Demo: Creating a .NET 8 Minimal API with GitHub Copilot

Welcome to this guided lab for creating a .NET 8 Minimal API using GitHub Copilot. This lab will walk you through each step, from initializing your project to creating CRUD operations and writing unit tests.

Prerequisites

- .NET 8 SDK installed
- Git installed and configured
- Visual Studio Code with GitHub Copilot extension

Step 1: Create a New .NET 8 Minimal API Project

Use GitHub Copilot's @workspace /new command to scaffold a new minimal API application.

Prompt:

```
@workspace /new Create a .net 8 minimal API project with name BooksAPI. Do not add
controller classes. Generate Book model class, DbContext and appsettings.json
files
```

This will generate the boilerplate code for a new minimal API project.

Step 2: Initialize Git for the Project

Open a terminal in your project directory and run:

```
cd BooksAPI
git init
```

This will initialize a new Git repository.

Step 3: Add Entity Framework Core with SQLite

Install the required NuGet packages for Entity Framework Core and SQLite:

```
dotnet add BooksAPI package Microsoft.EntityFrameworkCore.Sqlite --version
<Specify version>
dotnet add BooksAPI package Microsoft.EntityFrameworkCore.Tools --version <Specify
version>
```

Step 4: Update Program.cs to configure DbContext Service with Sqlite

Open the `Copilot edits` and use the below prompt to update the service registration.

```
Update the Program.cs to use the Sqlite provider for database
```