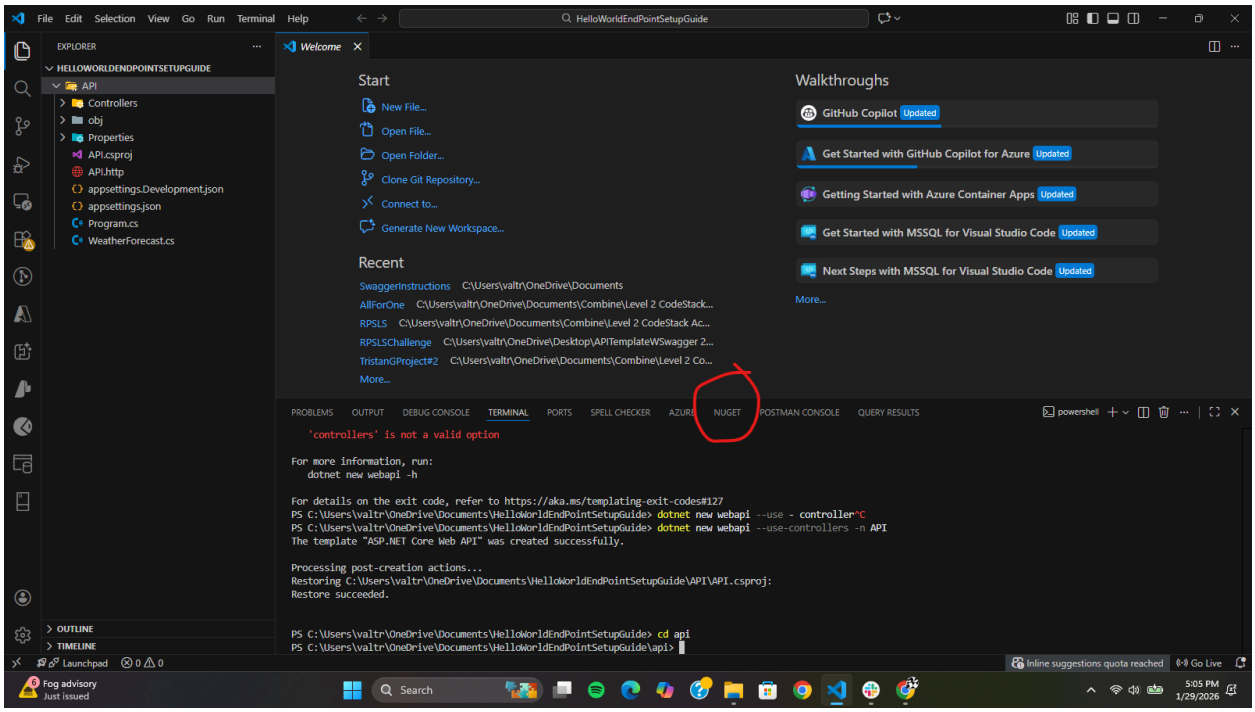
1. Project Initialization

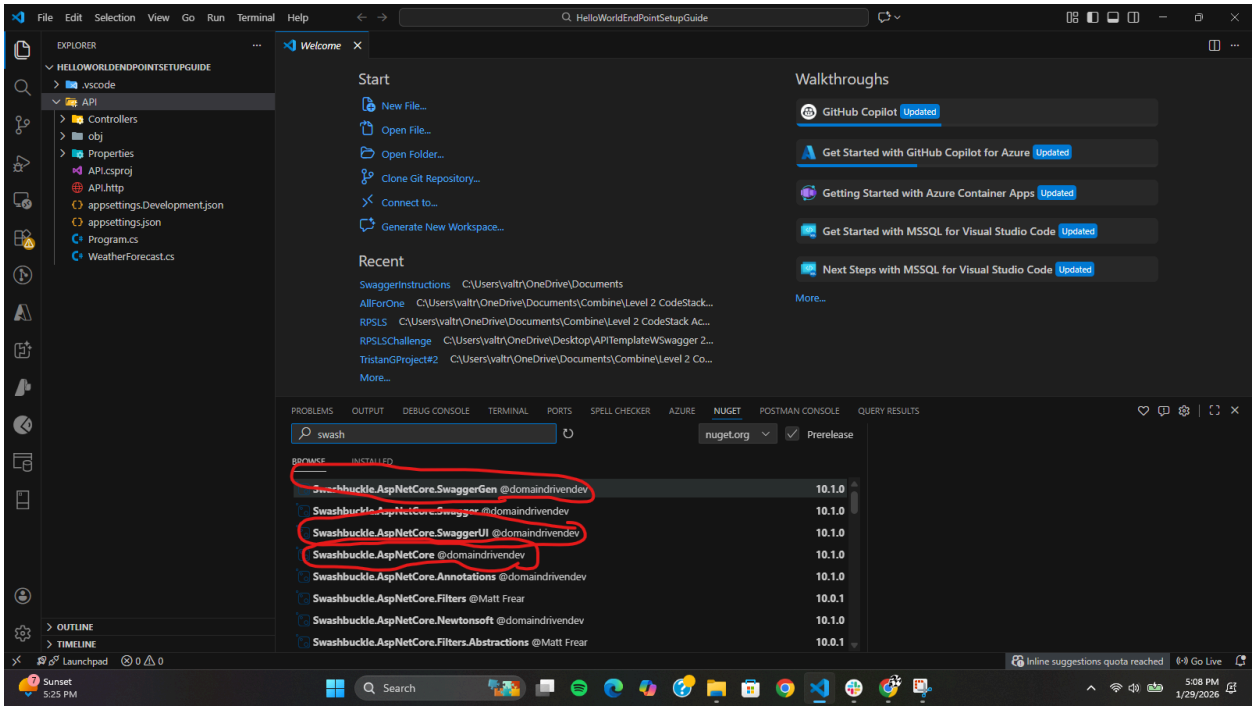
- Open the VS Code terminal (`Ctrl` + `` ` ``).
- Create the project with the necessary structure:
    - **Command:** `dotnet new webapi --use-controllers -n API`
    - **Note:** The `-n API` creates a specific folder “API” being the name of the folder, and `--use-controllers` sets up the controller folder automatically and links it to the program.cs
- Navigate into the new folder: `cd API`

2. Install Dependencies (NuGet)

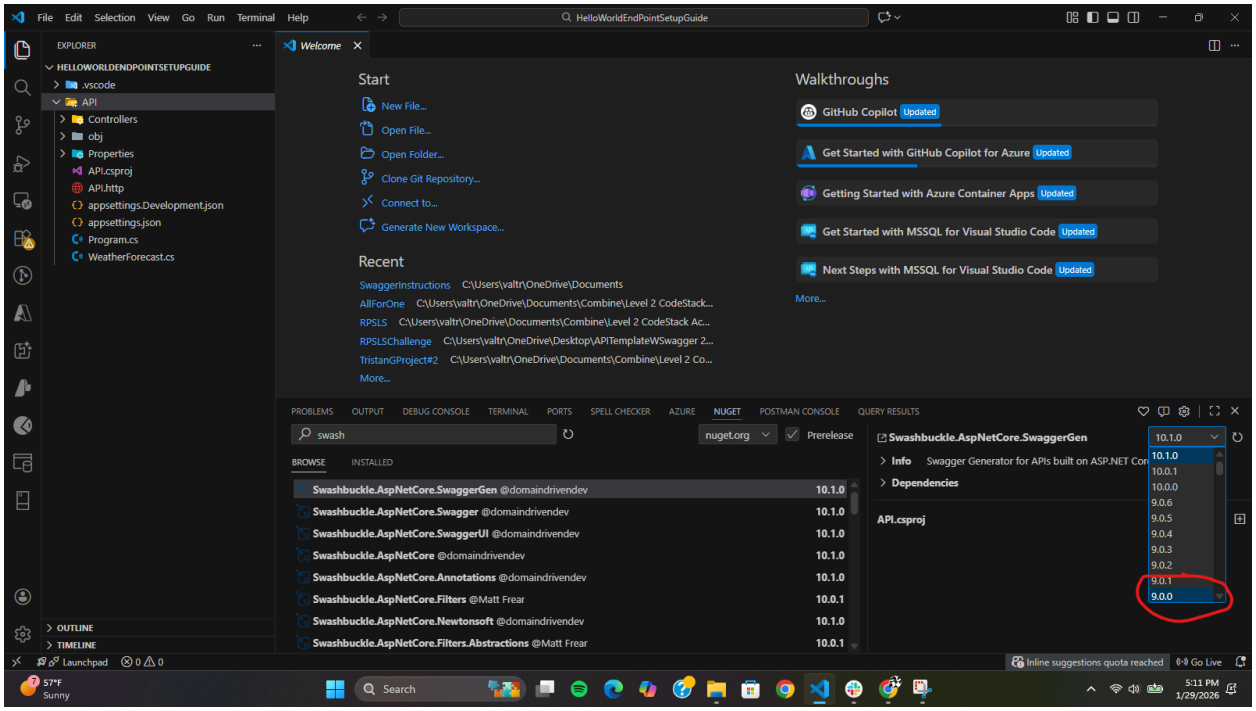
- Open the **NuGet** tab in VS Code.



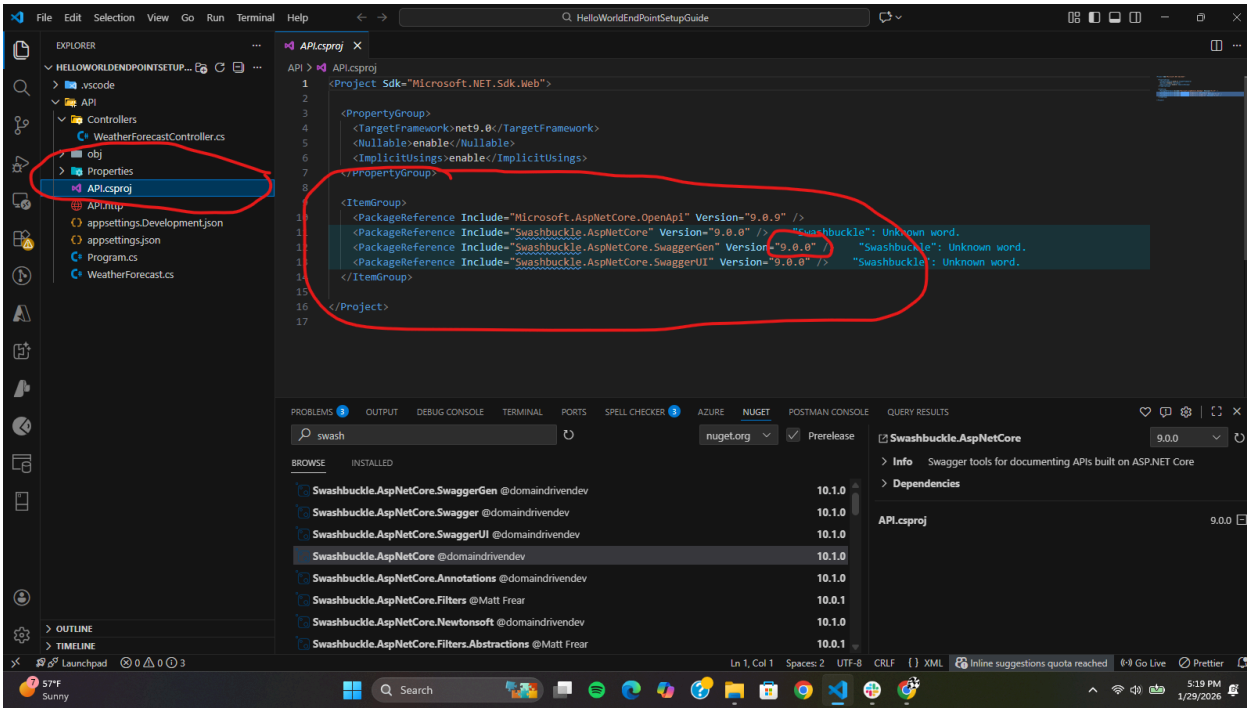
- Search for **"swash"**.
- Download the **Swashbuckle** packages, SwaggerGen, Swagger, SwaggerUI



- **Crucial:** Ensure you select **Version 9.0.0**.

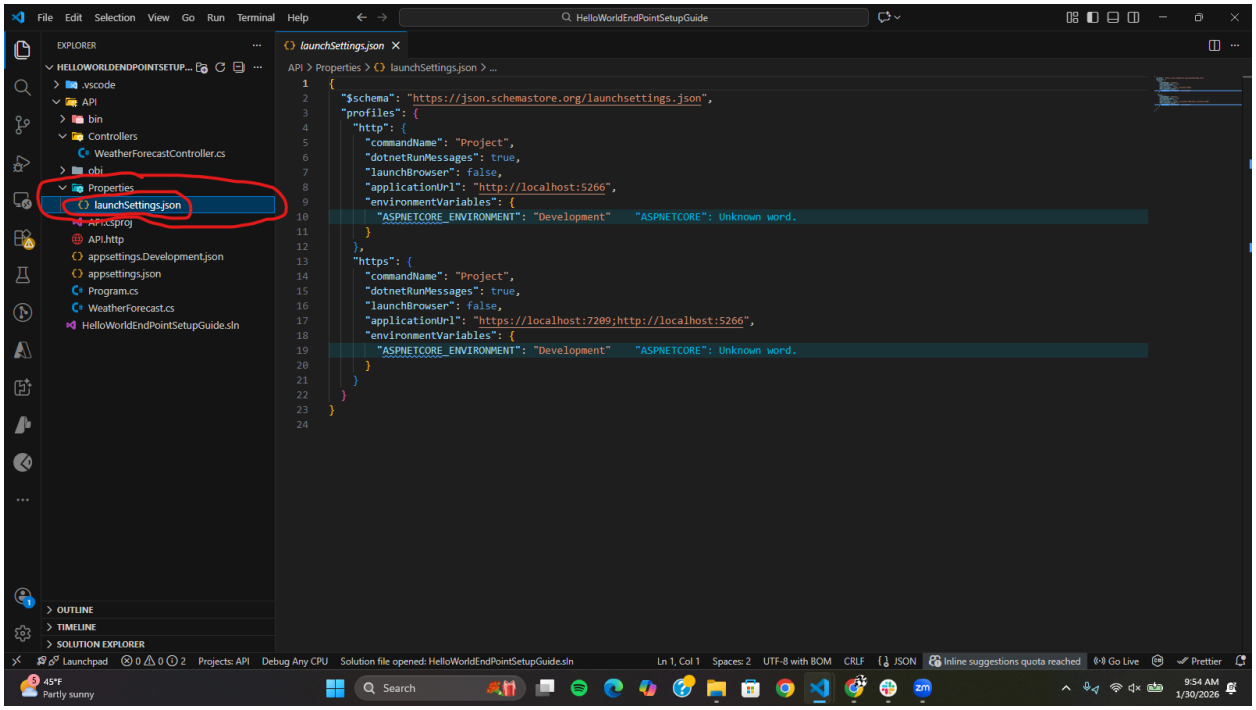


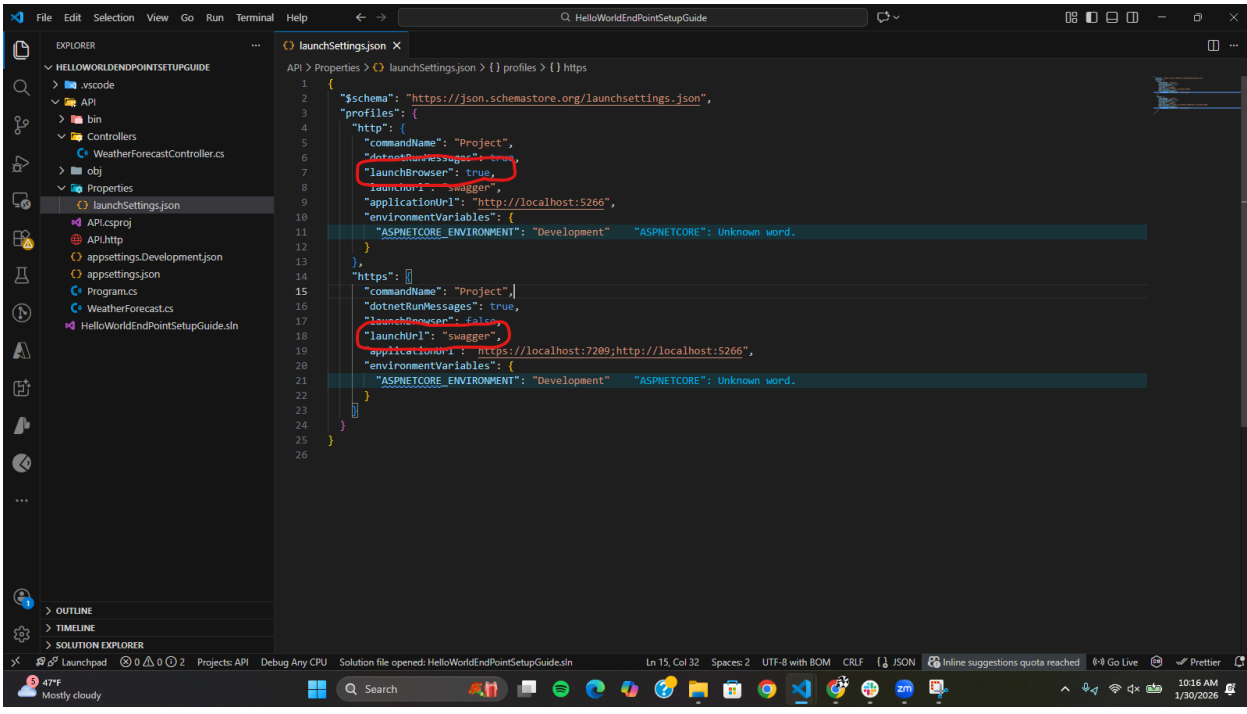
- SVerify installation by checking your `.csproj` file.

- 

3. Configure Launch Settings

- Open `Properties` > `launchSettings.json`.



- Modify the profiles (both sections) to ensure the browser opens Swagger automatically:
  - Change `"launchBrowser": false` to **`true`**.
  - Add/Update `"launchUrl": "swagger"`.
  - 

4. Configure Program.cs

You need to register Swagger services and middleware. So go to your program.cs file

Add to Builder Services:

C#

builder.Services.AddEndpointsApiExplorer();

builder.Services.AddSwaggerGen();

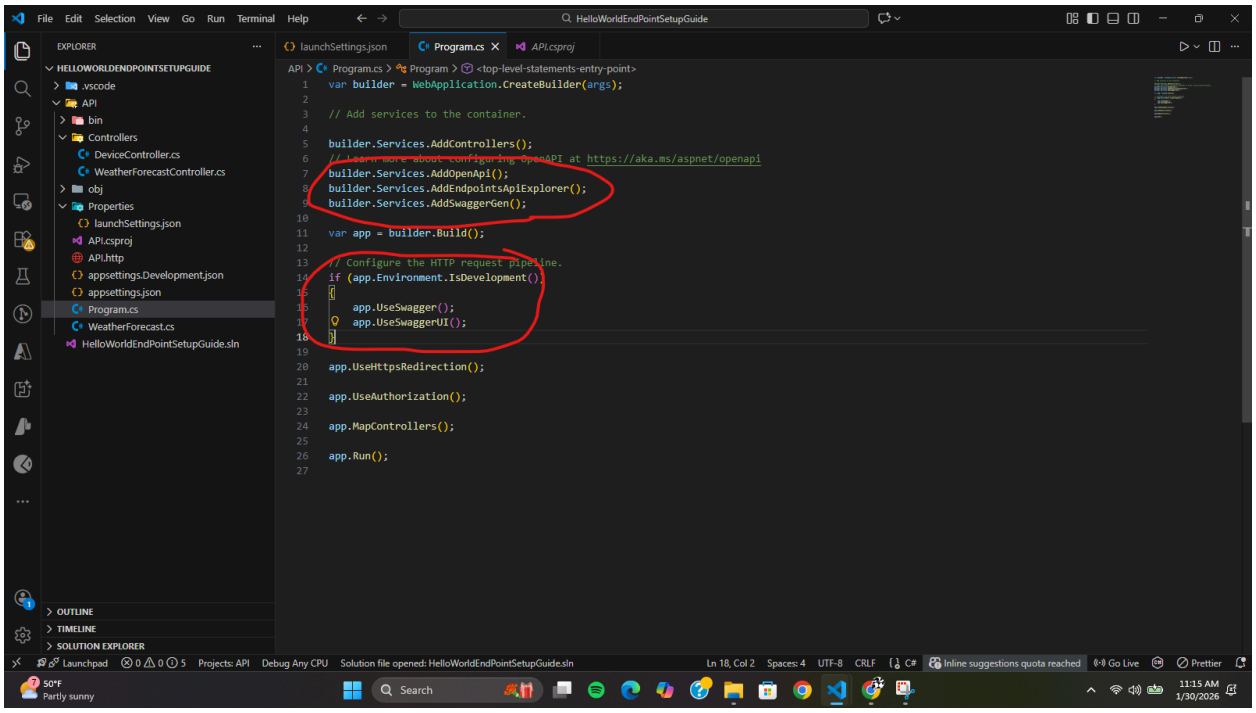
-

Update the App Environment: Replace `app.MapOpenApi();` with:

C#

app.UseSwagger();

app.UseSwaggerUI();



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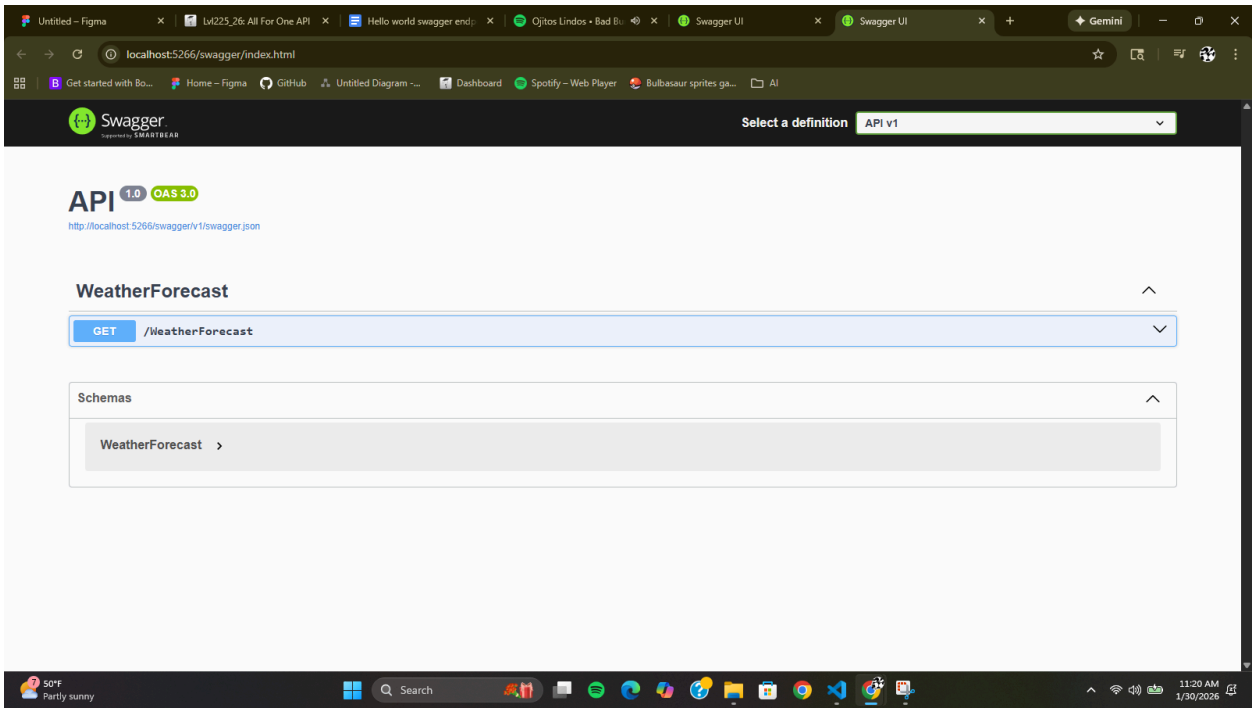
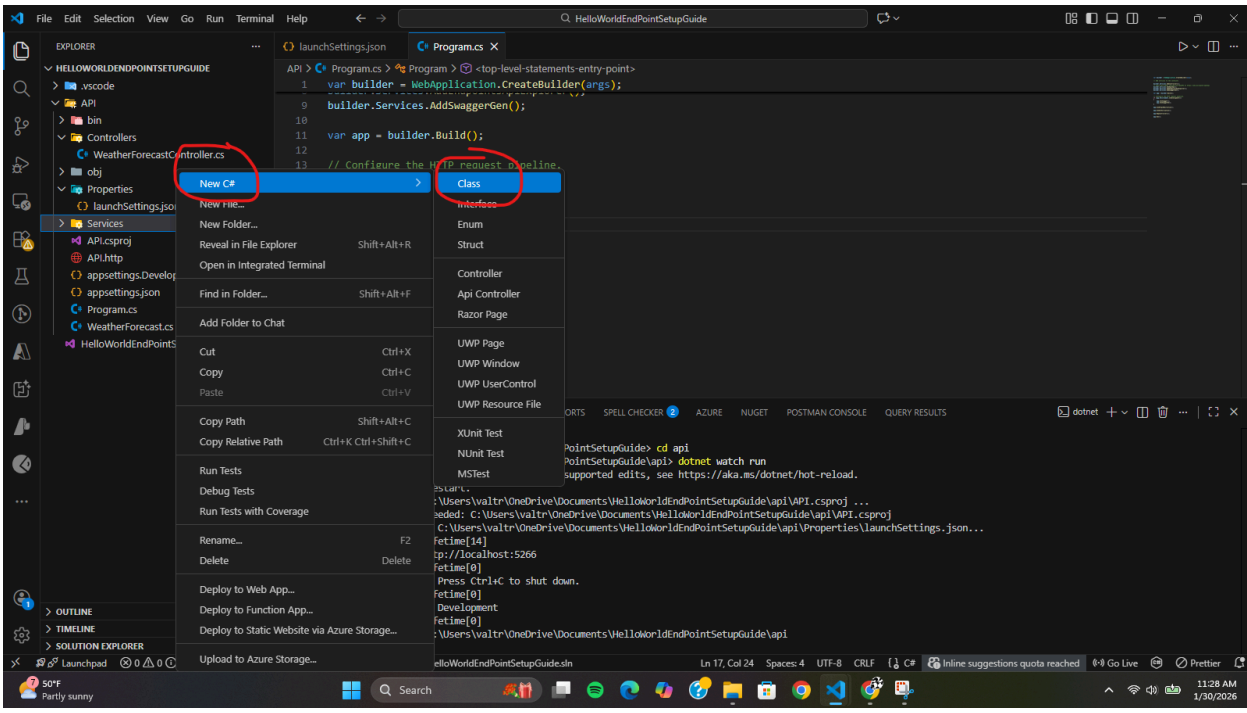
- **Test Setup:** Run `dotnet watch run` in the terminal. The Swagger UI should launch in your browser.



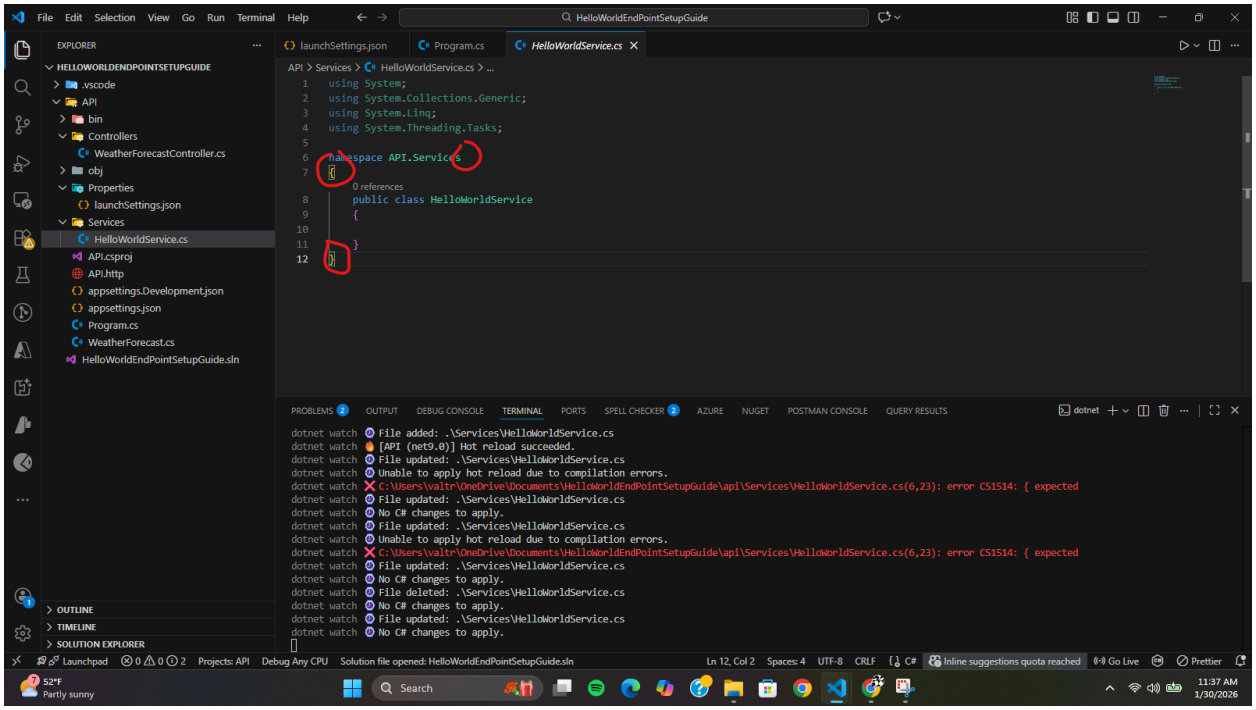
5. Create Services & Controllers

- **Services:**
    - Create a folder named **"Services"**.

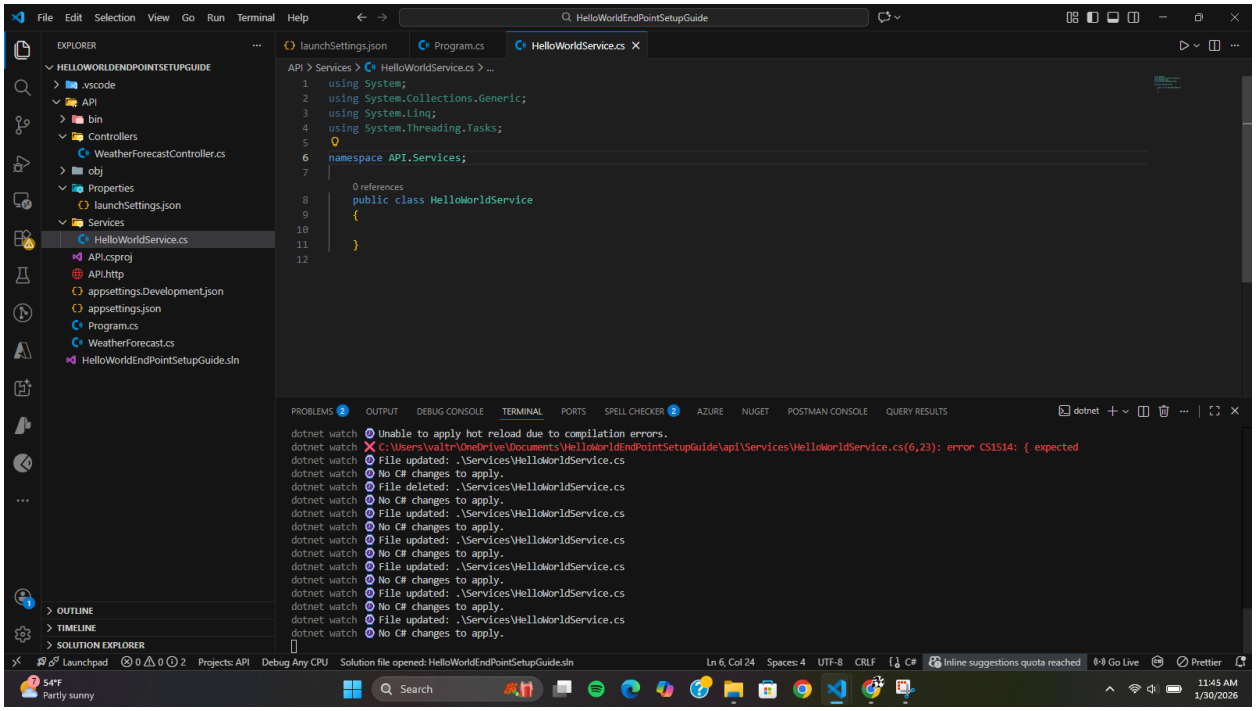
- Create a "New C# Class". Name it ending in "Service" (e.g., `HelloWorldService`).



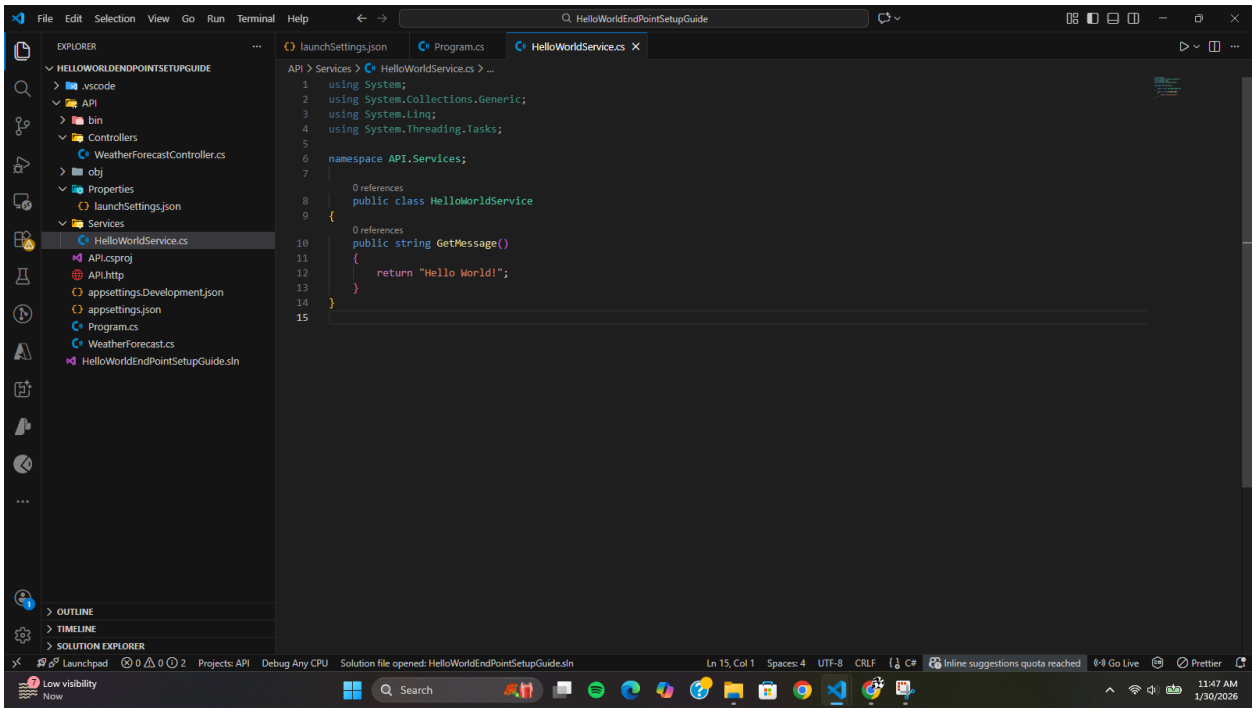
- Adjust format: Remove curly brackets for the namespace and add a semi-colon at the end (file-scoped namespace).



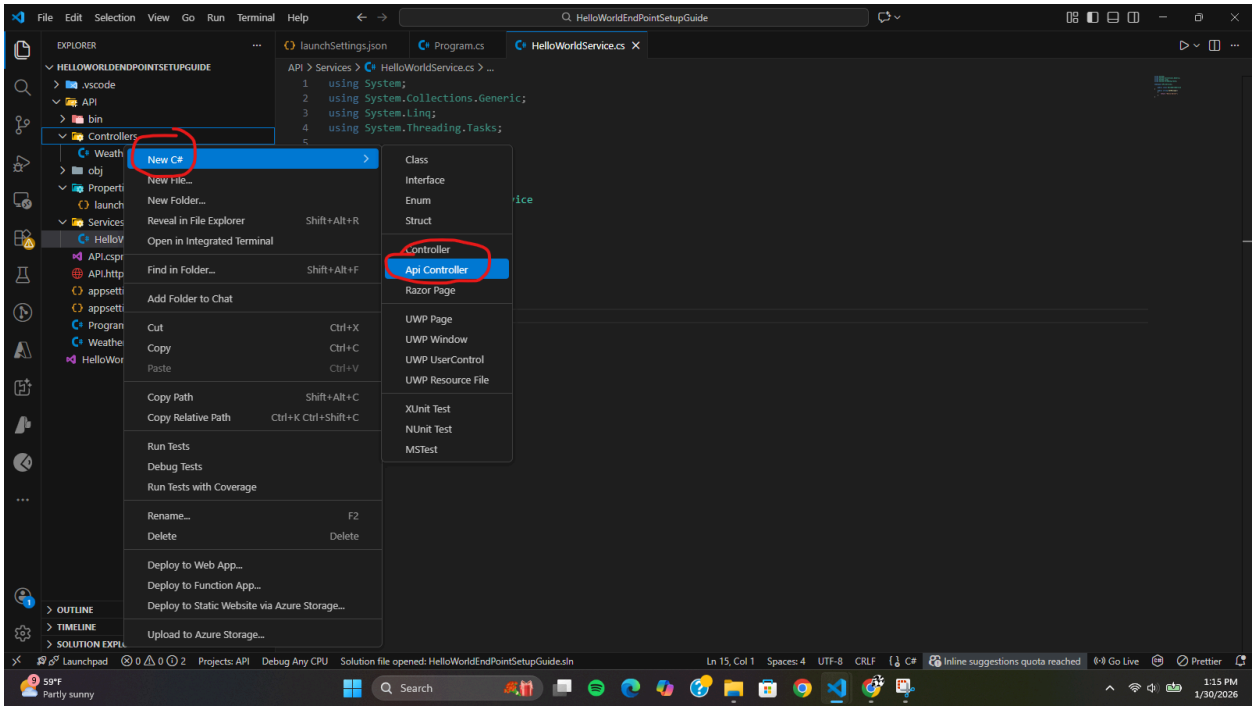
It should look something like this



And when you've coded out your Service file it should look something like this

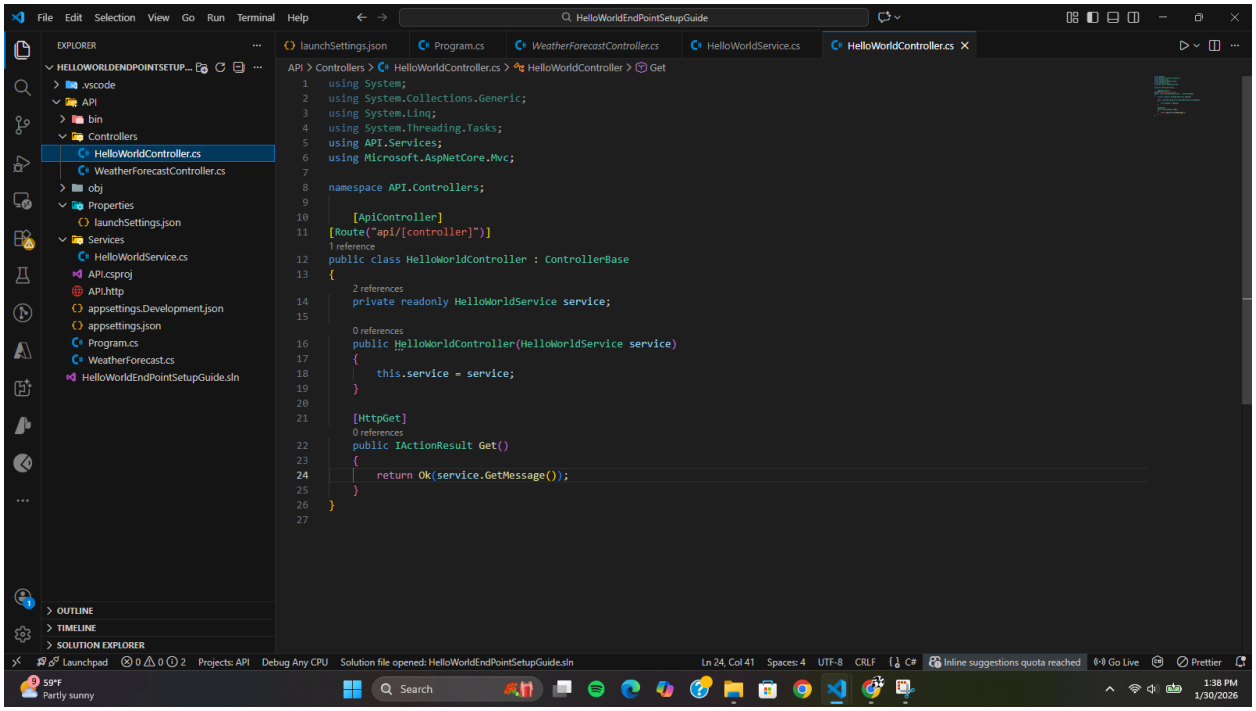


- **Controllers:**
    - Right-click the existing **"Controllers"** folder.
    - Select "New C# Api Controller". Name it ending in "Controller" (e.g., `HelloWorldController`).



- Adjust format to use file-scoped namespace (same as the Service file).

And when your done your Controller file should look something like this

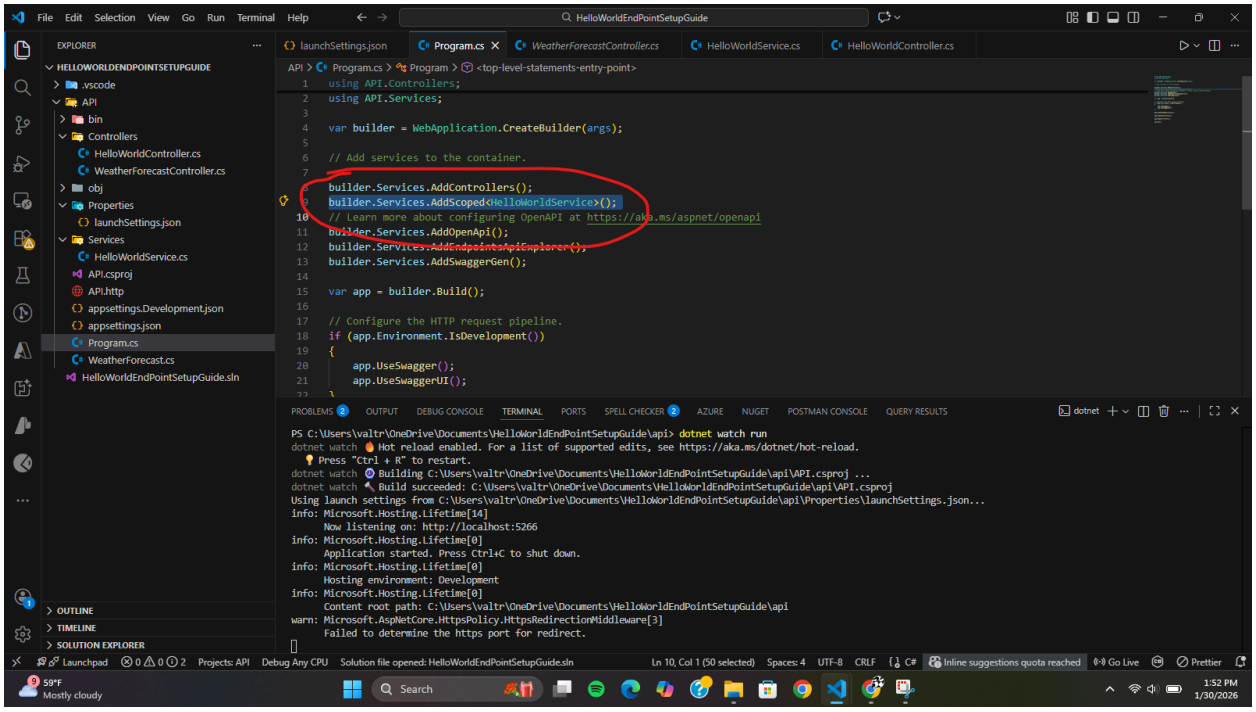


6. Dependency Injection & Final Run

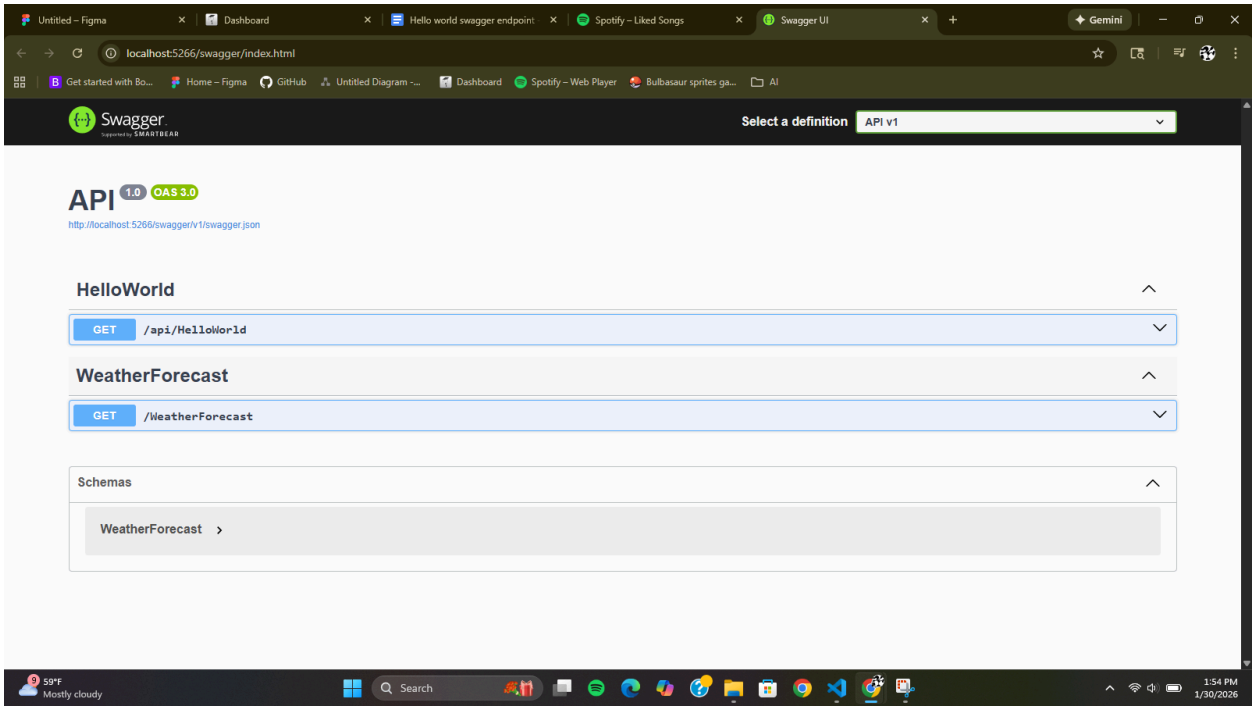
- **Register the Service:**
    - Go back to `Program.cs`.
    - Add this line under `AddControllers`:

C#

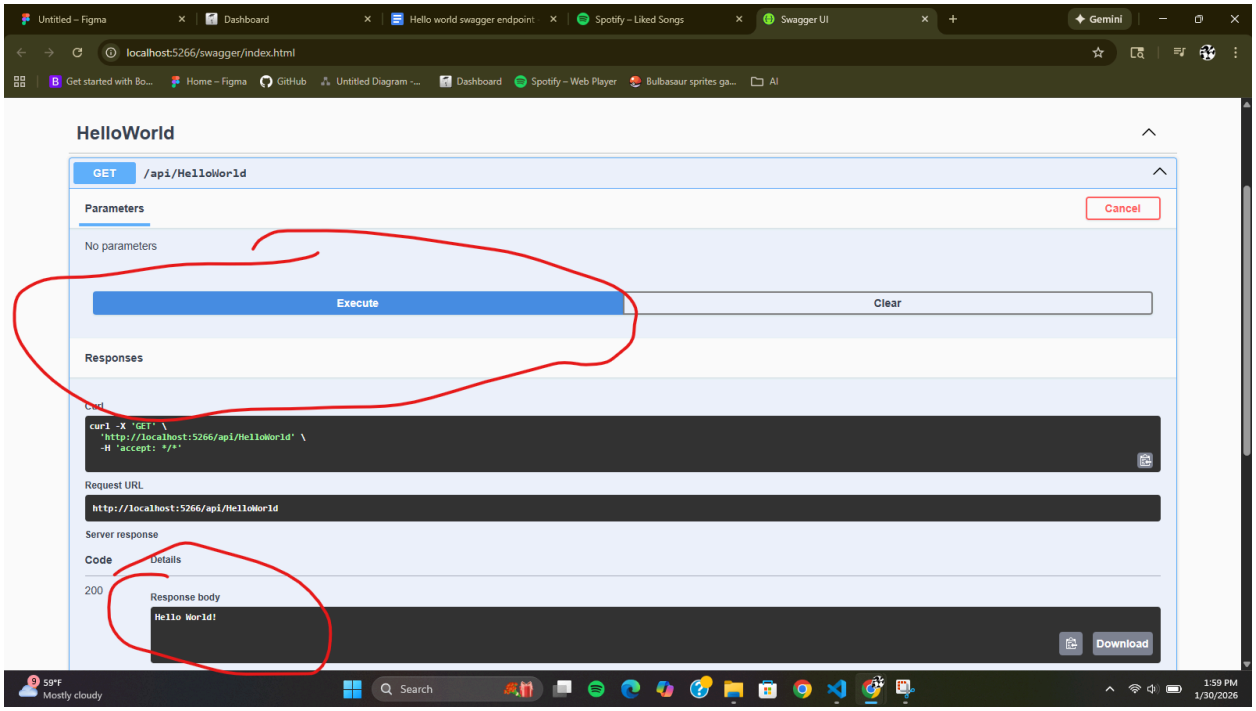
builder.Services.AddScoped<HelloWorldService>();



- **Execute:**
    - Run `dotnet watch run`.
    - Remember to cd in your project!



- In the browser, click **Get** -> **Try it out** -> **Execute** to test your endpoint.



Good job you just did the hello world mini challenge with endpoints and setup swagger!