

Project Proposal: Employee Management System with ASP.NET Core 5 + ReactJS

Introduction:

Our project aims to build an Employee Management System that allows companies to manage employee data, including personal information, performance metrics, and leave schedules. The project will be implemented using ASP.NET Core 5 for the backend and ReactJS for the frontend. The system will allow CRUD (Create, Read, Update, Delete) operations, code/component re-use, validation (server-side/client-side), and React routing.

Objectives:

The objectives of the Employee Management System are to:

1. Create a web application that allows companies to manage employee data.
2. Use ASP.NET Core 5 for the backend and ReactJS for the frontend.
3. Implement CRUD operations in the system.
4. Allow code and component re-use for efficient development.
5. Implement server-side and client-side validation to ensure data accuracy.
6. Implement React routing for efficient navigation within the application.

Scope:

The Employee Management System will allow companies to manage employee data, including personal information, performance metrics, and leave schedules. The system will have a user-friendly interface that will allow users to add, edit, and delete employee records. The system will also allow users to manage leave schedules, approve or reject leave applications, and track the number of leave days due and taken. The system will generate reports based on employee performance, number of hours worked, and what the employee worked on.

Methodology:

The Employee Management System will be built using ASP.NET Core 5 for the backend and ReactJS for the frontend. Docker container of official MS SQL Server 2019 will be used for the unavailability of the product on MacOS platform. The system will be designed to be scalable, secure, and easy to maintain. We will use an

Agile development methodology, which will involve regular meetings with the client to ensure that the project is on track.

Deliverables:

The following deliverables will be provided to the client:

1. A fully functional Employee Management System web application.
2. Documentation on the system's architecture, design, and functionality.
3. User manuals for the system.
4. Training sessions for users and administrators.
5. Support and maintenance for the system.

Timeline:

The development of the Employee Management System will take approximately 6 days. The timeline for the project is as follows:

1. Requirements gathering and analysis – 1 day
2. System design – half a day
3. Backend development – 1 day
4. Frontend development – 1 day
5. Testing and bug fixing – half a day
6. Deployment and user acceptance testing – 1 day
7. Documentation and training – 1 day

Cost:

The cost of the Employee Management System project will depend on the client's specific requirements. The final cost will be determined after the requirements gathering and analysis phase. However, the cost will include the following:

- 1) Development cost
- 2) Database cost
- 3) Infrastructure cost (e.g., hosting, domain name registration)
- 4) Documentation and training cost
- 5) Support and maintenance cost

Conclusion:

The Employee Management System will be a valuable tool for companies to manage

employee data, including personal information, performance metrics, and leave schedules. The system will be designed to be scalable, secure, and easy to maintain. Our team will use ASP.NET Core 5 for the backend and ReactJS for the frontend, along with an Agile development methodology, to ensure that the project is delivered on time and within budget. We are confident that the system will meet the client's requirements and provide a significant return on investment.