

Building a .NET Core Web API for the Todo List

Your task is to build a RESTful API using .NET Core that will serve as the backend for the Todo list application you previously created in React. This API will allow you to manage todos through HTTP requests, enabling the full functionality of creating, reading, updating, and deleting (CRUD) todos.

Task Overview

1. Create .NET Core Web API Project

Create a new .NET Core Web API project in Visual Studio

2. Design and Implement the Todo Model

Create a Todo Model Class:

- Properties: Id, Title, IsCompleted, Timestamp, Author.
- Use proper data types and annotations (e.g., [Required])

3. Create the Todo Controller (and context)

Use new Scaffolded Item, API controller with actions using EntityFramework

CRUD out of the box 😊

Suggest you try to write the code yourself!!

4. Create Database

Open package manager console (Tools => Nuget package manager)

Add-Migration "Migration Name" (Generates script)

Update-DataBase (Runs script)

Go to SQL object explorer and look at the created DB

5. Connect the API to Your React App

Replace the mock data in your React application with actual data from the API.

Use `fetch` to make HTTP requests to the API.

Ensure that all features from the React app are working with the backend API.

6. Implement Additional Features (Extra)

Add search functionality for finding Todos

Be able to get Todos sorted from the API based on Timestamp or author

Sort Todos according to prioritize level from the API