

SOFTWARE ENGINEERING (EXPERIMENT 4)

Topic: - HealthCare Chatbot

BRANCH: Computer Engineering & Cybersecurity (CSE-TE)

PREPARED BY:

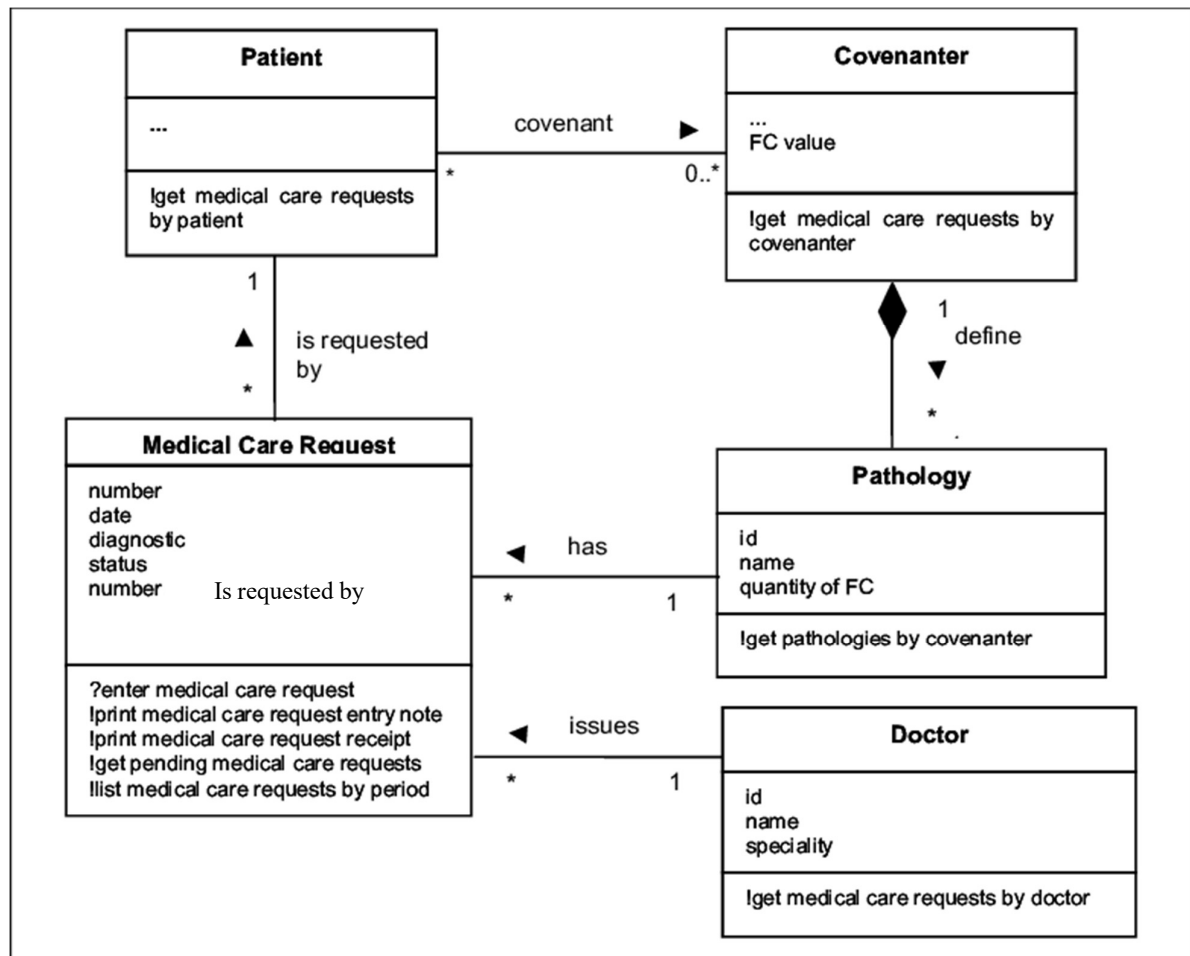
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Title: Class Diagram(UML)



Explanation of Classes:

Certainly! Let's break down the class diagram in a generalized way:

1. **HealthcareChatbot:**
 - Represents a chatbot system used in healthcare.
 - Contains a knowledge base for storing medical information.
2. **KnowledgeBase:**
 - Stores general information and medical records.
 - Provides methods to retrieve general information, medical records, update records, and add new general information.
3. **MedicalRecord:**
 - Represents a patient's medical record.
 - Contains a list of medical care requests (formerly "records").
4. **MedicalCareRequest:**
 - Represents a request for medical care made by a patient.
 - Contains information such as the date of the request, the pathology involved, and the doctor assigned to it.
5. **Pathology:**
 - Represents a medical condition or pathology.
 - Contains information like the name of the condition and a description.
6. **Doctor:**
 - Represents a healthcare provider or doctor.
 - Contains information such as the doctor's name and specialization.
7. **Appointment:**
 - Represents a scheduled appointment between a patient and a doctor.
 - Contains information about the date, time, patient ID, and doctor ID.
8. **Medication:**
 - Represents information about a medication prescribed to a patient.
 - Contains details such as the name of the medication, dosage, and frequency.

In summary, the class diagram represents a healthcare chatbot system that allows patients to interact with the chatbot to schedule appointments, view medical records, set medication reminders, and ask questions. The system maintains a knowledge base with general health information and patient medical records. Medical records include information about medical care requests, which involve specific pathologies and assigned doctors.

Additionally, the system keeps track of appointments between patients and doctors, along with medication details for prescriptions.

| Correction Parameters | Formative Assessment [40%] | Internal completion Practical [40%] | Attendance / Learning Attitude [20%] | |
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| Marks obtained | | | | |