Practice Project 3

**Create an ASP.NET WEB API Application to Add Subject Marks to Students and View Their Marks**

**WriteUp:**

**GitHub Link:** [**https://github.com/saraswathy15/Phase3PracPro3**](https://github.com/saraswathy15/Phase3PracPro3)

1. Initially created a project using ASP.net Core Web API

API will serve as the backend for the mobile app, allowing teachers to interact with student data.

2. Database Configuration

To manage student data, Entity Framework Core is used to connect to a SQL Server database.

3. Creating API Endpoints

A controller named SubjectsController is created to define API endpoints.

These endpoints correspond to actions that teachers can perform on student subject marks.

Key CRUD (Create, Read, Update, Delete) operations are implemented for subject marks within this controller.

For example, there's an AddSubjectMark endpoint that allows teachers to add a new subject mark for a student.

This is done through an HTTP POST request that sends subject mark data to the API.

4. Entity Framework Migrations are used to manage the database schema.

Migrations help in creating and updating the database based on the defined models and their relationships.

5. Testing

To ensure the API's functionality, testing is performed using Swagger tool.

Teachers can simulate the process of adding, updating, deleting, and retrieving subject marks to verify that the API behaves as expected.

6. The API will enable teachers to add, update, and delete subject marks for existing students.

7. Finally committed my project and pushed in github.