

Capstone Project

Recreating the Simple Bookstore Backend in C# / ASP.NET Web API

Capstone Overview

In this capstone, you will create a C# / ASP.NET Web API / SQL Server version of the Simple Bookstore backend you created in Node.js. Details of the steps you must take are in the next section.

To demonstrate your work, you have two choices:

- you can demonstrate that the API endpoints work by using a tool such as Postman
 - <https://learning.postman.com/docs/getting-started/basics/postman-basics/>
 - https://www.tutorialspoint.com/postman/postman_introduction.htm
- you can clone your React front end from the previous capstone and update the endpoints that you are calling to connect to the API

We have no preference over which one you choose. Do not “rush” through the backend skipping steps to try to save time to demonstrate in React.

Database Requirements

In this capstone, you will connect to a SQL Server database. You will need to create the same database, same tables, and same seed data in your SQL server.

The interface for SQL Server is called SQL Server Management Studio (SSMS). Its purpose is similar to MySQL Workbench.

You can watch a Pluralsight video to learn how to use SSMS or read about it here (<https://learn.microsoft.com/en-us/sql/ssms/quickstarts/ssms-connect-query-sql-server?view=sql-server-ver16>)

You can export your MySQL database schema and use it (with possible tweaks) to recreate the database.

REST API Requirements

Create your new API server using C# and APS.NET Web API. Check back with the Node.js version of the Simple Boostors API server to make sure you implement the same endpoints.

If you implemented additional endpoints, or changed any of the above, make sure

BONUS: Use Swagger to document the endpoints. If you are running short of time, try to document just a few of the endpoints.

Back-end Repository Requirements

- Provide a Git repository in either GitHub or GitLab
- Include in your repo's README file instructions on how to set up and run your project, including:
 - how to create the database and inserting sample data
 - how to run the server
 - list of endpoints
- Your repo should also include:
 - SQL scripts for creating the database and inserting sample data
 - source code for the REST API

Demonstrating Your API

It is our understanding that you will demonstrate your capstone to your hiring managers. As mentioned earlier, to demonstrate your work you can choose to:

- demonstrate that the API endpoints work by using a tool such as Postman
- clone your React front end from the previous capstone and update the endpoints that you are calling to connect to the API

We have no preference over which one you choose.

Also be prepared to share and discuss a snippet of code that you found interesting or challenging.

Good luck!