

Project Design Phase

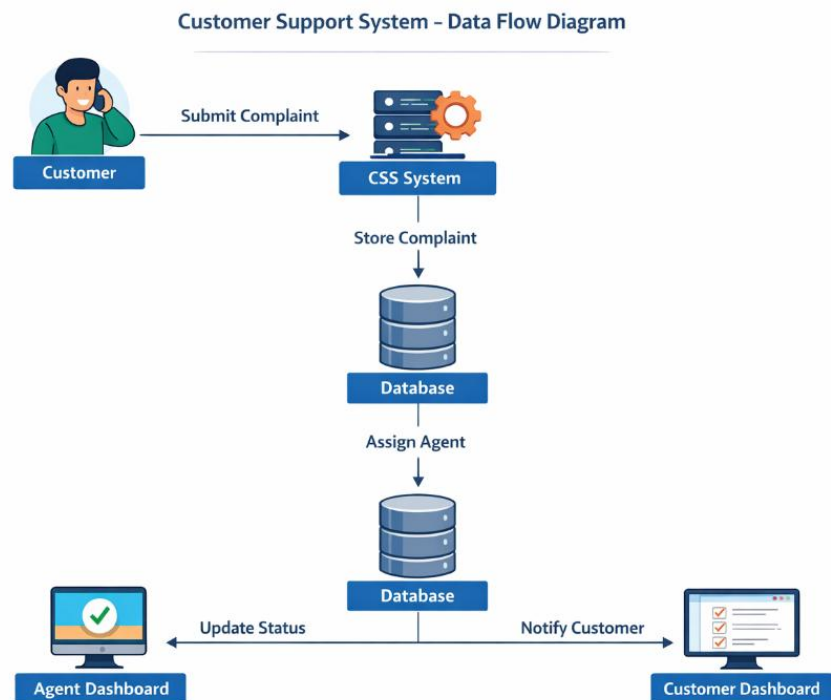
Solution Architecture

Date	18 February 2026
Team ID	LTVIP2026TMIDS24197
Project Name	Civil Engineering Insight Studio
Maximum Marks	4 Marks

Architecture Overview

The CSS system follows a **3-Tier Architecture**:

High-Level Solution Architecture Diagram



Detailed Component Architecture

1. Presentation Layer

- Login / Register Page
- Dashboard (Admin, Agent, User)
- Complaint Submission Form
- Status Tracking

2. Application Layer

- Authentication & Authorization
- Role Management (Admin, Agent, User)
- Complaint Assignment Logic
- Status Update Handling

- Email / OTP Confirmation

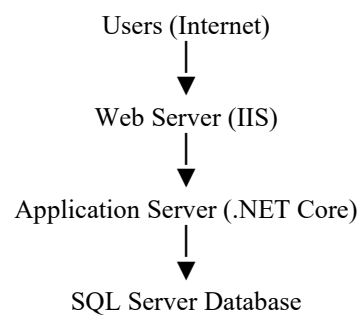
3. Data Layer

- User Table
- Agent Table
- Complaint Table
- Role Table
- Assignment Table

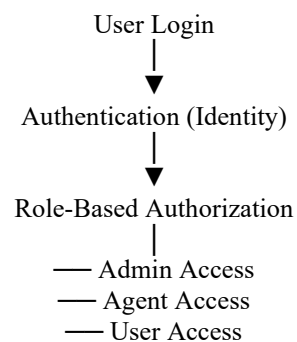
Technology Stack

Layer	Technology
Frontend	HTML, CSS, Bootstrap
Backend	ASP.NET Core MVC
Authentication	ASP.NET Identity
Database	SQL Server
Hosting	IIS / Cloud (Azure optional)

Deployment Architecture



Security Architecture



Security Features:

- Password Hashing
- Role-based access control
- Email confirmation
- Secure database access