# Project Summary

ResolveNow: Online Complaint Registration and Management System

SmartInternz Short Term Virtual Internship

Category: Full Stack Development

Team Members:

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## Overview

The Online Complaint Registration and Management System is a comprehensive software solution designed to streamline the process of submitting, tracking, and resolving complaints. It serves as a centralized platform for individuals and organizations to lodge complaints, monitor their progress, and receive timely resolutions. The system optimizes complaint handling, improves customer satisfaction, and ensures compliance with industry standards and data protection regulations.

## Key Features

- User Registration & Login: Secure account creation and authentication for users.
- Complaint Submission: Easy form-based submission with options to attach documents/images.
- Tracking & Notifications: Real-time updates via dashboard, email, or SMS.
- Interaction with Agents: Built-in messaging between users and assigned agents.
- Complaint Routing: Intelligent assignment of complaints to relevant departments or agents.
- Security & Confidentiality: Authentication, encryption, and access controls for safe data handling.
- Admin Management: Monitoring and distribution of complaints, ensuring smooth operations.

## Scenario Example

A customer (John) purchases a defective product online and files a complaint:
1. Registers and Logs In to the system.
2. Submits Complaint with details, attachments, and contact information.

3. Tracks Status via dashboard and receives notifications on updates.
4. Communicates with Assigned Agent (Sarah) through the system's messaging feature.
5. Receives Resolution (refund/replacement) and provides feedback.
6. Admin Oversees Process and manages complaint distribution across agents.

# Technical Architecture

The project follows a client-server model:
- Frontend (Client): Developed using React.js, Bootstrap, and Material UI for an intuitive, responsive interface. Axios is used to connect with backend services via RESTful APIs.
- Backend (Server): Built with Node.js and Express.js to manage business logic, complaint workflows, and communication between components.
- Database: MongoDB for scalable and efficient storage of user profiles, complaints, and status updates.
- Additional Tools: Socket.io and WebRTC enable real-time communication and data exchange.

This architecture ensures reliability, scalability, and performance, supporting seamless complaint resolution for users, agents, and administrators.

# Conclusion

The Online Complaint Registration and Management System provides a modern, user-friendly, and secure platform for handling complaints effectively. By integrating real-time updates, intelligent routing, and strong security measures, it ensures faster resolutions, higher user satisfaction, and improved organizational efficiency.