Team Introduction:

Our team name is DEV_4545. Nazmus Sakib, Mubasshir Naib and Saikat Hossain Shohag are the team members. We are 4th year students of CUET. We have problem solving skills and also we have some development skills. We expect to gain valuable outcomes from the program Learathon 3.0 by Geeky Solutions. We wish for the success of Learnathon 3.0.

Tentative Project Idea: Employee Management System

Introduction

This document outlines the basic features and technologies required to implement the Employee Management System using .NET. The system will manage employee profiles, tasks, attendance, payroll, and performance, ensuring streamlined operations.

🚀 Key Features

🔐 User Authentication

• Login & Registration: Secure user authentication system using ASP.NET Identity.

• Role-based Access: Define roles like Admin, Manager, and Employee, with appropriate permissions for each role.

👨‍💼 Employee Management

• Employee Profile: Create, update, and delete employee records (e.g., name, department, designation, contact info, joining date).

• Employee Hierarchy: Visualize reporting structures (e.g., managers and subordinates).

• Attendance Tracking: Record and manage daily attendance.

🕐 Leave & Payroll Management

• Leave Requests: Allow employees to apply for leave and managers to approve/reject them.

• Leave Balance: Display leave balances for each employee.

• Payroll Management: Generate salary slips based on attendance, leave deductions, and bonuses.

📊 Performance Management

• Performance Reviews: Track and store employee evaluations and feedback.

• Goal Tracking: Allow employees to set and update personal or team goals.

📝 Task Management

• Task Assignment: Assign tasks to employees with deadlines, priorities, and descriptions.

• Task Progress: Track the progress of tasks (e.g., Pending, In Progress, Completed).

📂 Document Management

• File Uploads: Store important documents (e.g., offer letters, contracts, ID proofs).

• Policy Documents: Share company policies and guidelines with employees.

📅 Calendar & Notifications

• Employee Calendar: Display schedules, tasks, holidays, and events.

• Notifications: Send reminders or updates for tasks, meetings, or approvals.

🛠️ Technologies & Tools

Technology	Purpose	Link
NET Core	Framework for web app development	https://dotnet.microsoft.com/apps/aspnet
Entity Framework Core	ORM for database interaction	https://learn.microsoft.com/en-us/ef/core/
SQL Server	Relational database for storing data	https://www.microsoft.com/en-us/sql-server

ASP.NET Identity	Authentication and authorization	https://learn.microsoft.com/en-us/aspnet/core/security/authentication/identity
GitHub	Version control and team collaboration	https://github.com/