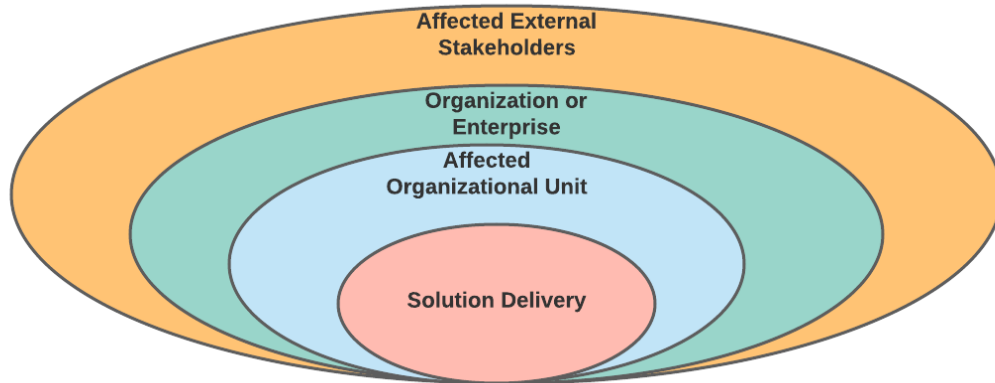


The Mayo Clinic

STAKEHOLDERS

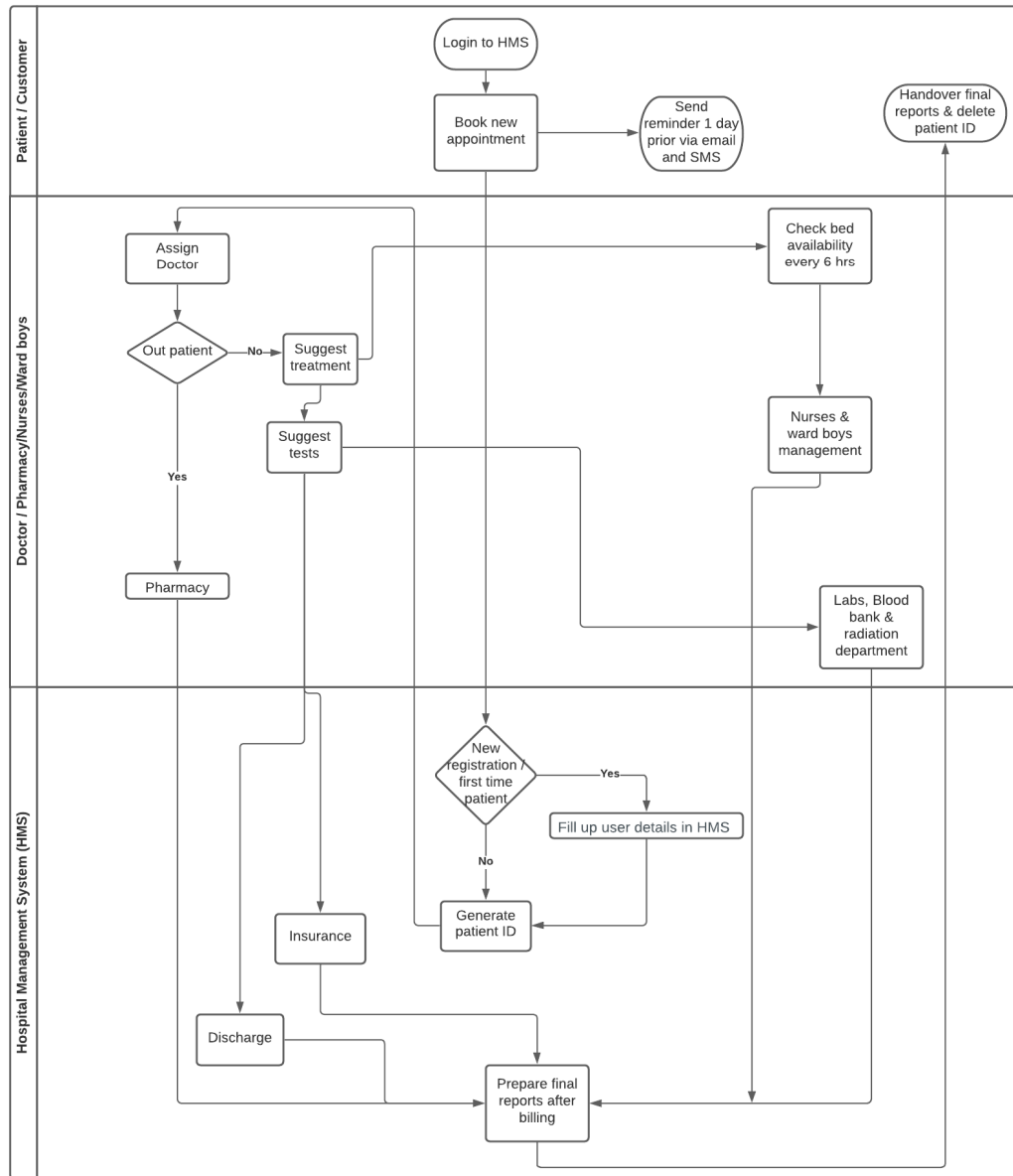
ACTOR	What he can do on the Software Created
Affected External stakeholders	<ul style="list-style-type: none">• Patients• Regulator• Suppliers• Insurance claim settlement company
Organization or Enterprise	<ul style="list-style-type: none">• Sponsors• Hospital Management
Affected Organizational Unit	<ul style="list-style-type: none">• Customer Support desk• Nurses• Ward boys• Doctors
Solution Delivery	<ul style="list-style-type: none">• Project Manager• Business Analyst• Implementation Engineer / architect



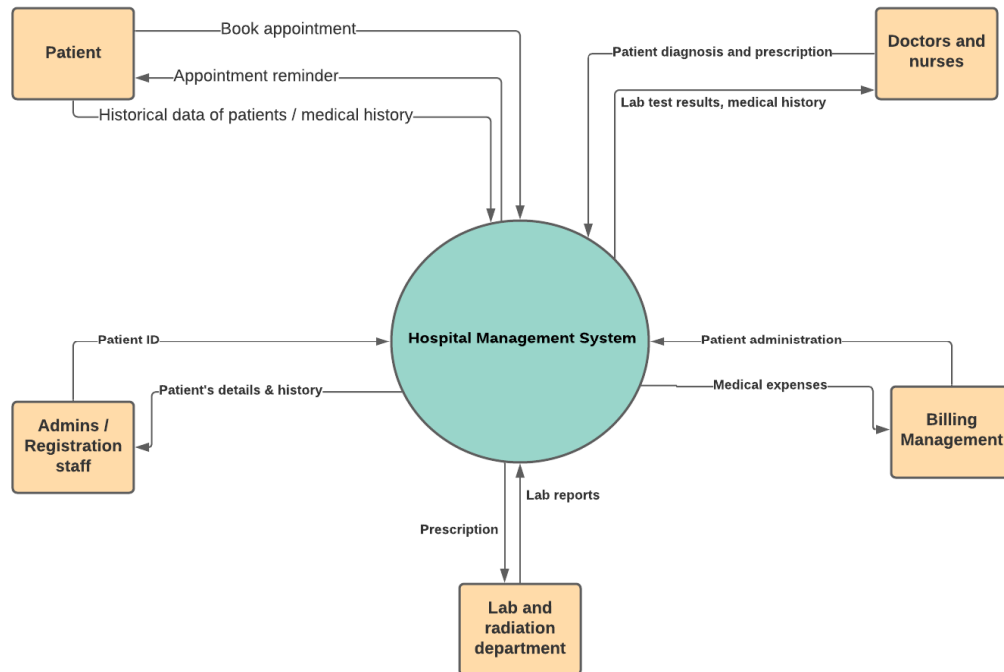
Scope

- Scope of the HMS includes Patients, Registration staff, Doctors and Nurses, Lab and radiation department, Hospital management and Billing

WORKFLOW OF THE PROPOSED SYSTEM



SCOPE using Use Case Diagram (UML)



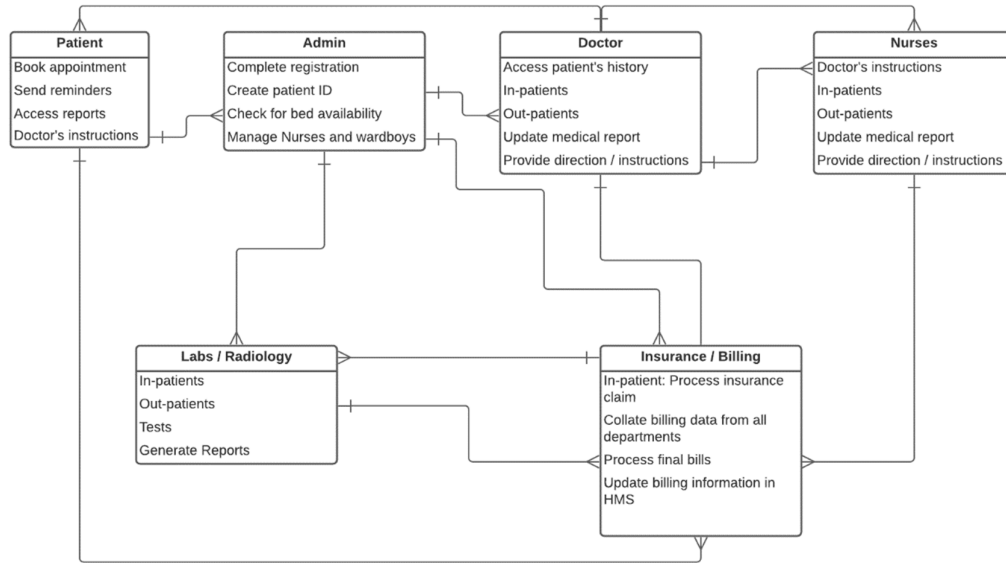
IN SCOPE

- Booking appointments and sending appointment reminders for patients
- System generated registration form to be filled for generating patient ID
- Bed occupancy tracker to be updated once in 6 hrs
- System reports are generated from the HMS for senior management to have a clear understanding on the hospital's revenue, expenses, bed occupancy, and other details
- All tests and lab reports are expected to be updated in HMS
- Doctors to have access to HMS based on patient ID to view the reports directly to reduce paperwork

OUT OF SCOPE

- Patients will not have access to HMS for accessing the records. It is restricted to the staff
- Once all the relevant documents are shared with patient. Upon discharge the claim settlement process that will happen between patient and the claim processing company
- The process of hiring doctors, nurses, or staff for the hospital
- Payroll system

ER Diagram for HMS



FUNCTIONAL REQUIREMENTS

- Booking appointments and sending reminder
- Patient's record storage and retrieval based on patient ID
- Doctor's medical prescription page
- Testing details and lab reports results to be mapped based on patient details
- Bed occupancy details to be updated for every 6 hrs
- Staff management process
- Report generation
- Medical expenses and bill generation
- Insurance information for any claim settlement
- Any instructions/observations from doctors, nurses or lab attendants should be tracked

NON-FUNCTIONAL REQUIREMENTS

- The system shall be available all the time
- The screens should be self-explanatory and very user friendly
- The system shall give responses in 1 second
- The system shall keep a log of all the errors

System Requirement:

- Database: MySQL Database to be used since it is open source and free.
- Operating System: Shall be Windows 2016
- Web-Based: The system shall be a web-based application

- Response Time: The system shall give responses in 1 second
- Capacity: The System must support 500 people using it at a time
- Errors: The system shall keep a log of all the errors
- Availability: The system shall be available all the time

Usability:

- The screens should be self-explanatory and very user friendly. Management would not want employees not ordering from the system as they cannot understand the screens and data fields on screen. The users should not find the system cumbersome.

Key requirements

Management would like the following reports:

- Bed occupancy for each day
- Doctors' appointments and revenue generated through OPDs.
- Total number of OPD patients and admitted patients
- Which doctors generate the maximum revenue
- Total amount of earnings through OPD and admitted patients
- Total amount of earnings generated through laboratory and radiology

Screen Wireframes

Portal visible to patients / end users

Welcome to our appointment page

home Doctor's profile Frequently searched Doctors

Is this your first appointment? ☐ yes ☒ no

Date for your appointments dd/mm/yyyy

Patient's Name

Mobile number

email ID

Click here to confirm appointment

Portal visible to Admins while registering patients for creating patient ID

Hospital Management System



Patient's First Name

Input Field

Patient's Last Name

Input Field

email ID

Input Field

Mobile number

Input Field

Emergency contact

Input Field

Address

Input Field

Save

