Software Requirements Specification (SRS)

1. Introduction

The Employee Resource Management System (ERMS) is a web-based enterprise application designed to manage employees, projects, and their allocations efficiently within an organization. This system is intended for use in a one-day hackathon environment and focuses on clean architecture and scalable design.

2. Objectives

- Manage employee records
- Assign employees to projects
- Provide role-based dashboards
- Ensure clean API and layered architecture

3. Scope

The system will allow administrators to manage employees and projects, managers to assign resources, and employees to view their allocations.

4. User Roles

Admin: Manage employees and projects
Manager: Assign employees to projects
Employee: View assigned projects

5. Functional Requirements

Employee Management: Create, read, update, delete employees.
Project Management: Create and manage projects.
Allocation: Assign employees to projects.
Dashboards: Role-based views.

6. Non-Functional Requirements

Performance: APIs should respond within 2 seconds.
Security: Role-based access.
Scalability: Layered architecture.
Usability: Simple UI using Angular.

7. System Architecture

Frontend: Angular SPA
Backend: ASP.NET Core Web API
Database: SQL Server / SQLite using EF Core

8. Design Constraints

One-day development timeline.
Limited scope for authentication.

9. Assumptions

Single organization usage.
Basic authentication or mock roles.

10. Evaluation Criteria

Clean API design
Proper layering
SOLID principles
Working CRUD operations