**Late Work Penalties Database – Project Plan**

**Project Kick-off Meeting:**

* Gather project team members and stakeholders.
* Introduce project objectives, scope, and requirements.
* Discuss roles and responsibilities.
* Set project milestones and timeline.

**Requirement Gathering and Analysis:**

* Conduct interviews and workshops with key stakeholders to gather requirements.
* Document functional and non-functional requirements.
* Analyse requirements to identify system features and functionalities.

**Database Design:**

* Design the database schema using SQL.
* Define tables, relationships, constraints, and indexes.
* Document the database design.

**UI/UX Design:**

* Design user interfaces for the front end using wireframes or mock-ups.
* Incorporate user feedback and iterate on designs.
* Finalize UI design elements such as layout, navigation, and visual style.

**Environment Setup:**

* Set up development environments for SQL Server, ASP.NET framework, and C#.
* Install necessary development tools such as Visual Studio.
* Configure version control systems for code management (e.g., Git).

**Backend Development:**

* Develop database tables and relationships based on the design.
* Write SQL queries, stored procedures, and functions for data manipulation and retrieval.
* Implement data validation and integrity constraints.

**Frontend Development:**

* Set up ASP.NET framework for web development.
* Create ASP.NET web pages or MVC views for user interfaces.
* Implement client-side functionality using HTML, CSS, JavaScript, and C#.

**Integration and Testing:**

* Integrate frontend and backend components.
* Conduct unit testing to ensure individual components function correctly.
* Perform integration testing to validate end-to-end functionality.
* Debug and fix any issues identified during testing.

**Documentation:**

* Create technical documentation for the database schema, codebase, and system architecture.
* Generate user manuals and guides for end-users.
* Document deployment procedures and configuration settings.

**User Acceptance Testing (UAT):**

* Invite end-users to participate in UAT sessions.
* Provide test scenarios and data for users to validate system functionality.
* Collect feedback and address any issues raised during UAT.

**Deployment:**

* Prepare for deployment to production environment.
* Perform final testing and validation in the production environment.
* Deploy the database system to production servers.
* Monitor system performance and stability post-deployment.

**Post-Deployment Support:**

* Provide ongoing support and maintenance for the deployed system.
* Address any issues or bugs reported by users.
* Monitor system usage and performance metrics.