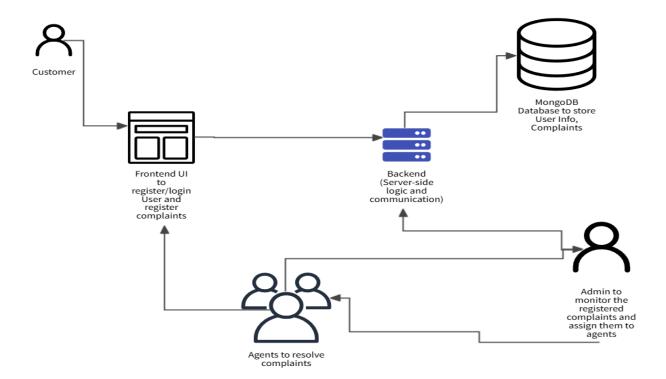
## Requirement Gathering and Analysis Phase Solution Architecture

Date	6 <sup>th</sup> July 2024
Team ID	SWTID1720103759
Project Name	Project – Online Complaint and Management
	System
Maximum Marks	

## The following main components of this system architecture include:

- **1. Front-end Web Interface:** A responsive, user-friendly web interface built using React.js and CSS framework Boot-Strap. This provides a friendly UI for customers to submit complaints and view their status (as well as a separate interface for administrators to manage the complaint workflow).
- **2. Back-end API:** Node.js server-side (Express.js) modular framework with RESTful APIs that handles the server-side logic, data management, and integration with other services.
- **3. Database:** A NoSQL cloud-based database MongoDB is used along with object-data modelling libraries such as Mongoose for easy handling and management of Data.
- **4. Authentication and Authorization:** Integration with a third-party authentication service (e.g., Auth0, Firebase Authentication) to handle secure user login, access control, and role-based permissions.



## Behavioural aspects of the complaint and management system:

- **1. Complaint Submission:** Customers can submit new complaints through an intuitive online form, providing details such as the nature of the complaint, contact information, and any supporting documents.
- **2. Complaint Tracking:** Customers can view the status of their submitted complaints, including any updates or actions taken by the support team, through the web interface.
- **3. Complaint Management:** Administrators can view all submitted complaints, assign them to relevant teams or individuals, add notes and updates, and mark complaints as resolved through the dedicated administrative interface.
- **4. Reporting and Analytics:** Administrators can generate reports on complaint trends, identify recurring issues, and track the performance of the complaint management process, (using the integrated reporting and analytics tools).
- **6. User and Access Management:** Administrators can manage user accounts, roles, and permissions to ensure appropriate access to the system's features and data.