OOAD-J Mini-Project Synopsis

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Project Title - Hospital Management System

Functionalities

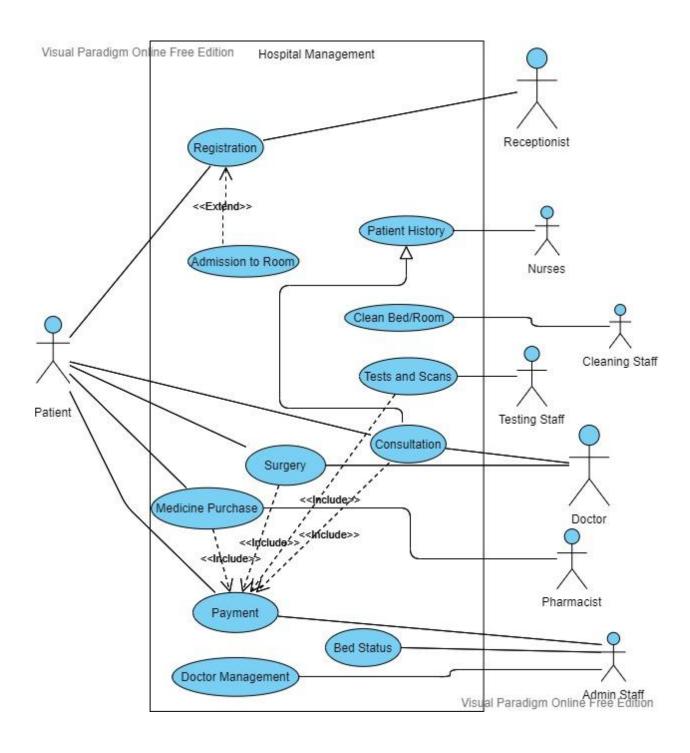
In order to simplify the management of processes within a hospital, a Hospital Management System has been created. The Patient begins by going through the Registration process, guided by the Receptionist. In some cases, the Patient may arrive via an Ambulance, driven by Ambulance Drivers employed by the Hospital. Following this, a Doctor is assigned to the Patient, and the Doctor conducts a Consultation/Diagnosis with the help of one or more Nurses. In order to assign a Doctor to the Patient, the Administrative/General Staff, who are responsible for Management of Doctors, assist the Receptionist. Based on the results of the Consultation/Diagnosis, which may involve Scans/Tests, and the Doctor going through the Patient's Medical History, a decision is made on the Patient's next steps. This may involve simply visiting the Pharmacist and Purchasing Medicine, or may require Admission to a Hospital Room. The Room is allotted by checking the Bed Status to see whether it is free or not, and whether the Cleaning Staff have ensured that the Room and Bed are clean. In some cases, the Diagnosis may also lead to Surgery. Payment from the Patient to the Hospital is managed by the Administrative/General Staff.

Use Case Matrix

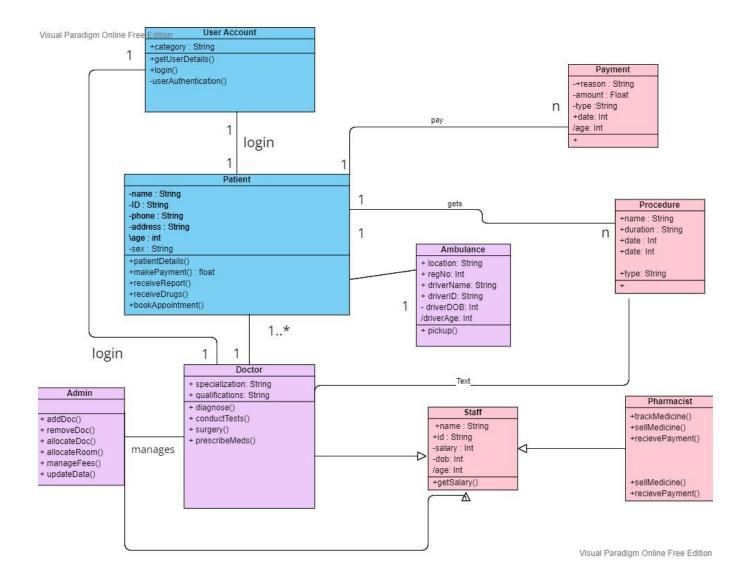
	Kartika	Krithika	Maitreyi
Ambulance		~	
Admission to Hospital Room			~
Bed Status	✓		
Clean Bed/Room	V		
Consultation/ Diagnosis		~	
Doctor Management			~
Patient History			~
Payment	'		
Purchase of Medicine			~
Registration	V		
Surgery		~	
Tests/Scans		~	

Static Models

Use Case Diagram



Class Model



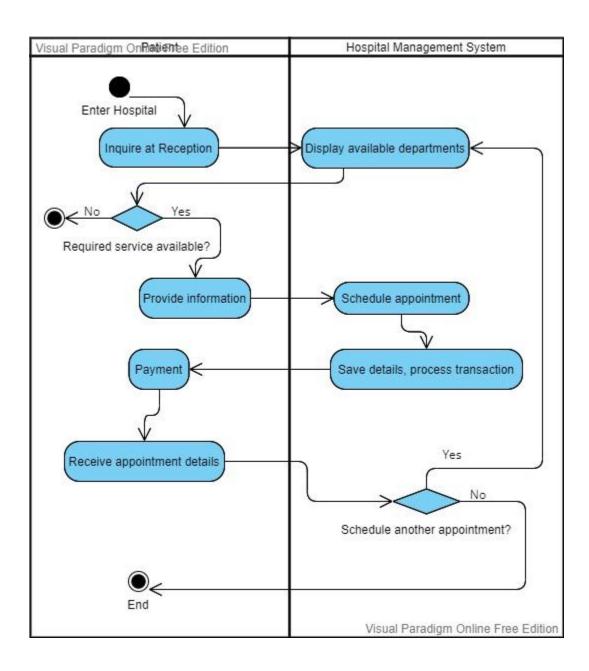
Actors

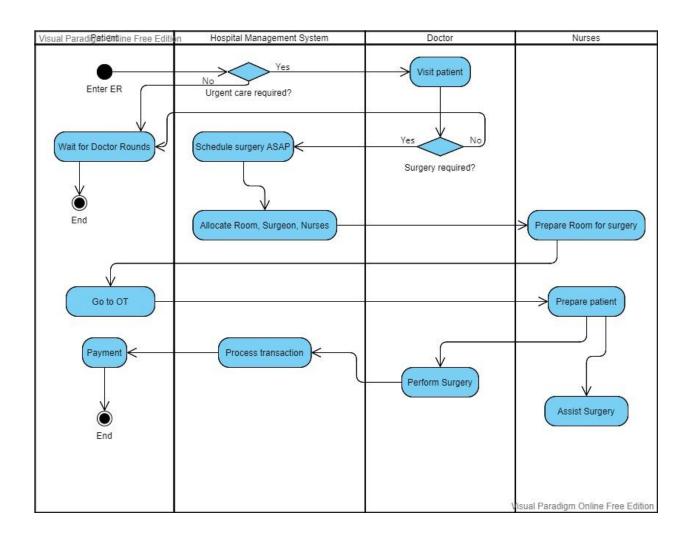
- Ambulance Drivers
- Cleaning Staff
- Doctor
- General/Administrative Staff
- Nurse
- Patient
- Pharmacist
- Receptionist

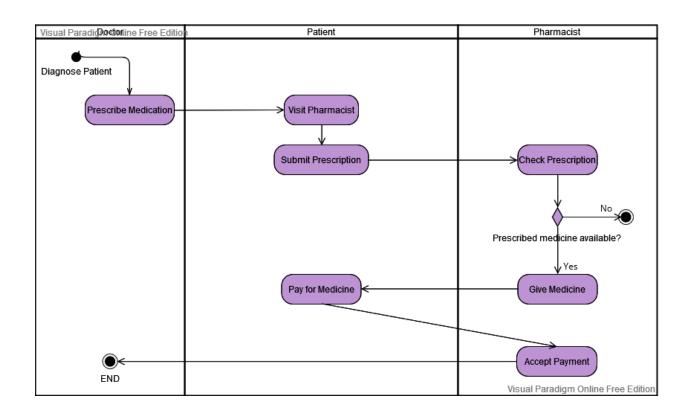
Use Cases

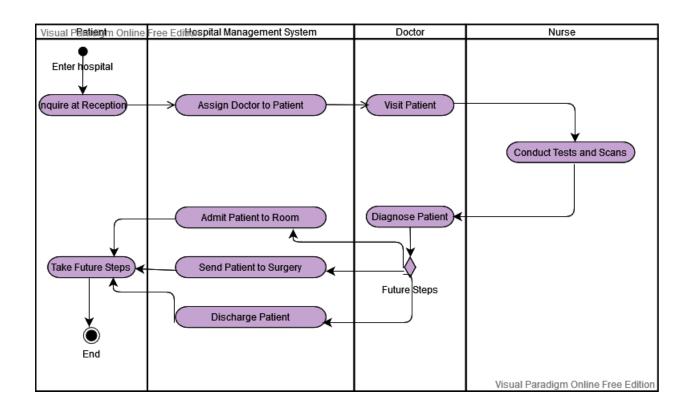
- Ambulance
- Admission to Hospital Room
- Bed Status
- Clean Bed/Room
- Consultation/Diagnosis
- Doctor Management
- Patient History
- Payment
- Purchase of Medicine
- Registration
- Surgery
- Tests/Scans

Activity Diagrams









State Diagrams

