OPT Portal Project Week 1 and Week 2 Deliverable:

Backend Team

Week 1 (August 12 - August 16)

- **Task: Identify User Roles and Permissions**
  - Define roles: Admin, Student, OPT Coordinator.
  - Specify permissions for each role.
  - Document roles and permissions.
- **Task: Define Functional Requirements**
  - Collaborate with Frontend and UI/UX teams to outline backend functionalities.
  - Discuss edge cases and failure scenarios.
- **Task: Design MongoDB Schema**
  - Identify necessary collections (Users, Documents, etc.).
  - Define attributes for each collection.
  - Establish relationships between collections.
- **Task: Outline RESTful API Endpoints**
  - Define API endpoints for CRUD operations.
  - Specify HTTP methods for each endpoint.
  - Create detailed request and response formats.
- **Task: Specify Authentication and Authorization Mechanisms**
  - Decide on authentication methods (e.g., JWT, OAuth).
  - Document the process of token issuance, storage, and validation.
  - Implement role-based access control (RBAC) in API design.

Week 2 (August 19 - August 23)

- **Task: Setup Development Environment**
  - Set up local development environment (Node.js).
  - Configure cloud environment on AWS (EC2, S3, RDS).
  - Install necessary backend tools and dependencies.
- **Task: Initial API Development**
  - Set up initial Node.js project structure.
  - Create initial API endpoints for user authentication and document submission.
  - Test endpoints using Postman or similar tools.
- **Task: Database Integration**
  - Connect the application with MongoDB.
  - Test basic CRUD operations for Users and Documents collections.
  - Ensure database connection stability and security.

Frontend Team

Week 1 (August 12 - August 16)

- **Task: Define Functional Requirements**
  - Identify and document key frontend functionalities.
  - Ensure UI alignment with backend requirements.
  - Collaborate on user stories and use cases.
- **Task: Collaborate on Database Schema Design**
  - Ensure frontend requirements align with the database design.
  - Plan data fetching strategies and state management.
- **Task: Collaborate on API Specifications**
  - Work with the backend team to ensure frontend needs are met by the API.
  - Define data flows for component interaction with APIs.
- **Task: Plan Frontend Authentication Flow**
  - Design the frontend authentication flow, including login and token management.
  - Ensure role-based access is reflected in the frontend.

Week 2 (August 19 - August 23)

- **Task: Setup Development Environment**
  - Set up local development environment (React).
  - Install necessary frontend tools and dependencies.
- **Task: Frontend Framework Setup**
  - Set up initial React project structure with routing and state management.
  - Implement initial components: Login, Dashboard, Document List.
- **Task: Begin API Integration**
  - Start integrating the frontend with backend APIs.
  - Test connection and data flow between frontend and backend.
- **Task: Implement Basic Authentication UI**
  - Start developing the login UI.
  - Focus on user experience and security (e.g., form validation).

UI/UX Team

Week 1 (August 12 - August 16)

- **Task: Define Non-Functional Requirements**
  - Identify non-functional requirements such as security, scalability, and performance.
  - Develop user personas for each role (Admin, Student, OPT Coordinator).
- **Task: Begin Sketching Wireframes**
  - Start sketching initial wireframes for different user roles.
  - Focus on key screens like login, dashboard, and document submission views.
- **Task: Gather Feedback and Iterate on Wireframes**

- ○ Present initial wireframes to Backend and Frontend teams.
- ○ Refine wireframes based on feedback.
- **Task: Begin High-Fidelity Mockups**
  - ○ Transition from wireframes to high-fidelity mockups in Figma.
  - ○ Focus on key screens and ensure visual consistency.

Week 2 (August 19 - August 23)

- **Task: Design Role-Based Dashboards**
  - ○ Finalize design of role-specific dashboards (Admin, Student, OPT Coordinator).
  - ○ Ensure a seamless user experience across roles.
- **Task: Gather Feedback on High-Fidelity Mockups**
  - ○ Present high-fidelity mockups to stakeholders and the development team.
  - ○ Collect feedback and make necessary adjustments.
- **Task: Iterate and Finalize Designs**
  - ○ Make adjustments based on feedback.
  - ○ Prepare designs for handoff to the frontend team for implementation.