory data entry specialist wants to update any details of a lab report, he/she can update details of the lab report using the system. UpdateReport() function will be used to update details of lab reports in the system. Patient can log in to the system and view her/his lab reports. Doctor can view each patient's lab reports separately with the help of the system and system will use ViewReport() function to display reports. Sometimes laboratory data entry specialist wants to remove previously added lab report and add a newly edited lab report to the system. In that case he/she can remove a lab report to add a new one to the system and system will delete the lab report using DeleteReport() function.



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#### 6. Payment Service

The system have to manage payment details of each patient correctly. When a new appointment is added to the system, a new payment will be added to the system with the use of AddPayment() function. If a patient change the appointment from one doctor to another doctor, the payment details also should be changed with relevant charges. So using UpdatePayment() system will update payment details correctly. Patient can log in to his/her profile and view payment details. Overall payment details which is generated by the ViewDetails() function, can be seen by admin and hospital. Admin and hospital can view daily or monthly payment details using the system. When a patient cancel an appointment, the system will automatically remove the payment details related to that appointment using RemovePayment() function.

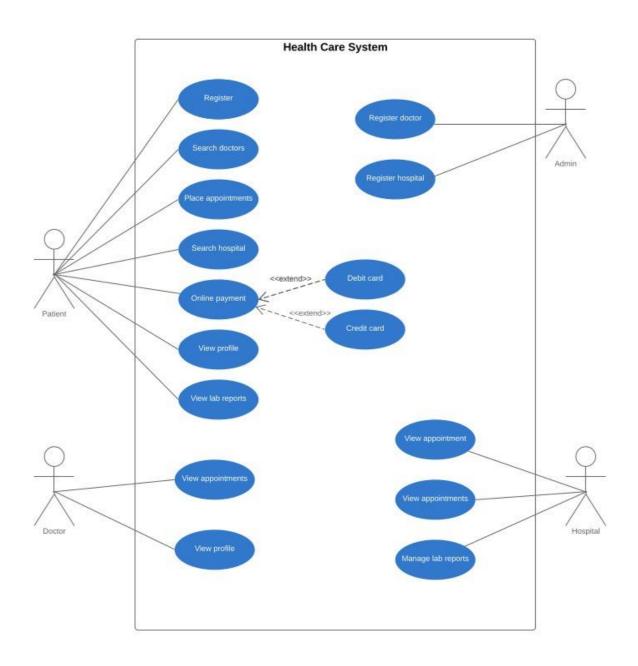
GitHub Link: <a href="https://github.com/EsDiViHub/Online-Channeling-System">https://github.com/EsDiViHub/Online-Channeling-System</a>



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### **Use Case Diagram**

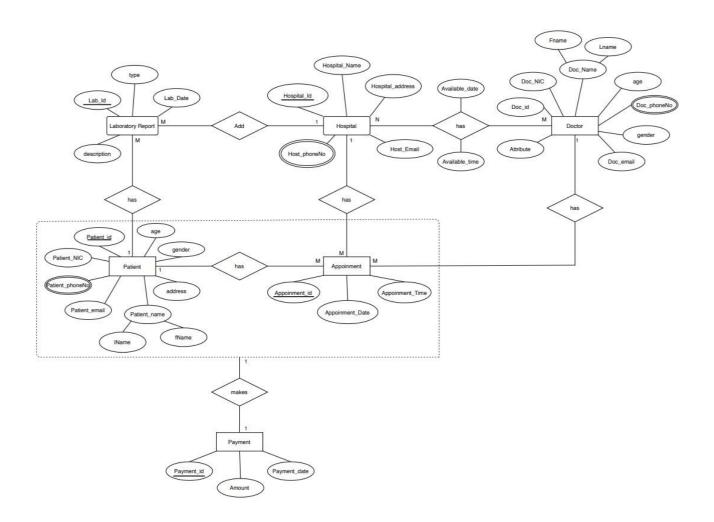




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### **ER Diagram**

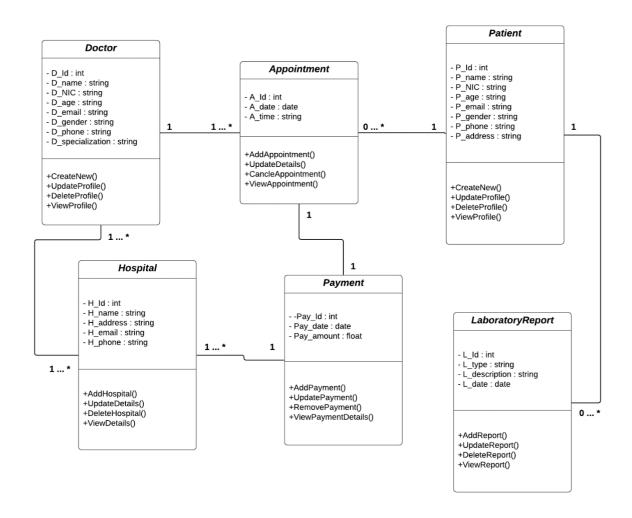




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### **Class Diagram**

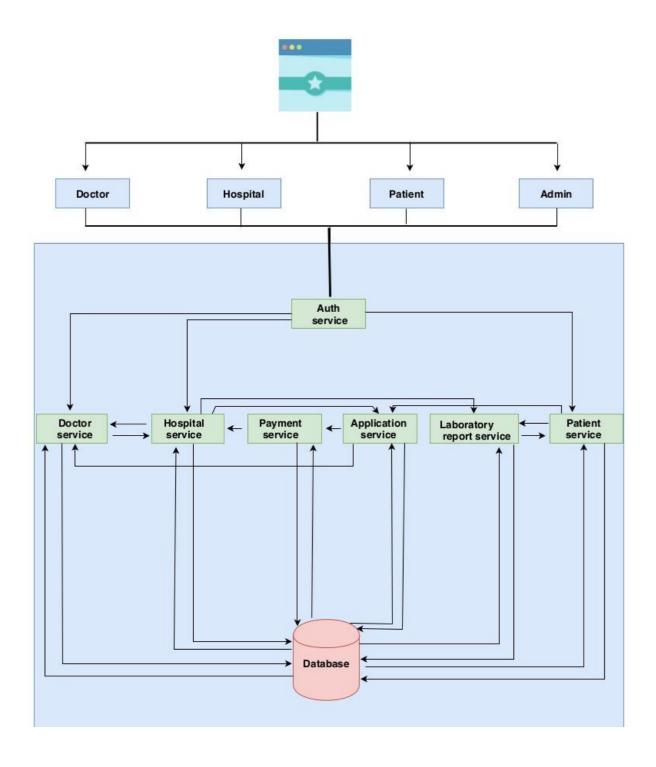




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#### **Overall Architecture**

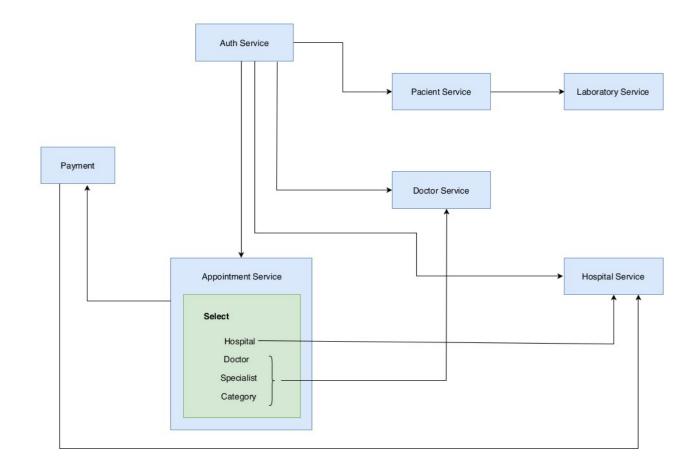




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### **Services Diagram**





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### **API Diagram**

> Hospital

