Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	12-06-2025
Team ID	LTVIP2025TMID52018
Project Name	Resolvenow: your platform for online complaints
Maximum Marks	4 Marks

Technical Architecture:

The Resolve Now platform is designed with a scalable 3-tier architecture that includes the presentation layer (frontend), business logic (backend), and data storage layer. The solution ensures performance, security, and ease of integration with third-party APIs (e.g., Stripe for payments).

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web-based interface for clients and freelancers	HTML, CSS, JavaScript / React Js etc.
2.	Application Logic-1	Complaints posting	Node.js, Express.js
3.	Application Logic-2	Admin panel	React js, Node js
4.	Application Logic-3	Complaint messaging system	Express.js, Mongoose
5.	Database	Stores user data, jobs, applications, messages	MongoDB
6.	Cloud Database	Scalable DB (if deployed)	MongoDB Atlas (optional)
7.	Infrastructure	App runs on local development server	Node.js server on localhost

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Frontend frameworks	React.js, Node.js, BootStrap, Tailwind CSS
2.	Scalable Architecture	3-tier architecture with RESTful APIs	Microservices
3.	Security Implementations	Password hashing, role-based access, CORS handling	bcryptjs, JWT (future), CORS middleware
4.	Availability	Runs locally, can be deployed to cloud (e.g., Vercel + MongoDB Atlas)	Node server + cloud deployment (optional)

5.	Performance	Lightweight frontend, efficient REST APIs, can scale with load balancer	React for UI, Express for fast APIs

References:

https://c4model.com/

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d

https://aws.amazon.com/architecture/web-app/

https://mongoosejs.com/docs/guide.html

https://axios-http.com/docs/intro

https://www.mongodb.com/cloud/atlas