**Design Methodology:**

* + We followed an Agile approach with iterative design and development.
  + UI/UX Design Methodology:
    - Wireframing (Figma)
    - User Journey Mapping
    - Responsive Layouts (Mobile-first design)
  + Backend Design Methodology:
    - Database schema (ERD)
    - Class diagram for backend models (User, Prescription, Reminder, FamilyProfile, Log)
    - Component diagram (Frontend → API → Database → Notification Service)
    - Sequence diagram (User sets reminder → API call → DB storage → Notification triggered)

**Attached Diagrams:**

* Use Case Diagram – showing User, Caregiver, Admin, and System use cases.
* Class Diagram – backend models with attributes and methods.
* ERD (Entity Relationship Diagram) – database design for MedMate.
* Component Diagram – architecture of frontend, backend, and database interactions.
* Sequence Diagram (optional but strong) – reminder scheduling flow.

**Types of Testing Techniques**

1. **Unit Testing**

* Test individual components in isolation.
* Example: Verify that login() returns correct user with valid credentials.

1. **Integration Testing**

* Test interaction between modules (e.g., Frontend API call → Backend → Database).
* Example: Upload prescription from frontend and check if it’s stored correctly in DB.

1. **System Testing**

* Test the complete system end-to-end.
* Example: Register a user → upload prescription → set reminder → receive notification.

1. **Acceptance Testing (UAT)**

* Verify system against user requirements.
* Example: Caregiver manages family members’ reminders successfully.

1. **Regression Testing**

* Ensure that new features don’t break existing ones.
* Example: Adding family profile doesn’t affect existing reminder notifications.

1. **Performance Testing**

* Test system under load.
* Example: Ensure reminders are sent within 2s even with 100 concurrent users.