Software Requirements Specification (SRS)
Enterprise Ticket / Issue Management System
One-Day Hackathon Version

1. Introduction

This document defines the minimum viable requirements for developing an Enterprise Ticket / Issue Management System within a one-day hackathon. Participants are expected to implement a working end-to-end solution focusing on core functionality and clean design.

1.1 Purpose

The purpose of this SRS is to provide clear and limited requirements suitable for completion within a single-day hackathon.

1.2 Scope

The scope is limited to basic ticket lifecycle management with authentication. Advanced features such as microservices, CI/CD, and container orchestration are out of scope.

1.3 Definitions and Acronyms

ETIMS – Enterprise Ticket / Issue Management System
API – Application Programming Interface
JWT – JSON Web Token

2. Overall Description

2.1 User Roles

• Admin: Can view all tickets and manage ticket status.
• User: Can create and view own tickets.

2.2 Operating Environment

Frontend: Angular (Web Browser)
Backend: ASP.NET Core Web API
Database: SQL Server or SQLite

3. Functional Requirements

3.1 Authentication

FR-1: Users shall be able to log in using email and password.
FR-2: The system shall use JWT for securing APIs.

3.2 Ticket Management

FR-3: Users shall be able to create a ticket with title, description, and priority.
FR-4: Users shall be able to view their tickets.
FR-5: Admin shall be able to update ticket status (Open, In Progress, Closed).

3.3 Search

FR-6: Users shall be able to search tickets by status or priority.

4. Non-Functional Requirements

• Performance: System shall support minimum 50 concurrent users.
• Security: Passwords shall not be stored in plain text.
• Usability: UI shall be simple and easy to use.
• Maintainability: Code should follow basic layering.

5. Constraints

• Development time limited to one day.
• Only core features will be evaluated.
• Open-source libraries may be used.

6. Expected Deliverables

• Working Angular frontend
• ASP.NET Core Web API
• Database schema
• README file explaining setup