



Technology Stack



Date: 28 June 2025



Team ID: LTVIP2025TMID49956



Project Name: Resolve Now: Your Platform for Online Complaints



Maximum Marks: 4 Marks



1. Front-End (Client-Side)

Technology	Purpose
HTML5, CSS3	For creating the structure and styling of the user interface
JavaScript	To make the UI interactive and responsive
React.js or Vue.js	For building dynamic, component-based web interfaces
Bootstrap/Tailwind CSS	For responsive design and ready-to-use UI components



2. Back-End (Server-Side)

Technology	Purpose
Node.js with Express.js	Handles API requests, routing, and middleware logic
Python with Flask/Django (<i>optional alternative</i>)	Backend logic and processing if a Python stack is preferred



3. Database

Technology	Purpose
MongoDB	NoSQL database for storing complaints and user data
MySQL/PostgreSQL (<i>optional alternative</i>)	For structured relational data if preferred

4. Security & Authentication

Technology	Purpose
JWT (JSON Web Tokens)	For secure user authentication
bcrypt.js	For password hashing and user credential protection
SSL/TLS Encryption	For securing data transmission

5. Notifications

Technology	Purpose
Twilio / Firebase Cloud Messaging (FCM)	For sending SMS or push notifications to users
Nodemailer / SMTP	For sending email updates about complaints

6. Hosting & Deployment

Platform	Purpose
GitHub + Vercel / Netlify	For frontend deployment and version control
Render / Railway / Heroku	For backend API hosting
MongoDB Atlas / PlanetScale	For cloud database hosting

7. Tools & Utilities

Tool	Purpose
Postman	For testing API endpoints
Git & GitHub	Version control and collaboration
Figma / Adobe XD	For UI/UX design and prototyping
