

How to deploy a .NET 8 WebAPI in Azure WebApp service

1. Create .NET 8 Web API with VSCode

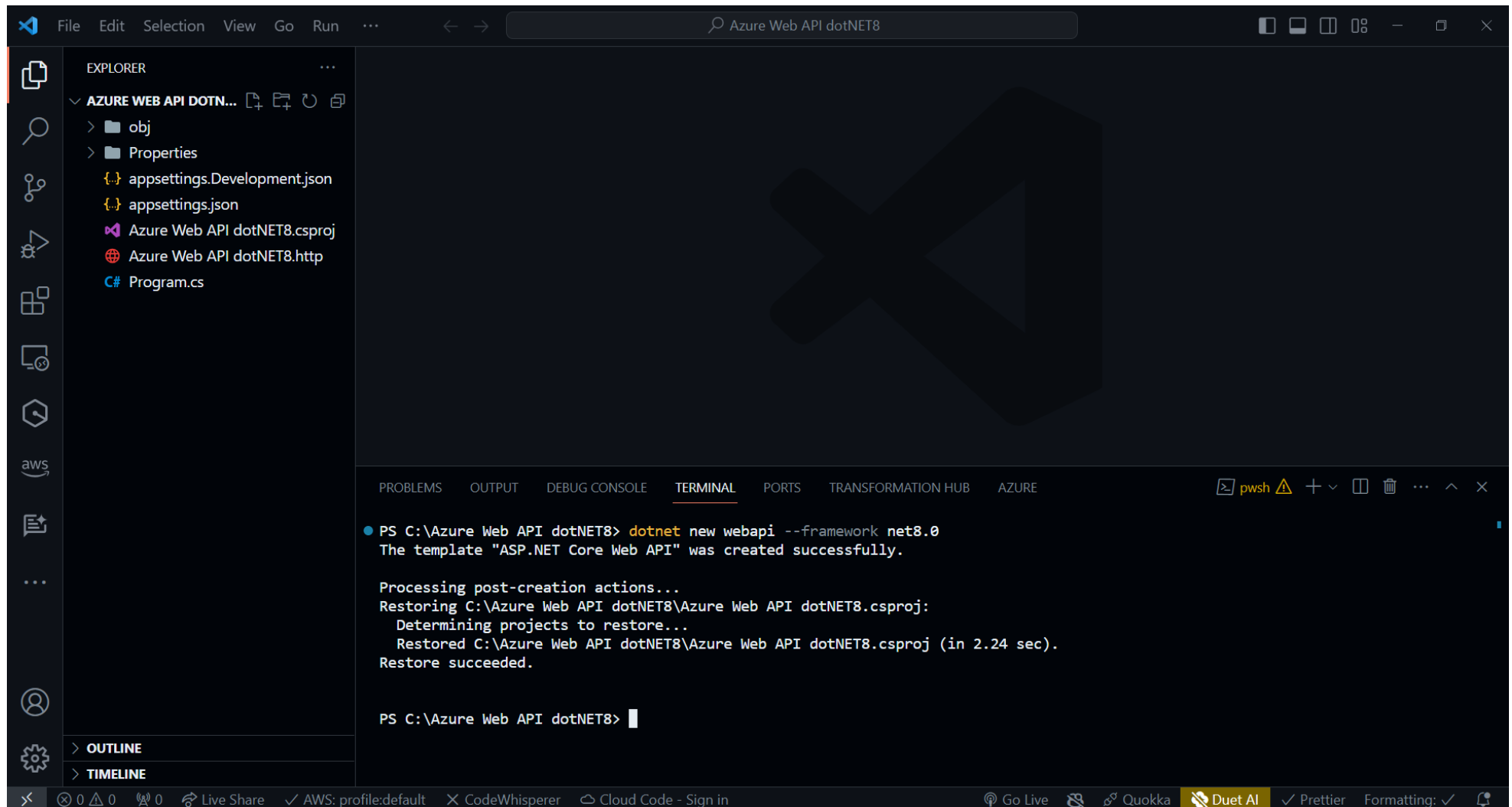
Create a new folder where to place the application

Open VSCode with the command:

```
code .
```

Create a new .NET 8 WebAPI with this command:

```
dotnet new webapi --framework net8.0
```



Run the application to verify

```
dotnet run
```

The screenshot shows the Visual Studio Code interface with the following components:

- EXPLORER:** Displays the project structure for 'AZURE WEB API DOTNET8'. The files and folders listed are:
 - bin
 - obj
 - Properties
 - appsettings.Development.json
 - appsettings.json
 - Azure Web API dotNET8.csproj
 - Azure Web API dotNET8.http
 - Program.cs
- TERMINAL:** Shows the output of the command `dotnet run` executed in a PowerShell prompt. The output is:

```
PS C:\Azure Web API dotNET8> dotnet run
Building...
info: Microsoft.Hosting.Lifetime[14]
      Now listening on: http://localhost:5273
info: Microsoft.Hosting.Lifetime[0]
      Application started. Press Ctrl+C to shut down.
info: Microsoft.Hosting.Lifetime[0]
      Hosting environment: Development
info: Microsoft.Hosting.Lifetime[0]
      Content root path: C:\Azure Web API dotNET8
```
- STATUS BAR:** At the bottom, it shows various icons and text including '0 0 0', 'Live Share', 'AWS: profile:default', 'CodeWhisperer', 'Cloud Code - Sign in', 'Go Live', 'Quokka', 'Duet AI', 'Prettier', and 'Formatting: ✓'.

Swagger UI interface showing the definition for the **Azure Web API dotNET8** (1.0 OAS3). The selected definition is **Azure Web API dotNET8 v1**.

The endpoint **GET /weatherforecast** is displayed. It has no parameters.

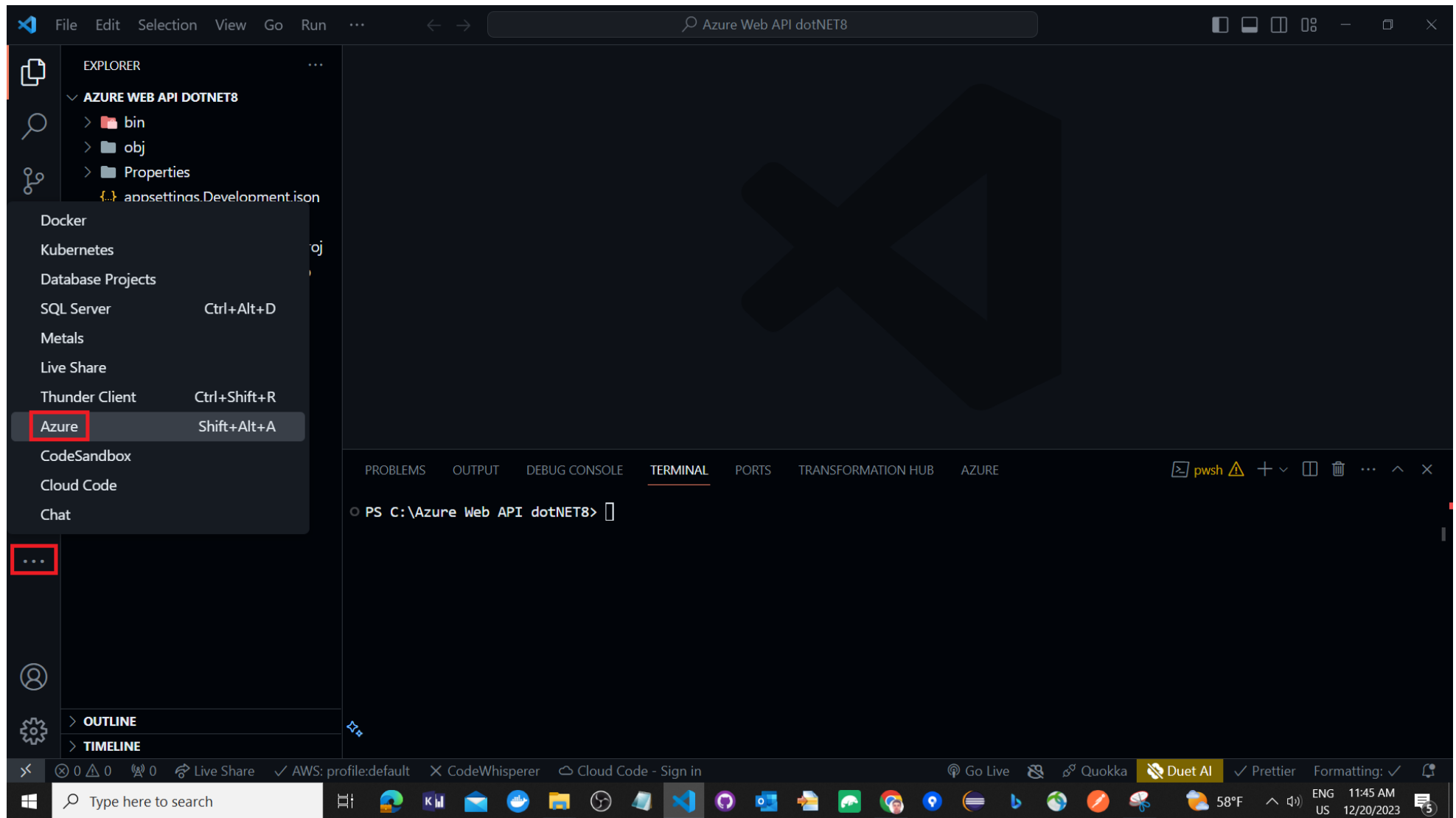
The **Execute** button is highlighted in blue. The **Clear** button is visible.

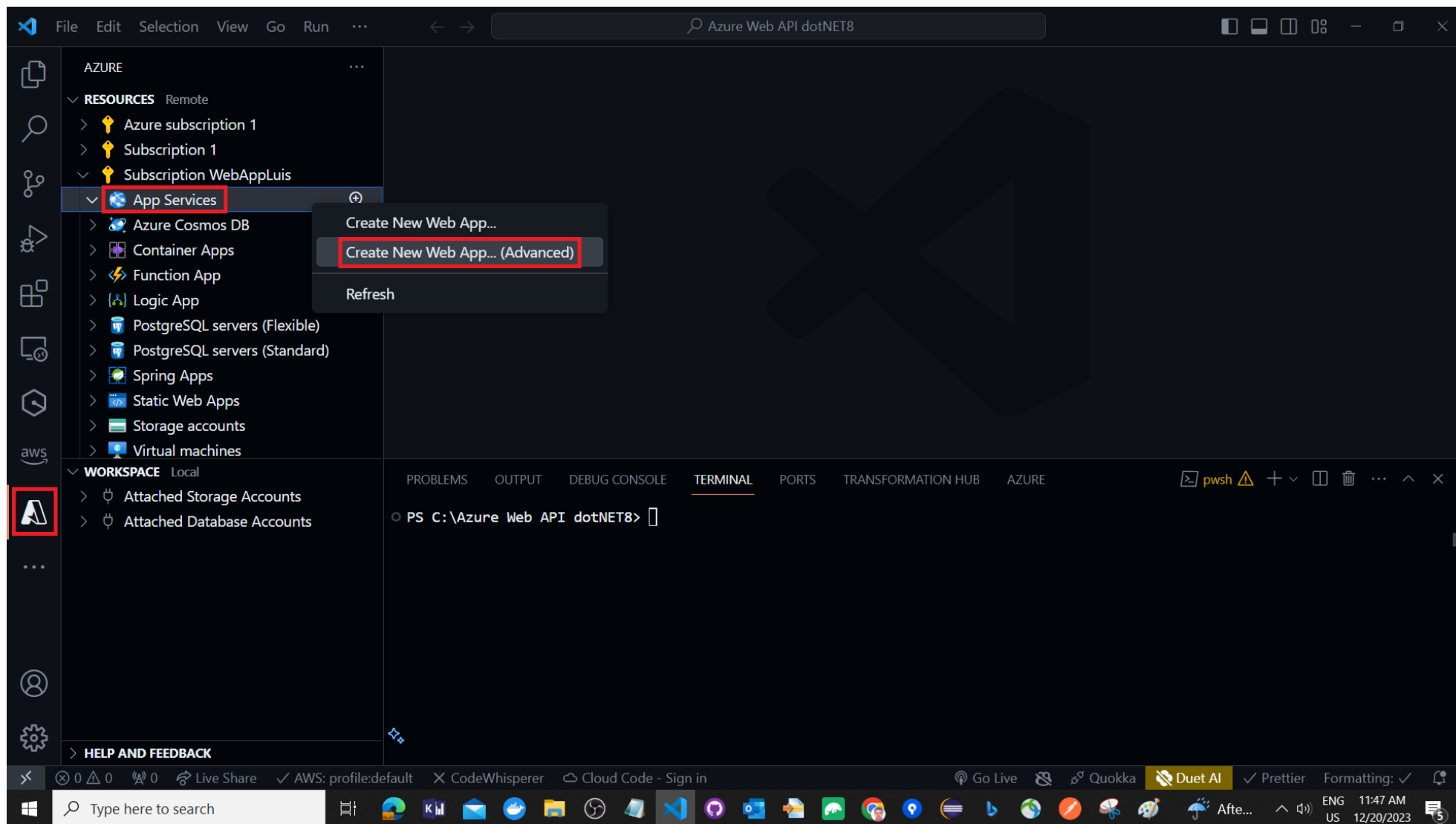
The **Responses** section shows the following curl command:

```
curl -X 'GET' \
'http://localhost:5273/weatherforecast' \
-H 'accept: application/json'
```

2. Deploy the application to Azure Web App service

In the left menu select Azure extension





Set the .NET 8 Web API name

The screenshot shows the Visual Studio Code interface with the 'Create new web app (1/6)' dialog box open. The dialog box has a red border and contains the text 'mynewdotnet8webapi2022' in the input field. Below the input field, it says 'Enter a globally unique name for the new web app. (Press 'Enter' to confirm or 'Escape' to cancel)'. The Azure Explorer sidebar on the left shows the 'App Services' resource selected under 'Subscription WebAppLuis'. The terminal at the bottom shows the command prompt 'PS C:\Azure Web API dotNET8>'. The status bar at the bottom indicates the current file is 'Type here to search'.

File Edit Selection View Go Run ...

Create new web app (1/6)

mynewdotnet8webapi2022

Enter a globally unique name for the new web app. (Press 'Enter' to confirm or 'Escape' to cancel)

AZURE

RESOURCES Remote

- Azure subscription 1
- Subscription 1
- Subscription WebAppLuis
 - App Services
 - Azure Cosmos DB
 - Container Apps
 - Function App
 - Logic App
 - PostgreSQL servers (Flexible)
 - PostgreSQL servers (Standard)
 - Spring Apps
 - Static Web Apps
 - Storage accounts
 - Virtual machines

WORKSPACE Local

- Attached Storage Accounts
- Attached Database Accounts

HELP AND FEEDBACK

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS TRANSFORMATION HUB AZURE

PS C:\Azure Web API dotNET8>

Type here to search

Go Live Quokka Duet AI Prettier Formatting: ✓

58°F ENG 11:48 AM 12/20/2023

The screenshot shows the Visual Studio Code interface during the deployment of a .NET 8 WebAPI to Azure. The 'Create new web app (2/6)' wizard is open, and the 'AZURE' section is selected. The 'Subscription WebAppLuis' is expanded, showing a list of resource groups. The 'App Services' resource group is selected, and the 'Create new resource group (recently used)' option is highlighted with a red box. The terminal shows the command prompt 'PS C:\Azure Web API dotNET8>'.

File **Edit** **Selection** **View** **Go** **Run** ...

← Create new web app (2/6)

Select a resource group for new resources.

+ Create new resource group (recently used)

AZURE ...

RESOURCES Remote

- > Azure subscription 1
- > Subscription 1
- > Subscription WebAppLuis
 - > App Services
 - > Azure Cosmos DB
 - > Container Apps
 - > Function App
 - > Logic App
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WORKSPACE Local

- > Attached Storage Accounts
- > Attached Database Accounts

HELP AND FEEDBACK

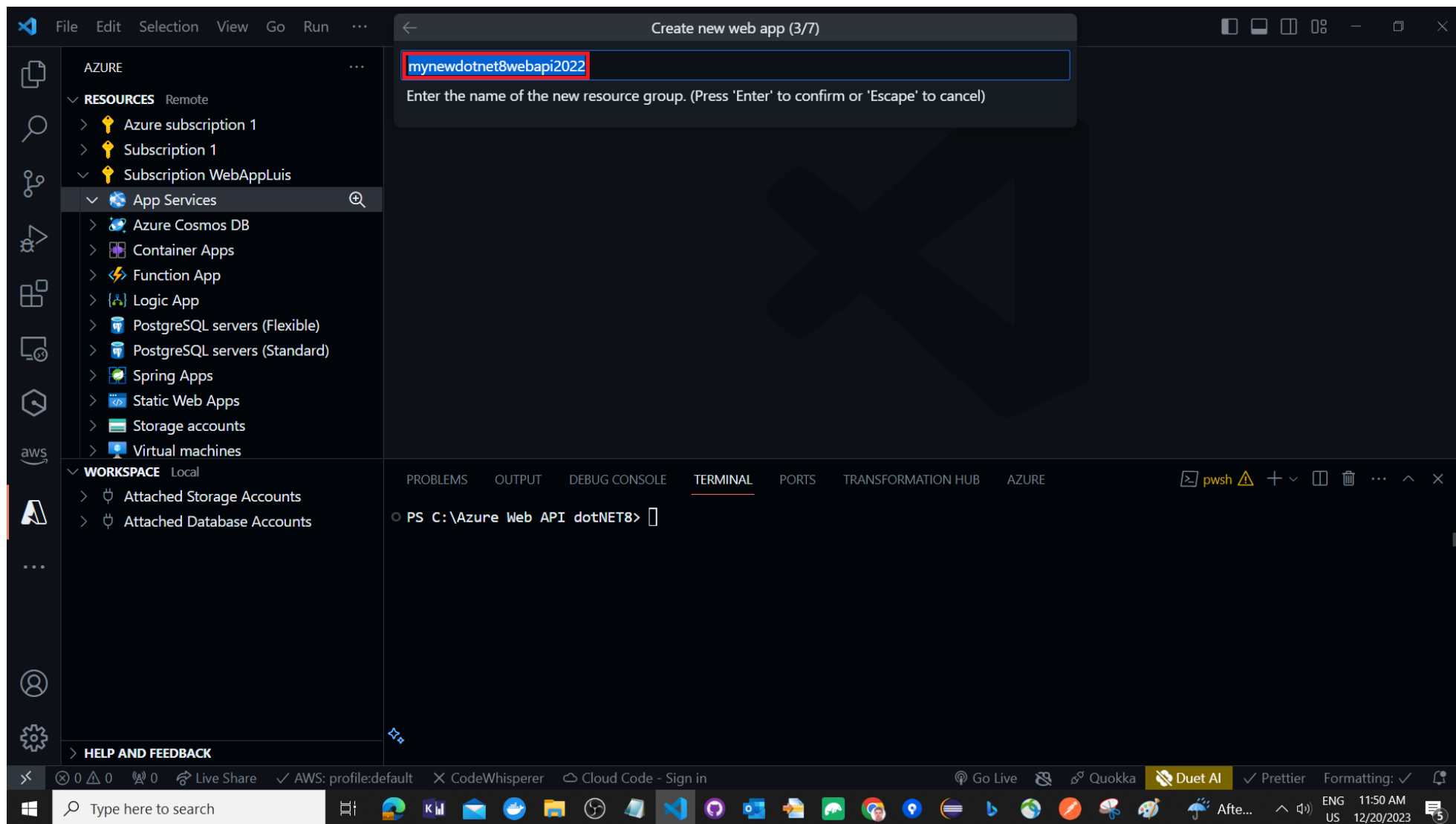
PROBLEMS **OUTPUT** **DEBUG CONSOLE** **TERMINAL** **PORTS** **TRANSFORMATION HUB** **AZURE**

PS C:\Azure Web API dotNET8>

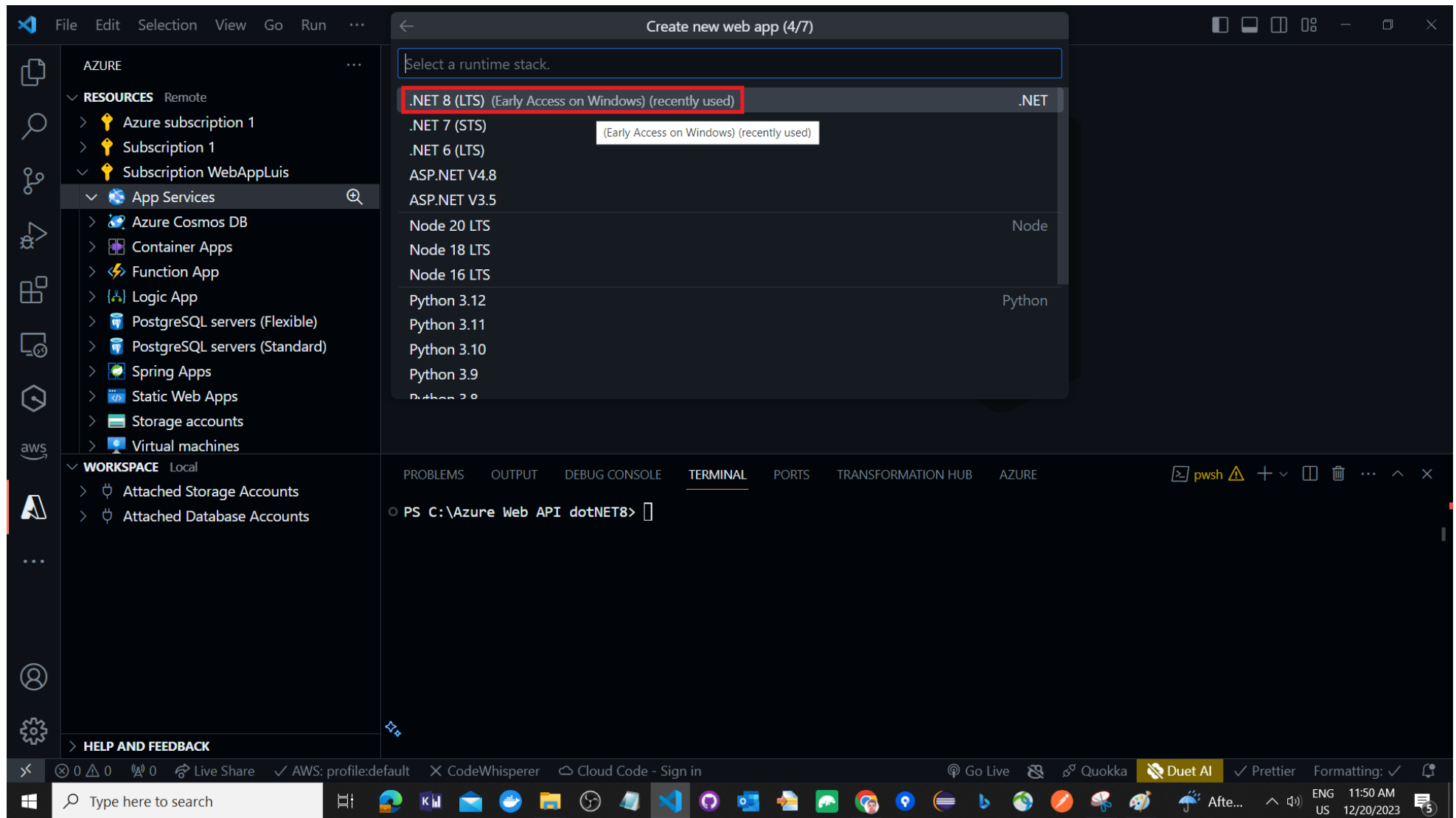
Go Live Quokka Duet AI Prettier Formatting: ✓

Type here to search

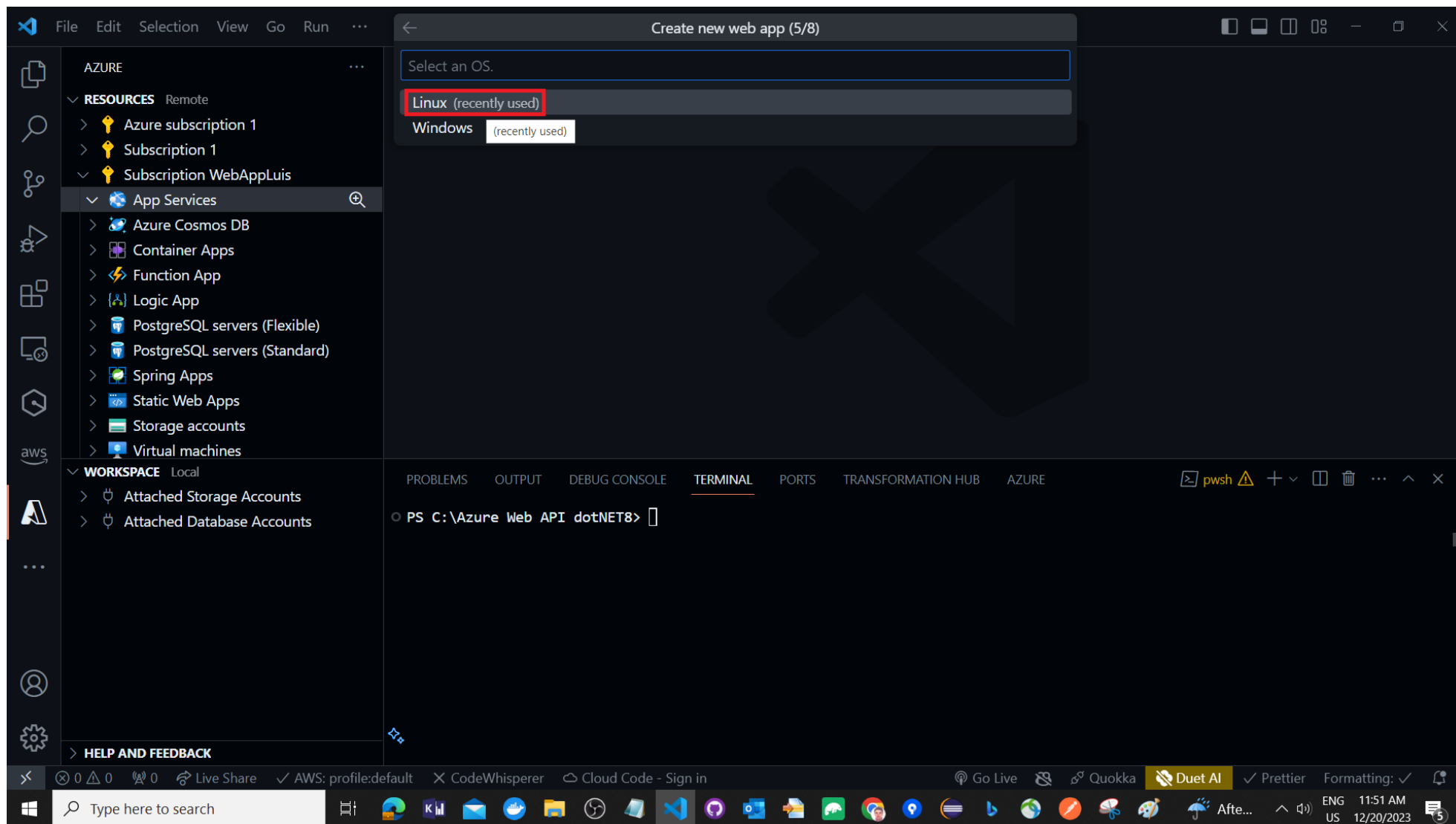
58°F ENG 11:49 AM US 12/20/2023



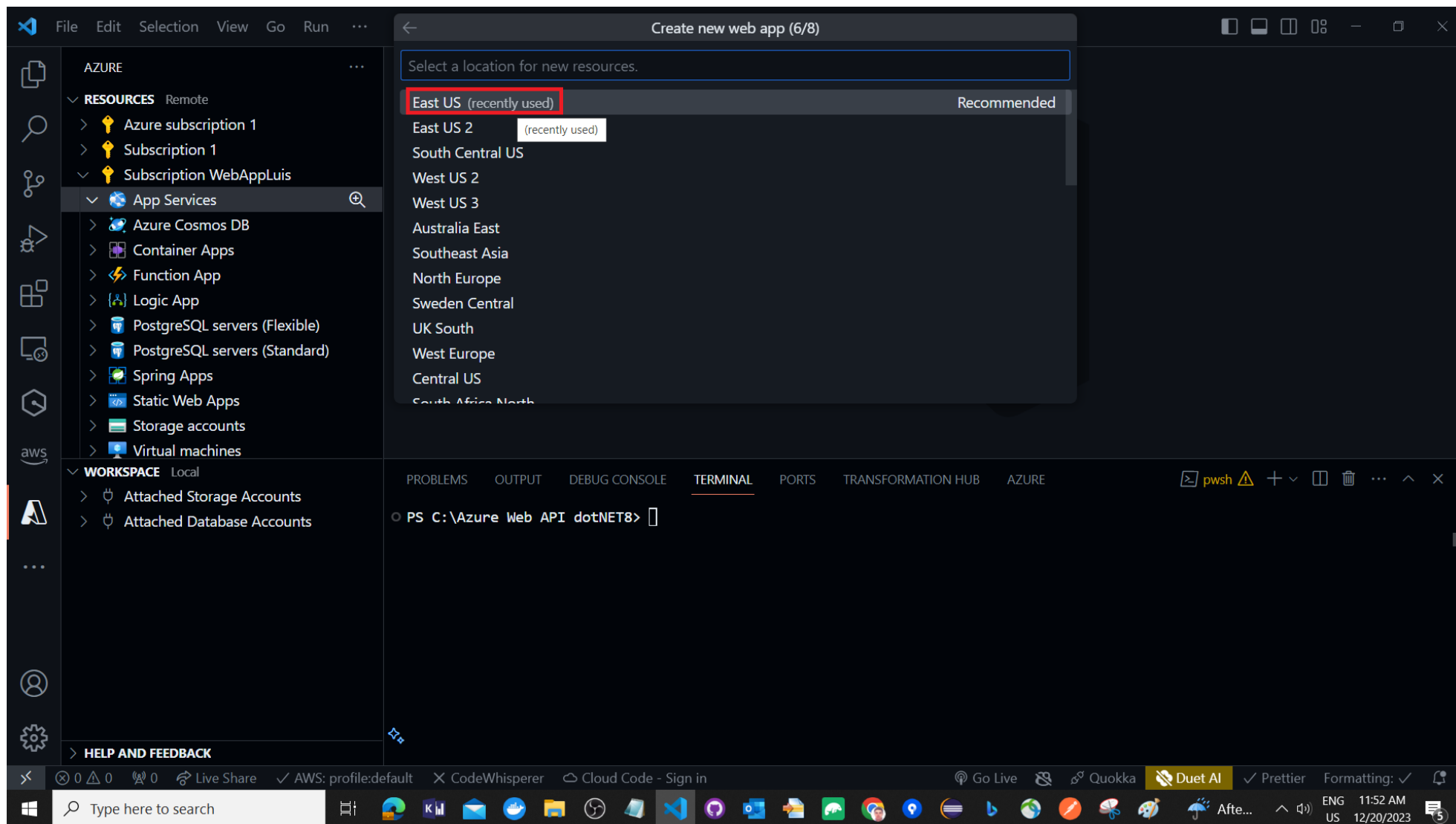
Select the .NET 8 framework



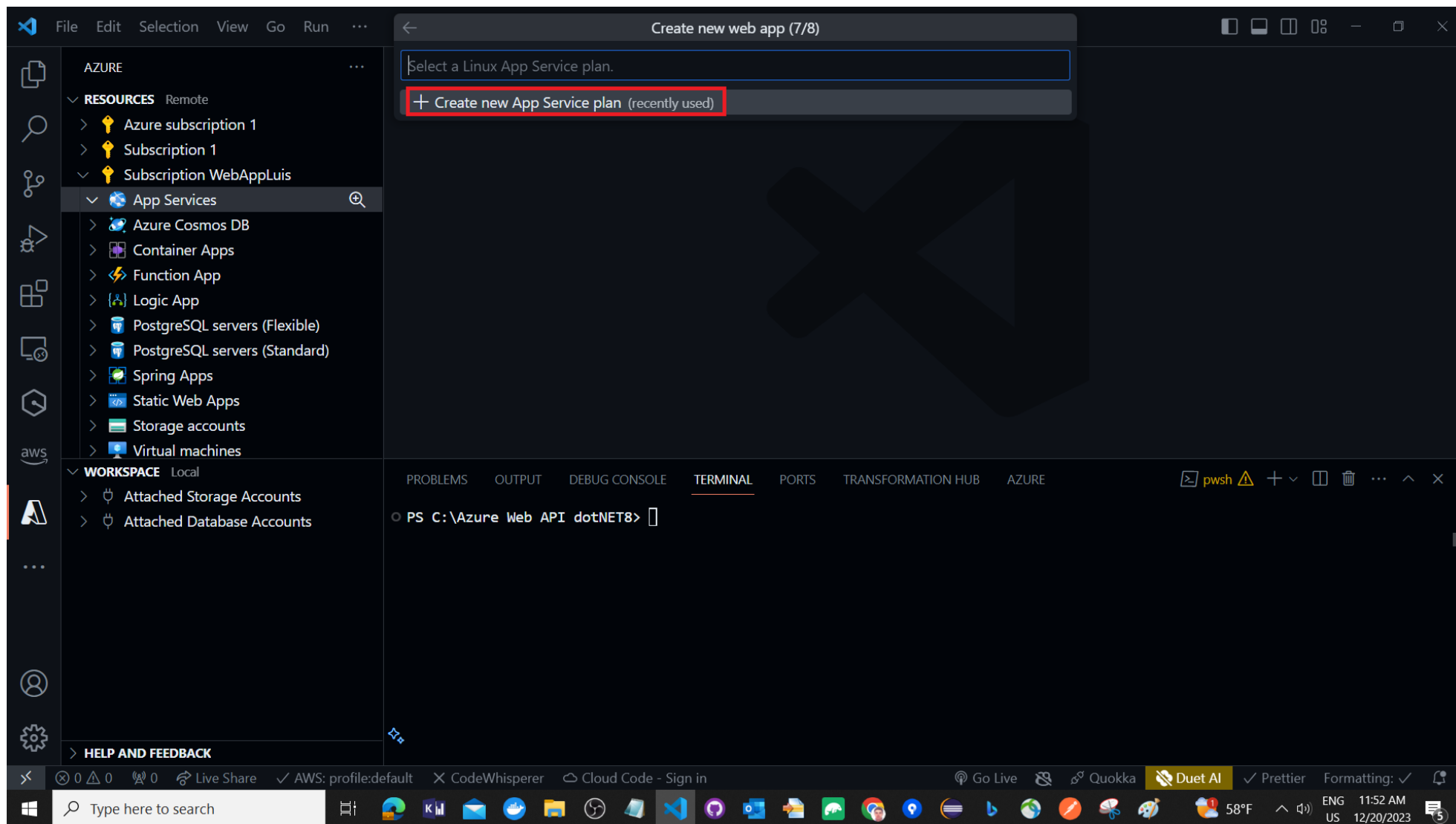
Select the operating system linux



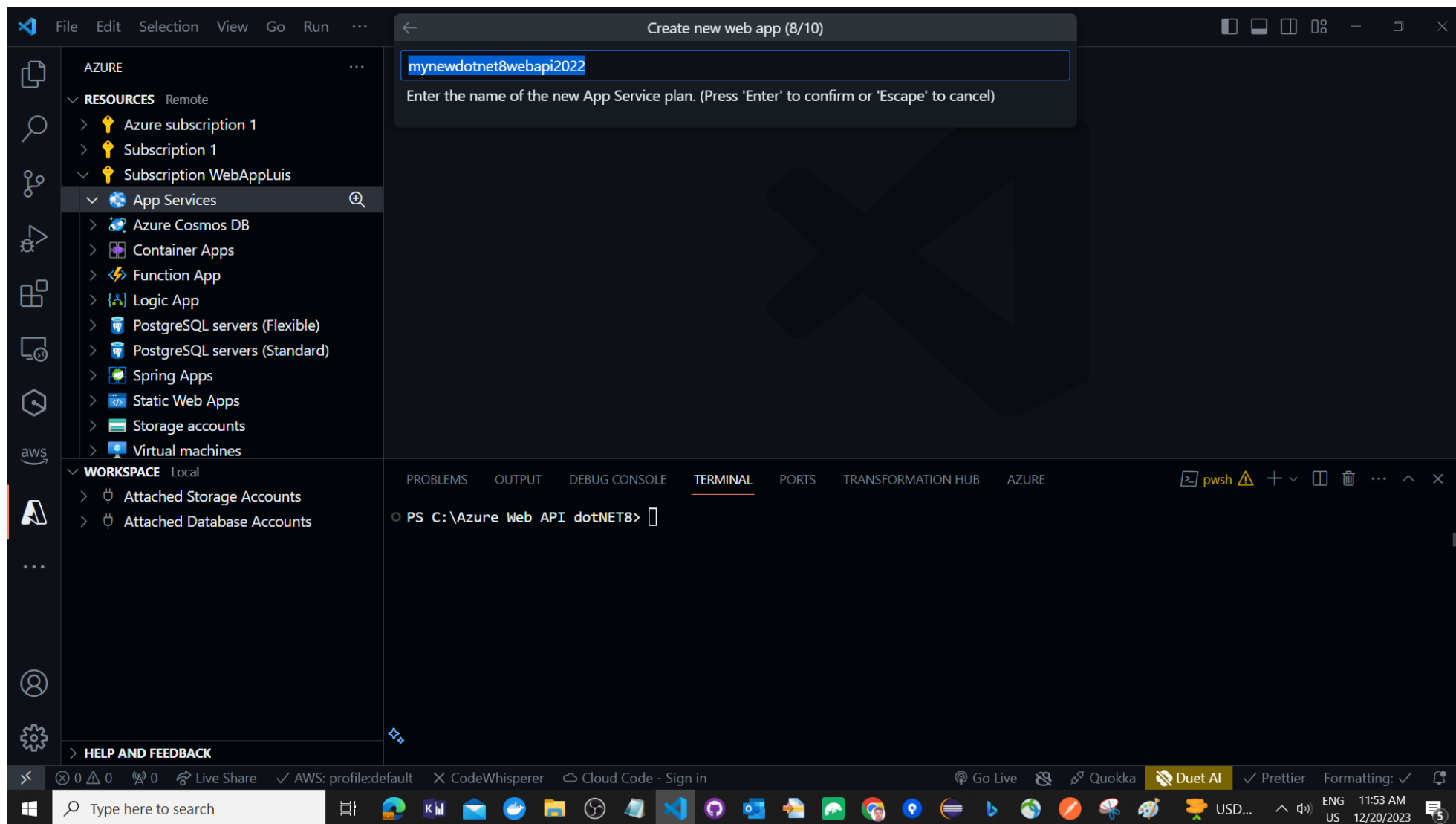
Select the location East US



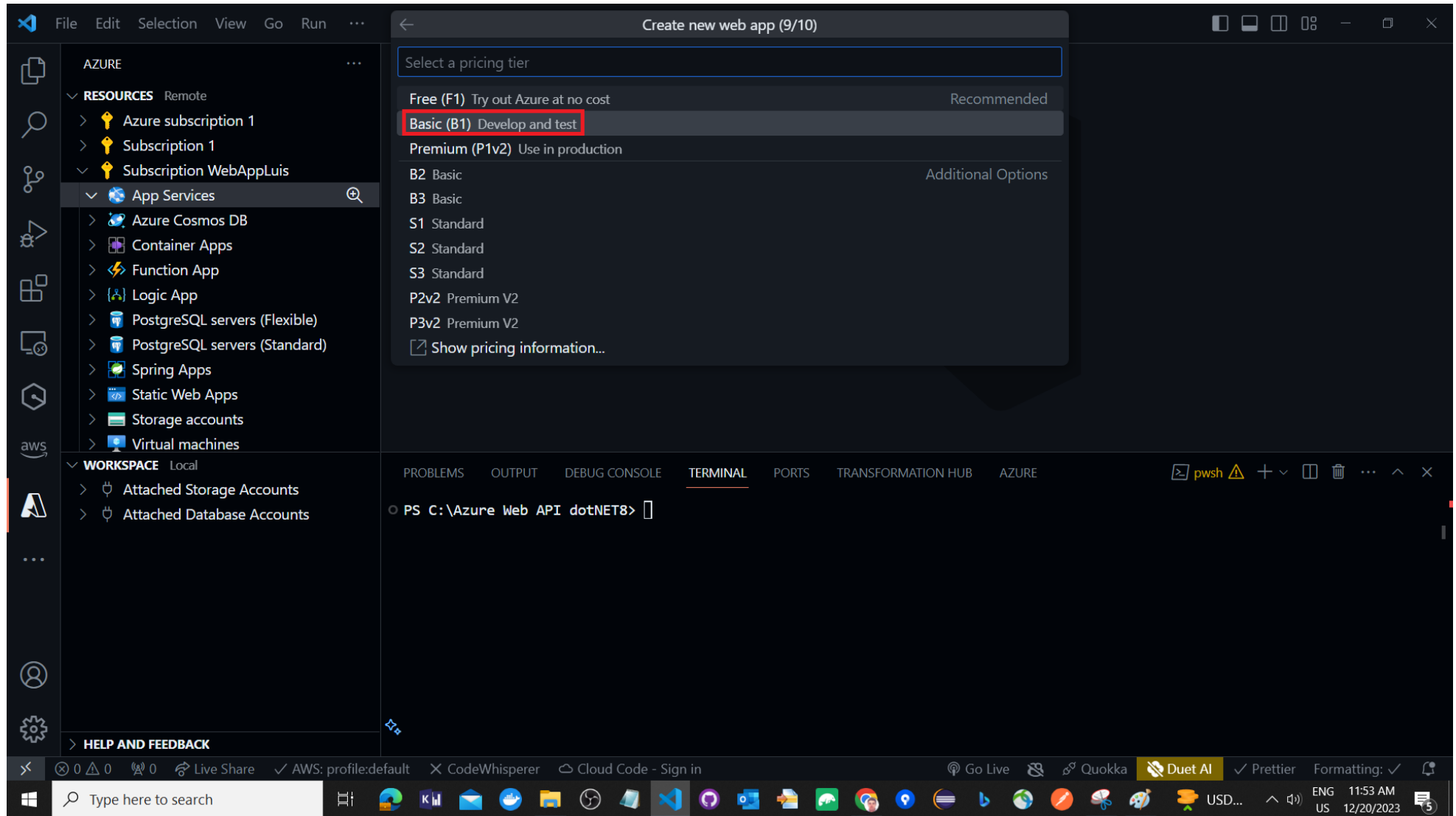
Create a new Service Plan



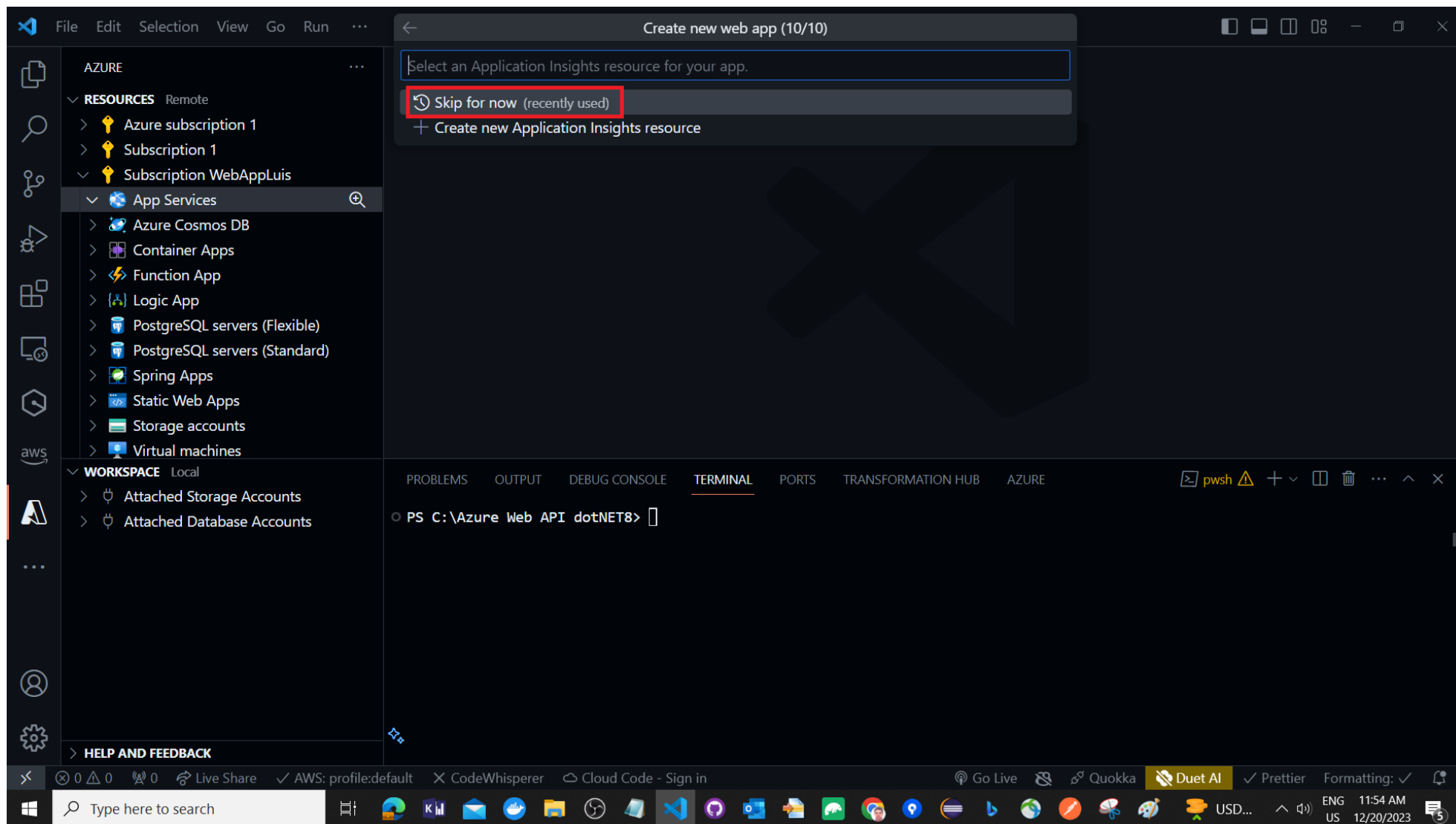
Enter the new Service Plan name



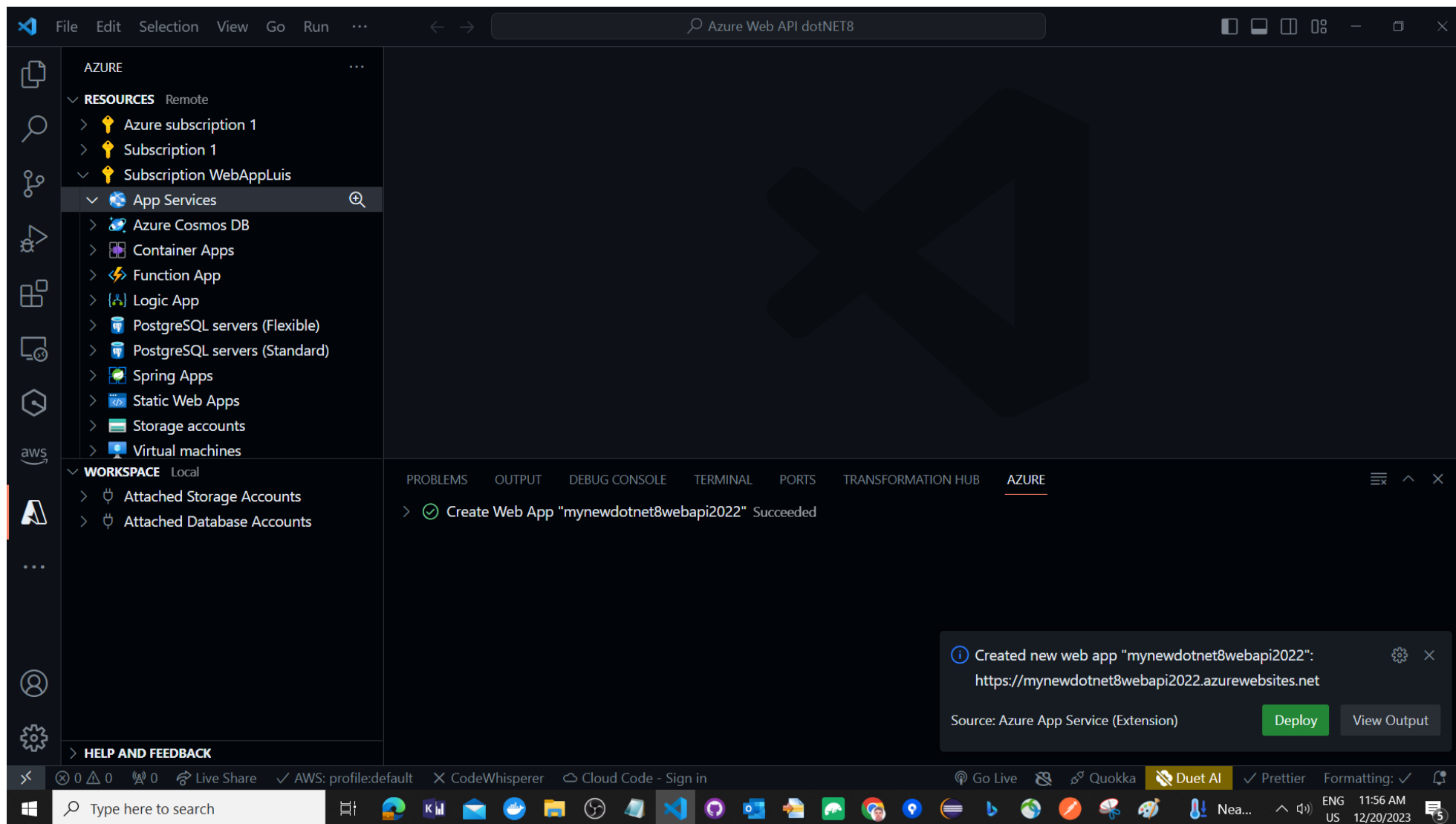
Select the App Service plan **Basic (B1)**



Skip creating a new Application Insights resource



Create a new deployment



Place the Web API in a folder

The screenshot shows the Visual Studio Code interface with the Azure extension installed. The left sidebar displays the 'AZURE' resource tree, showing the subscription and the specific App Service 'mynewdotnet8webapi2022'. The main editor area shows a large 'X' watermark, indicating a deployment or build process. The bottom panel displays the 'OUTPUT' window, which shows the deployment logs for 'mynewdotnet8webapi2022'. The logs indicate that the deployment was successful, with files being copied and the application being deployed. A notification bubble at the bottom right of the output window states: 'Deployment to "mynewdotnet8webapi2022" completed.' with buttons for 'Browse Website', 'Stream Logs', and 'Upload Settings'. The status bar at the bottom shows the current project is 'AWS: profile:default' and the code is formatted with Prettier.

AZURE

- RESOURCES Remote
 - Azure subscription 1
 - Subscription 1
 - Subscription WebAppLuis
 - App Services
 - mynewdotnet8webapi2022
 - Azure Cosmos DB
 - Container Apps
 - Function App
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 - Static Web Apps
 - Storage accounts
- WORKSPACE Local
 - Attached Storage Accounts
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OUTPUT

```
12:01:52 PM mynewdotnet8webapi2022: Copying file: 'Azure Web API dotNET8.runtimeconfig.json'
12:01:52 PM mynewdotnet8webapi2022: Copying file: 'Microsoft.AspNetCore.OpenApi.dll'
12:01:52 PM mynewdotnet8webapi2022: Copying file: 'Microsoft.OpenApi.dll'
12:01:52 PM mynewdotnet8webapi2022: Copying file: 'Swashbuckle.AspNetCore.Swagger.dll'
12:01:52 PM mynewdotnet8webapi2022: Copying file: 'Swashbuckle.AspNetCore.SwaggerGen.dll'
12:01:52 PM mynewdotnet8webapi2022: Copying file: 'Swashbuckle.AspNetCore.SwaggerUI.dll'
12:01:53 PM mynewdotnet8webapi2022: Copying file: 'appsettings.Development.json'
12:01:53 PM mynewdotnet8webapi2022: Copying file: 'appsettings.json'
12:01:53 PM mynewdotnet8webapi2022: Copying file: 'web.config'
12:01:53 PM mynewdotnet8webapi2022: Deleting file: 'hostingstart.html'
12:01:53 PM mynewdotnet8webapi2022: Finished successfully.
12:01:53 PM mynewdotnet8webapi2022: Running post deployment command(s)...
12:01:53 PM mynewdotnet8webapi2022: Triggering recycle (previ
12:01:54 PM mynewdotnet8webapi2022: Deployment successful. de
ZipDeploy. Extract zip.
12:02:18 PM: Deployment to "mynewdotnet8webapi2022" completed
```

Deployment to "mynewdotnet8webapi2022" completed.

Source: Azure App... [Browse Website](#) [Stream Logs](#) [Upload Settings](#)

The screenshot shows a web browser window with the address bar displaying `mynewdotnet8webapi2022.azurewebsites.net/weatherforecast`. The page content shows a JSON array of weather forecast data. The browser's address bar and tabs are visible at the top, and the Windows taskbar is at the bottom.

```
[{"date": "2023-12-21", "temperatureC": -20, "summary": "Scorching", "temperatureF": -3}, {"date": "2023-12-22", "temperatureC": 21, "summary": "Scorching", "temperatureF": 69}, {"date": "2023-12-23", "temperatureC": 18, "summary": "Bracing", "temperatureF": 64}, {"date": "2023-12-24", "temperatureC": 53, "summary": "Cool", "temperatureF": 127}, {"date": "2023-12-25", "temperatureC": 12, "summary": "Cool", "temperatureF": 53}]
```