Software Design and Analysis

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Section: BSCS 5B

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Assignment#01

Stakeholders:

In stakeholders

1. Doctors
2. Patients
3. Nurses
4. Hospital administrative i.e.

- Receptionist
- lab assistant
- Pharmacist
- Pharmacist

Business Requirements:

- Complete system management
- Secure assurance
- Check and balance (Bill Mangement)

- Maintain record of Medicines and Hospital

Functional Requirements:

- Registration
- Login
- Verification
- U-id and password
- Clinic no allocation
- Appointment accept and cancel list
- Booked Appointment
- Prescription update
- Reports
- Manage Profile
- Views of stakeholders
- Medicine prepares
- Generate Invoice
- Account updating
- Payment method

User Requirements:

- **Patients feature**
  - a) Appointment Book
  - b) Examine medical records
  - c) Emergency admission
  - d) Creating discharge summaries
  - e) payment of the invoice
  - f) Obtain medications

- **Doctor's feature**
  - a) View the prescription for the patient.
  - b) Check out the patient's test results
  - c) assess the patient
  - d) View his or her Calendar
  - e) Enter a patient's prescription here.
  - f) Recommend examine to lab assistants
  - g) Produce reports
  - h) profile manages

- **Receptionist's feature**
  - a) View appointment list
  - b) View status with Nurses
  - c) Book an appointment
  - d) Register and Update Patient accounts
  - e) Issue clinic number
  - f) Profile management

- **Nurses feature**

a) changes the patient account

b) Conduct pre-assessment tests.

c) View the availability of doctors

d) assigning patients to concerned doctors, managing profiles

• Pharmacists feature

a) cost of medications

b) may view the prescription for the patient

c) Give medication based on the patient's prescription

d) Update the medicine status of hospital stock, Update profile

• Lab Assistants feature

a) Updates patient Details

b) Perform examinations

c) Process specimens

d) Generate test reports like CT scans, X-Ray images, and MRI reports

e) Profile management

• Cashiers feature

a) Creating a bill
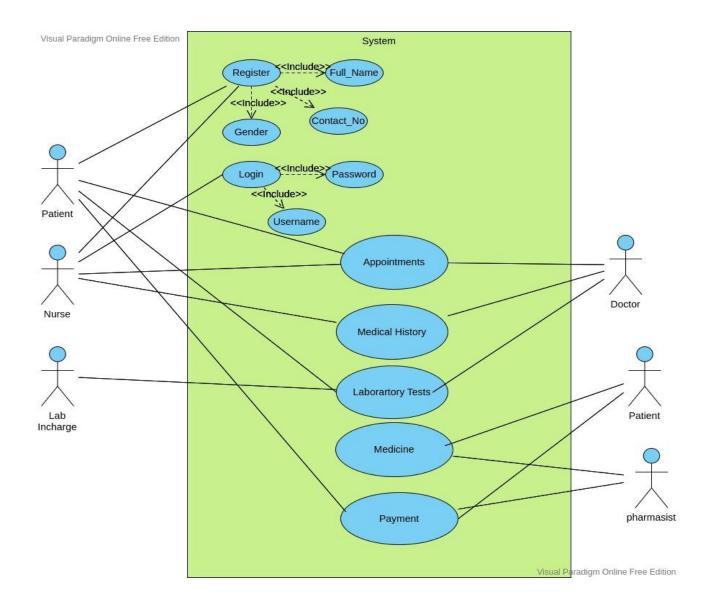
b) Receive cash

c) View payment history

d) Update profile

Non-Functional Requirements:

a) Stability

b) Safety and Maintainability

c) Accessibility

d) Availability

e) Security

f) Profitability

g) Scalability

h) Reliability

i) Capacity

j) Usability

k) Performance

l) Durability

Assignment#02

Requirement Analysis

• Draw use-cases for the identified HMS case study.

System

Register <<Include>> Full_Name

<<Include>>

<<Include>>

Gender

Contact_No

Login <<Include>> Password

<<Include>>

Username

Appointments

Medical History

Laborartory Tests

Medicine

Payment

Patient

Nurse

Lab
Incharge

Doctor

Patient

pharmasist

- Draw Swimlane Diagram to link activities/processes with actors