Employee Management

Contents

1.0. Project Summary

This project is a simple application to manage employee details internally. It should allow for adding, viewing/updating and deactivating records.

When possible, deletion should not be possible for users, therefore a user would update a records active status to disable records where relevant. This is because in real life usage we would normally not want to actually delete records as they are unretrievable if any issues arise with a certain employee for example. So, within the code we should look to check the active status of records for functionalities.

2.0. User Interface

2.1. User Interface of Application

2.1.1. Home Page

This page is where the application first loads and should contain a navigation to the Employee and Job pages. This should be where future features would be added.

2.1.2. Employee Page

This page should contain a list of existing employees from the database. Each record should be selectable to view and edit an employee record. On this screen, there should be a option to add new employee records to the database.

2.1.2.1. Employee Add

This should be a new screen where the users can input relevant employee information, then later save it to the database.

2.1.2.2. Employee Edit

Clicking on an employee record should take the user to a page where all the relevant fields are populated with the employee data. Here the employee could update or deactivate a single record by saving.

2.1.3. Job Page

This page should contain list of existing jobs from the database. Each record should be selectable to view and edit a job record.

2.1.3.1. Job Add

This should be a new screen where the users can input relevant job information, then later save it o the database.

2.1.3.2. Job Edit

Clicking on an job record should take the user to a page where all the relevant fields are populated with the job data. Here the job could update or deactivate a single record by saving.

3.0. Database

3.1. Table structure

3.1.1. Employee

Column Name	Data Type	Description
ID	Small int, not null	(PK) unique identifier of table
EmployeeNo	Nvarchar(50), not null	Employee number field relevant to users
Name	Nvarchar(50), not null	Name of record
PhoneNo	Nvarchar(50), null	Phone number of record
Email	Navarchar(50), null	Email of record
JobID	Small int, not null	(FK to Job) Job reference of record
EmployeeDetailID	Small int, not null	Salary amount of record
IsActive	Bool, not null	Active status of record

DateCreated	DateTime, not null	Date created of record

3.1.2. EmployeeDetail

Column Name	Data Type	Description
ID	Small int, not null	(PK) unique identifier of table
EmployeeID	Small int, not null	(FK to Employee) Employee reference if record
SalaryAmount	Nvarchar(50), not null	Salary amount of record
StartDate	Datetime, not null	Start date of employee record

3.1.3. Job

Column Name	Data Type	Description
ID	Small int, not null	(PK) unique identifier of table
Title	Nvarchar(50), not null	Title field of record
IsActive	Bool, not null	Active status of record

4.0. Technologies

For development, this application will be created using the Visual Studio IDE, programmed in C# .NET Blazor WebAssembly (client-side web app) and TSQL for the database creation/management.

5.0. Tasks

5.1. Task Breakdown

Task	Description	Estimate
Create database & table	Write script that creates the database and tables with some sample data for consistency during development	1 hrs
Empty project and upload to version control	Select and create template project then upload to version control for consistency	1 hrs
UI pages	Make blank pages mentioned in the User Interface section	3 hrs
Save functionality	Create generic save functionality	2 hrs
Add functionality	Create generic add functionality	1 hrs
Edit functionality	Create generic edit functionality	1 hrs
Delete functionality	Create generic delete functionality	1 hrs
Connect backend to project	Connect backend to project	1 hrs
Connect UI to backend	Connect front and backend, making sure that actions save as intended	10 hrs
Testing project as whole	Test project as a whole – note fix any bugs discovered	5 hrs