# Project Documentation

## Overview

This project is built using ASP.NET Core version 3 and follows a multi-layer architecture. It includes ASP.NET Web API for handling HTTP requests. Before running the project, please follow the instructions below to set up the necessary databases and understand how to use the API for user registration.

## Prerequisites

- .NET Core 3.1 SDK

- SQL Server

- Postman (for testing the API)

## Instructions

### 1. Database Setup

1.1 First, run all the queries found in the `InstructionAndDB` folder. This folder contains two subfolders:

- \*\*UserDB\*\*: Contains queries related to the user database.

- \*\*EmployeeDB\*\*: Contains queries related to the employee database.

1.2 Execute the SQL scripts to create the databases and tables:

#### `dbUsers` Database

- \*\*Tables:\*\*

- `tblUsers`

- `tblUsersRoles`

#### `dbEmployees` Database

- \*\*Tables:\*\*

- `tblEmployees`

### 2. User Registration

For registration, the project uses a Web API. You can save a record in the `tblUsers` table via Postman.

#### API Endpoint

`http://localhost:44350/api/UserRegistration`

#### Request Body

```json

{

"FirstName": "Anup",

"LastName": "Bhaumik",

"UserName": "admin",

"Password": "admin",

"Role": 1

}

```

### 3. Login

After creating the first user, you can log in with the `UserName` and `Password` used during registration.

## Packages Used

### Web Layer

- `Microsoft.AspNetCore.Authentication` (Version 2.2.0)

- `Microsoft.AspNetCore.Authentication.Cookies` (Version 2.2.0)

- `Microsoft.AspNetCore.Mvc.NewtonsoftJson` (Version 3.0.0)

### Entities Layer

- `Microsoft.EntityFrameworkCore` (Version 5.0.0)

- `Microsoft.EntityFrameworkCore.SqlServer` (Version 5.0.0)

### Business Layer

- `Microsoft.Extensions.Configuration` (Version 6.0.0)

- `Microsoft.Extensions.Configuration.Json` (Version 6.0.0)

- `Microsoft.Extensions.Http` (Version 6.0.0)

### API Layer

- `Microsoft.Extensions.Configuration` (Version 6.0.0)

- `Microsoft.Extensions.Configuration.Json` (Version 6.0.0)

These packages are specified in the project's `csproj` files and will be restored when you build the project.

## How to Run the Project

1. Clone the repository from GitHub.

2. Navigate to the project directory and open it in your preferred IDE (e.g., Visual Studio).

3. Restore the NuGet packages by building the project.

4. Ensure SQL Server is running and the necessary databases are created.

5. Update the connection strings in `appsettings.json` to match your SQL Server configuration.

6. Run the project.

## Additional Notes

- Ensure that your SQL Server is configured to allow external connections if running the project on a different machine.

- Use Postman or a similar tool to test the API endpoints during development.