

# How to create in VSCode .NET 8 Web API and deploy it to Azure WebApp with Azure CLI

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## Summary

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In this example we show you how to create a new .NET 8 WebAPI and how to deploy it in Azure Web App with only two commands:

```
dotnet new webapi
```

```
az webapp up ^  
--name myWebAppIuscoco19777 ^  
--resource-group myRG ^  
--location EastUS ^  
--sku B1 ^  
--os-type Windows ^  
--runtime "dotnet:8"
```

## 1. Create a new .NET 8 Web API in VSCode

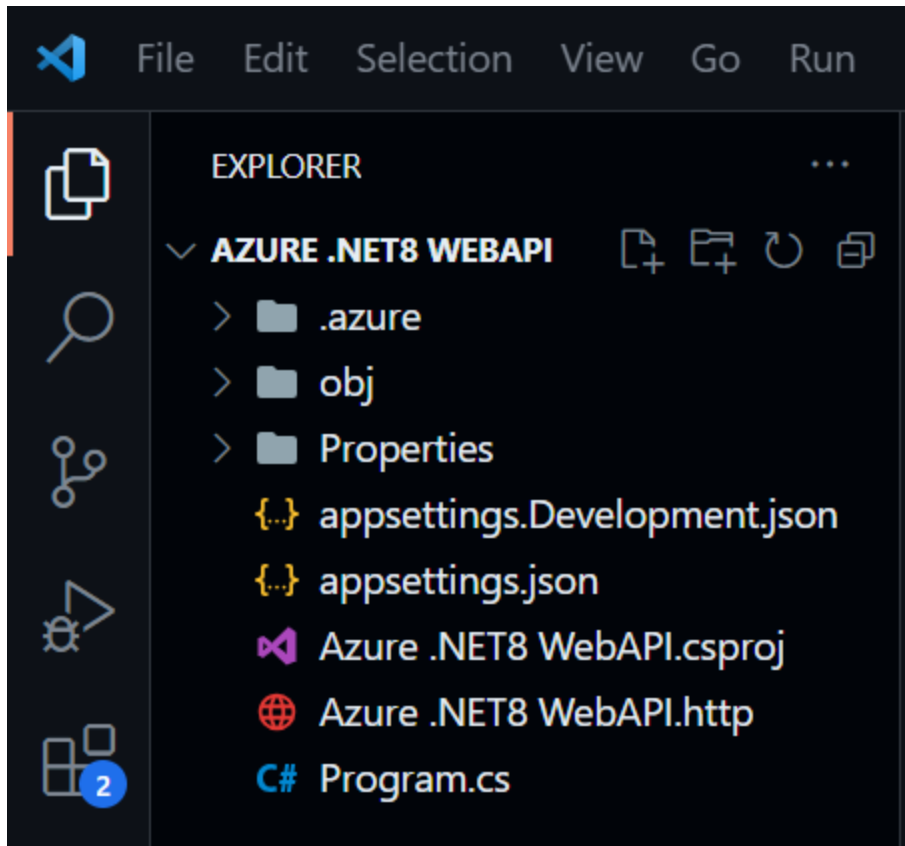
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We create a new directory where to place the new application

We run VSCode and in a Terminal Window we run this command:

```
dotnet new webapi
```

This is by default the Web API application project folders structure



If we would like to include some features when creating the application we can run this command to list the available application features

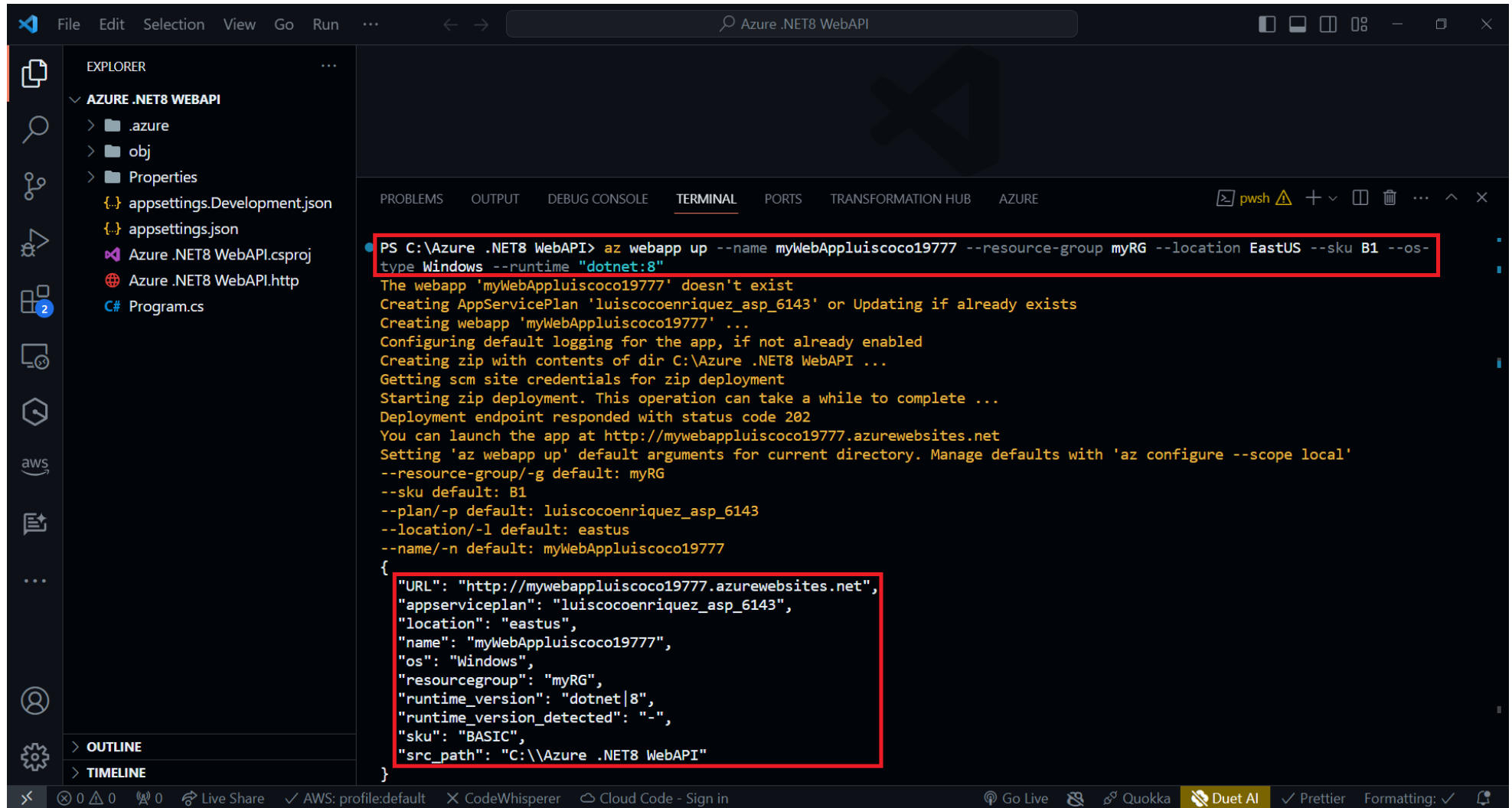
```
dotnet new webapi --help
```

## 2. Deploy the .NET 8 Web API in Azure Web App

With the following command automatically we create a new Azure AppService Plan and also a new Azure Web App

```
az webapp up ^  
--name myWebAppluiscoco19777 ^  
--resource-group myRG ^
```

```
--location EastUS ^  
--sku B1 ^  
--os-type Windows ^  
--runtime "dotnet:8"
```



```
PS C:\Azure .NET8 WebAPI> az webapp up --name myWebAppluiscoco19777 --resource-group myRG --location EastUS --sku B1 --os-  
type Windows --runtime "dotnet:8"  
The webapp 'myWebAppluiscoco19777' doesn't exist  
Creating AppServicePlan 'luiscocoenriquez_asp_6143' or Updating if already exists  
Creating webapp 'myWebAppluiscoco19777' ...  
Configuring default logging for the app, if not already enabled  
Creating zip with contents of dir C:\Azure .NET8 WebAPI ...  
Getting scm site credentials for zip deployment  
Starting zip deployment. This operation can take a while to complete ...  
Deployment endpoint responded with status code 202  
You can launch the app at http://mywebappluiscoco19777.azurewebsites.net  
Setting 'az webapp up' default arguments for current directory. Manage defaults with 'az configure --scope local'  
--resource-group/-g default: myRG  
--sku default: B1  
--plan/-p default: luiscocoenriquez_asp_6143  
--location/-l default: eastus  
--name/-n default: myWebAppluiscoco19777  
{  
  "URL": "http://mywebappluiscoco19777.azurewebsites.net",  
  "appserviceplan": "luiscocoenriquez_asp_6143",  
  "location": "eastus",  
  "name": "myWebAppluiscoco19777",  
  "os": "Windows",  
  "resourcegroup": "myRG",  
  "runtime_version": "dotnet|8",  
  "runtime_version_detected": "-",  
  "sku": "BASIC",  
  "src_path": "C:\\Azure .NET8 WebAPI"  
}
```

### 3. Verify in Azure Portal we created a new AppService Plan and a new Web App

We log in to Azure and we go to "All resources" option.

We confirm we created a new AppServicePlan called "luiscocoenriquez\_asp\_6143" and a new WebApp called "myWebAppluiscoco19777"

Microsoft Azure

Search resources, services, and docs (G+)

Home > All resources

particular (luiscocoenriquezhotmail.onmicrosoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Delete

Filter for any field... Subscription equals 2 of 4 selected Resource group equals all Type equals all Location equals all Add filter

0 Recommendations 5 Changed resources 0 Unsecure resources

No grouping List view

Name	Type	Resource group	Location	Subscription
luiscocoenriquez_asp_6143	App Service plan	myRG	East US	Subscription WebAppLuis
myWebAppluiscoco19777	App Service	myRG	East US	Subscription WebAppLuis

If we enter in the WebApp we can see the new application default domain name "mywebappluiscoco19777.azurewebsites.net"

Microsoft Azure

Search resources, services, and docs (G+)

Home > All resources > myWebAppluiscoco19777

Web App

Search

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Microsoft Defender for Cloud

Events (preview)

Deployment

Deployment slots

Deployment Center

Settings

Configuration

Essentials

Resource group (move) myRG

Status

Running

Location (move) East US

Subscription (move) Subscription WebAppLuis

Subscription ID

1d640b19-d6ae-466b-a0bd-d80869b565b8

Tags (edit)

Add tags

Default domain

mywebappluiscoco19777.azurewebsites.net

App Service Plan

luiscocoenriquez\_asp\_6143 (B1: 1)

Operating System

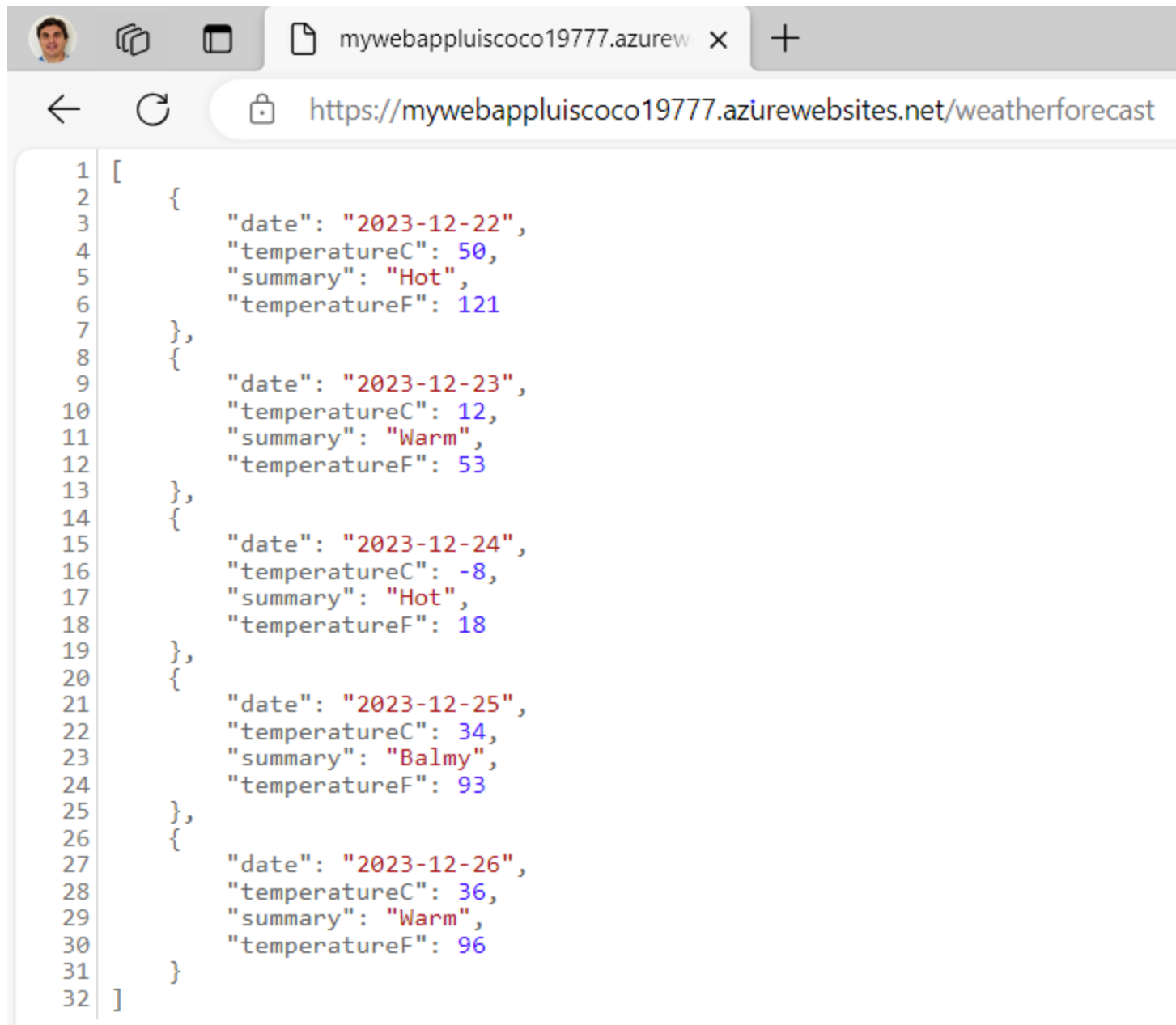
Windows

Health Check

Not Configured

We verify the new Web API application introducing the endpoint in the internet web browser.

The endpoint is composed by the web application default domain name ("mywebappluiscoco19777.azurewebsites.net") plus the api endpoint name ("weatherforecast")



The screenshot shows a web browser window with the address bar displaying `https://mywebappluiscoco19777.azurewebsites.net/weatherforecast`. The browser's developer tools are open, showing a JSON array of five weather forecast objects. The JSON is color-coded: dates are in red, temperatures in Celsius are in blue, and summaries are in red. The forecast data is as follows:

Date	Temperature (C)	Summary	Temperature (F)
2023-12-22	50	Hot	121
2023-12-23	12	Warm	53
2023-12-24	-8	Hot	18
2023-12-25	34	Balmy	93
2023-12-26	36	Warm	96

```
1 [
2   {
3     "date": "2023-12-22",
4     "temperatureC": 50,
5     "summary": "Hot",
6     "temperatureF": 121
7   },
8   {
9     "date": "2023-12-23",
10    "temperatureC": 12,
11    "summary": "Warm",
12    "temperatureF": 53
13  },
14  {
15    "date": "2023-12-24",
16    "temperatureC": -8,
17    "summary": "Hot",
18    "temperatureF": 18
19  },
20  {
21    "date": "2023-12-25",
22    "temperatureC": 34,
23    "summary": "Balmy",
24    "temperatureF": 93
25  },
26  {
27    "date": "2023-12-26",
28    "temperatureC": 36,
29    "summary": "Warm",
30    "temperatureF": 96
31  }
32 ]
```