Introduction

Rainbow School aims to facilitate the process of updating and viewing student marks through a mobile application. To achieve this, we will create an ASP.NET WEB API application that allows teachers to add, update, delete subject marks for existing students, and view their marks. This guide outlines the step-by-step process for creating this application.

Create an ASP.NET WEB (Model View Controller)

Project Launch Visual Studio Community Edition. Go to "File" > "New" > "Project...". Select "ASP.NET Web Application (.NET Framework)" under "Visual C#" and choose an appropriate project name. Click "OK" generate project.

Design the Schema(Under Model Class)

Review the schema designed for the school database in the Model Class. Ensure that the necessary Classes are defined in the Models Folder, such as "Students" and "Subjects."

Ensure Data Connectivity

First go to Web.config file add Connection string line under the configuration Properties .
Creste a DBContext class under the Data folder and import important in built class library to perform database operations.

Create Controllers

Right-click on the "Controllers" folder in your project. Select "Add" > "Controller...". Choose "API Controller with actions, using Entity Framework" and click "Add." Select a model class (e.g., "Student") and configure the controller actions for CRUD (Create, Read, Update, Delete) operations. Follow the same procedure to create controllers for other models (e.g., "Subject Marks").

Implement CRUD Operations

In the controller actions (e.g., Create, Edit, Delete), write code to interact with the database using Entity Framework. Implement the logic for adding, updating, and deleting subject marks for students. Implement any necessary LINQ queries to fetch and view the subject marks for Subjects With subjects details .

Install Necessary Packages to perform Swagger testing and Database Operations .
Swashbuckler
Microsoft.EntityFrameworkCore.tools
Microsoft.EntityFrameworkCore.design
Microsoft.EntityFrameworkCore.sql
EntityFramework

Conclusion
You have successfully created an ASP.NET WEB API application that allows teachers to manage and view student marks. This application will enable Rainbow School to update student marks efficiently through a mobile app while maintaining data integrity and security