Week 4: User Stories, Use Cases, Wireframes & Database Design
Student: Amrit Vaswani
SID – 2319498

Finalised User Stories
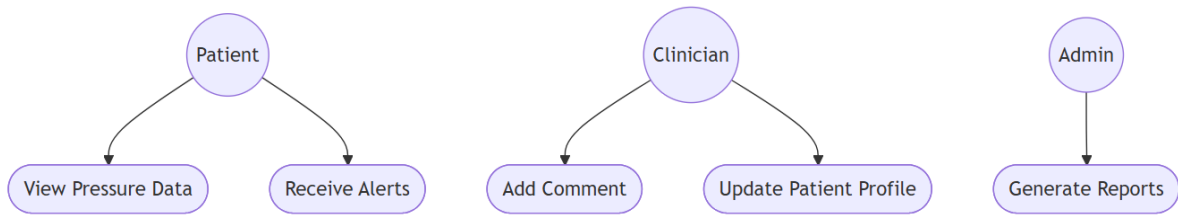
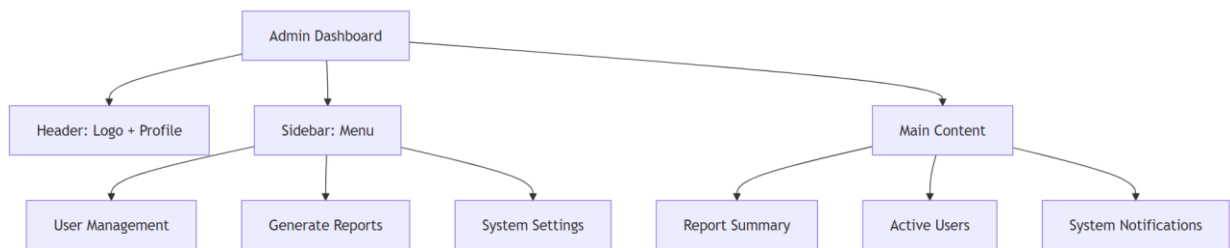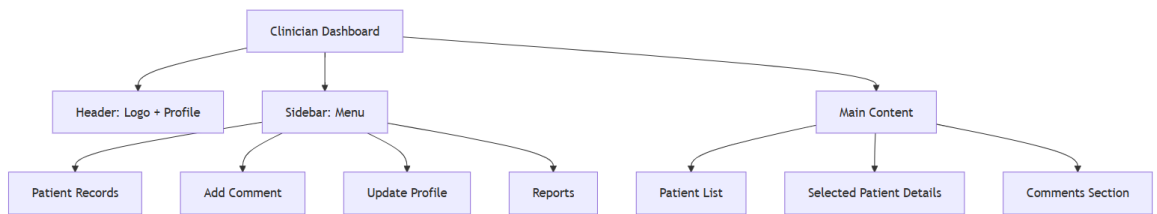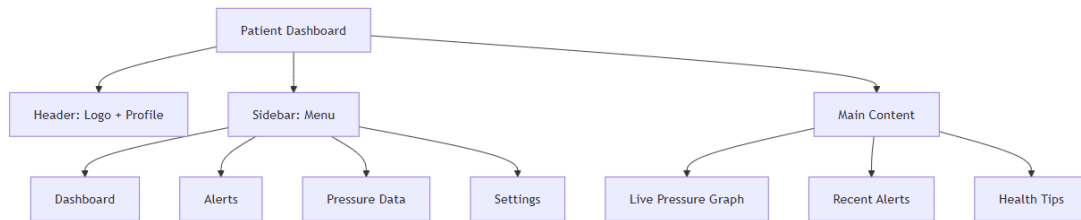| ID	User Story	Priority
US01	As a **patient**, I want to **view my live pressure data** so that I can **monitor my health**.	High
US02	As a **clinician**, I want to **add comments to patient records** so that I can **track patient progress**.	High
US03	As an **admin**, I want to **generate reports** so that I can **analyse system usage**.	Medium
US04	As a **patient**, I want to **receive alerts for abnormal readings** so that I can **take timely action**.	High
US05	As a **clinician**, I want to **update patient profiles** so that I can **maintain accurate records**.	Medium

Use Case Diagram

Description:

- Actors: Patient, Clinician, Admin

- Main Use Cases: View Data, Add Comment, Generate Report, Update Profile, Receive Alerts

Diagram:

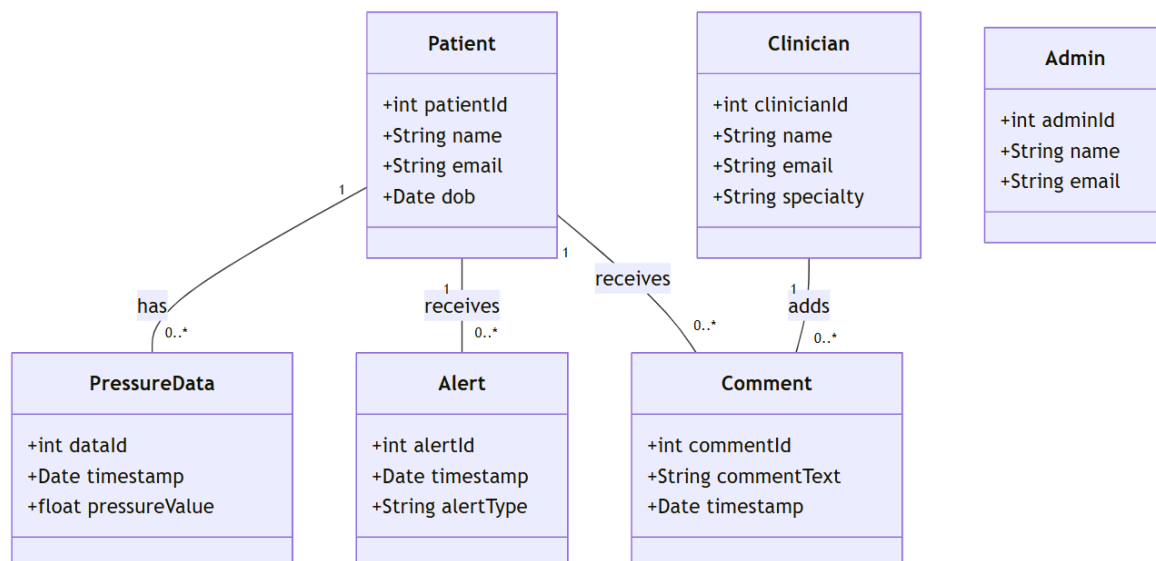| Use Case	Actor	Precondition	Trigger	Main Flow	Postcondition	Alternative Flow
View Pressure Data	Patient	Patient is logged in	Patient selects "View Dashboard"	System displays live pressure data	Data displayed successfully	If no data, system shows "No Data Available"
Add Comment	Clinician	Clinician is logged in	Clinician selects patient record	Clinician enters comment and submits	Comment saved to database	If save fails, show error
Generate Report	Admin	Admin is logged in	Admin selects "Generate Report"	System compiles report	Report available for download	If no data, display "No Data Available"
Receive Alerts	Patient	Patient is logged in	Abnormal reading detected	System sends alert	Alert delivered	If alert fails, retry delivery

Wireframes

Patient Dashboard

- Header: Logo + Profile
- Sidebar: Menu
  - Dashboard
  - Alerts
  - Pressure Data
  - Settings
- Main Content
  - Live Pressure Graph
  - Recent Alerts
  - Health Tips

Clinician Dashboard

- Header: Logo + Profile
- Sidebar: Menu
  - Patient Records
  - Add Comment
  - Update Profile
  - Reports
- Main Content
  - Patient List
  - Selected Patient Details
  - Comments Section

Admin Dashboard

- Header: Logo + Profile
- Sidebar: Menu
  - User Management
  - Generate Reports
  - System Settings
- Main Content
  - Report Summary
  - Active Users
  - System Notifications

Database Design

Table Name	Columns	Primary Key	Foreign Key
Patient	PatientID, Name, Age, Email	PatientID	-
Clinician	ClinicianID, Name, Email	ClinicianID	-
PressureData	DataID, PatientID, Timestamp, Value	DataID	PatientID
Comment	CommentID, PatientID, ClinicianID, CommentText, Timestamp	CommentID	PatientID, ClinicianID
Alert	AlertID, PatientID, AlertType, Timestamp, Status	AlertID	PatientID

Entity Relationship Diagram (ERD)

Relationships:

- Patient → PressureData (1-to-many)
- Patient → Comment (1-to-many)
- Clinician → Comment (1-to-many)
- Patient → Alert (1-to-many)

Diagram

Logbook Entry for week 4

What I have done in Week 4:
Finalise User Stories
Finalise Use Case Diagram & Descriptions
Allocate core functions to group members
Finalise Wireframes
Start Database Design and ERD

Tasks Completed:
Reviewed and refined all user stories
Updated Use Case Diagram and descriptions
Allocated core functions to group members
Refined wireframes and prepared for submission
Designed initial database tables and ERD