Project Design: Online Complaint Submission Platform

Date	26-06-2025
Team ID	LTVIP2025TMID53167
Project Name	Resolve Now: platform For online Complaints
Maximum Marks	4 Marks

Solution Architecture

The solution architecture of the Online Complaint Submission Platform is designed with scalability, reliability,and user experience in mind. It comprises multiple layers:

1.Presentation Layer (Frontend):

- Technologies: React (Web), Flutter (Mobile)

- Features: User interfaces for complaint submission, dashboards, and feedback

2. Application Layer (Backend):

- Technologies: Node.js / Django / Laravel

- Responsibilities: Business logic, complaint routing, user authentication, and data processing

3. Database Layer:

- Technologies: PostgreSQL / MongoDB

- Stores user data, complaint records, media references, and system logs

4. File Storage Service:

- Technologies: AWS S3 / Cloudinary

- Used for storing uploaded media (images, videos, documents)

5. Notification Service:

- Technologies: Firebase Cloud Messaging / Twilio

- Sends SMS, email, and in-app notifications about complaint status updates

6. Authentication and Authorization:

Technologies: JWT (JSON Web Tokens) / OAuth 2.0

- Manages secure access and roles for users and administrators

7. Admin Dashboard:

- Provides system administrators with analytics, reporting, and complaint management tools

8. API Layer:

- Exposes RESTful APIs to connect frontend with backend services and mobile apps

This modular architecture ensures that the system is maintainable, secure, and ready for future enhancements such as AI-based complaint categorization and chatbot integrations.