Project Title: Citizen Complaints and Engagement System

Frontend: Angular.js Backend: NestJS Database: MySQL Document Version: 1.0 Date: May 17, 2025

1. © Executive Summary

The Citizen Complaints and Engagement System is designed as a centralized platform to streamline the way citizens submit complaints or feedback on public services and how government agencies respond to them. The aim is to improve transparency, response time, and citizen satisfaction by offering a single point of access, accountability, and two-way communication.

This MVP enables:

- Complaint/feedback submission and tracking by citizens.
- Categorization and routing of complaints to relevant agencies.
- Admin dashboard for public institutions to respond and manage submissions.
- Basic user management and secure authentication.

2. — User Requirement Specifications

2.1 Citizens (End Users)

Functional Requirements:

- ✓ Submit complaints/feedback
- View complaint history and status
- ✓ Reset password via email link

2.2 Agencies (Admin Users)

Functional Requirements:

- ✓ Login securely
- ✓ View submitted complaints routed to their agency
- \checkmark Filter complaints by status, category, or date
- ✓ Post official responses
- \checkmark View dashboard statistics (e.g., complaints by category, resolution rate)

3. W User Stories

& Citizen User Stories

Create Account

As a citizen,

I want to create a secure account with my name, email, and password **So that** I can track and manage my complaints.

∜ Login

As a citizen, I want to login using my credentials So that I can access my dashboard.

⊘ Logout

As a citizen,
I want to securely logout
So that no one else can access my data.

Forgot Password

As a citizen,

I want to receive a password reset link to my email **So that** I can regain access to my account.

∀ View Dashboard

As a citizen,

I want to see the list of all complaints I've submitted **So that** I can track the current status and any responses.

Citizen Dashboard Should Display:

- Complaint ID, title, category
- Date submitted
- Current status (e.g., Submitted, In Review, Resolved, Closed)
- Last updated
- Any agency responses

Admin (Agency) User Stories

✓ Login

As an admin,

I want to login to the dashboard

So that I can view and respond to citizen complaints.

⊘ Logout

As an admin,

I want to securely logout

So that no unauthorized access can occur.

Forgot Password

As an admin,
I want to reset my password via email link
So that I can regain access if I forget it.

∀ View Dashboard

As an admin,

I want to see complaints relevant to my agency

So that I can prioritize and manage responses effectively.

Admin Dashboard Should Display:

- List of complaints filtered by:
 - o Status (Submitted, In Review, Resolved)
 - Category

- o Date range
- Complaint details (citizen info optional)
- Ability to update status
- Post a response
- Summary stats:
 - Total complaints this month
 - Number resolved
 - Average resolution time
 - Top categories by frequency

4. ★□ Non-Functional Requirements

- **Security**: All user data must be stored securely (hashed passwords, JWT-based sessions).
- Usability: UI/UX must be accessible and intuitive for both citizens and admins.
- **Scalability**: System must be modular to allow additional features like analytics or AIrouting in future.
- **Performance**: Complaints should load within 2 seconds under standard load.
- Extensibility: Designed so that future additions (e.g., mobile app) require minimal backend changes.

5. User Roles & Access Control

Role Access Description

Citizen Can only view, submit, and track their own complaints

Admin Can view all complaints for their agency and post responses

Superadmin (Future) Can manage users and agencies across system