Project Design Phase

Problem – Solution Fit Template

Date	
Team ID	**PNT2025TMID09625**
Project Name	**Online Complaint Registration And Management System**
Maximum Marks	**4 Marks**

Problem – Solution Fit Template

1. Discovery and Problem Analysis

- **Problem Statement:**
  People face difficulties when filing complaints due to complicated processes, no proper tracking system, slow responses, and poor communication between users and authorities.

- **User Research:**
  We gathered feedback from users and administrators through surveys and interviews. The findings showed that users want an easy way to file complaints, get regular updates, and communicate directly with the responsible department.

- **Requirements Gathering:**

  - **Functional:** User registration/login, complaint submission, status tracking, admin dashboard, notifications, search & filter.

  - **Non-Functional:** Secure data handling, fast performance, high availability.

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2. Solution Design and Planning

- **Solution Brainstorming:**
  Create a central online platform where users can submit complaints, track their status in real-time, and communicate with the handling authority.

- **Technical Architecture:**
  MERN Stack (MongoDB, Express.js, React.js, Node.js). The database stores complaints, user details, and status updates. Backend handles business logic and APIs. Frontend provides an easy interface for all users.

- **UX/UI Design:**
  Simple forms, clear complaint status display, and a clean admin dashboard to ensure smooth user experience.

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3. Development and Implementation

- **Agile Development:**
  The project is divided into small sprints, each focused on specific features.

- **Sprint Planning Example:**

  - Sprint 1: Registration & Login

  - Sprint 2: Complaint submission and tracking

  - Sprint 3: Admin dashboard & assignment feature

- **Coding & Testing:**
  Continuous testing during development to make sure all functions work correctly and securely.

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4. Deployment and Maintenance

- **Deployment:** Launch the application for users.

- **Monitoring:** Track performance, security, and uptime.

- **Feedback & Iteration:** Collect user feedback to add improvements and new features.