Full Stack Application Development with Cloud Computing

Module 6 – Application Deployment and Management with Azure

Lab Practical Manual

Topic: Azure with Python – Solved Question

Ex. 1: Create a function in Azure with Python using Visual Studio Code.

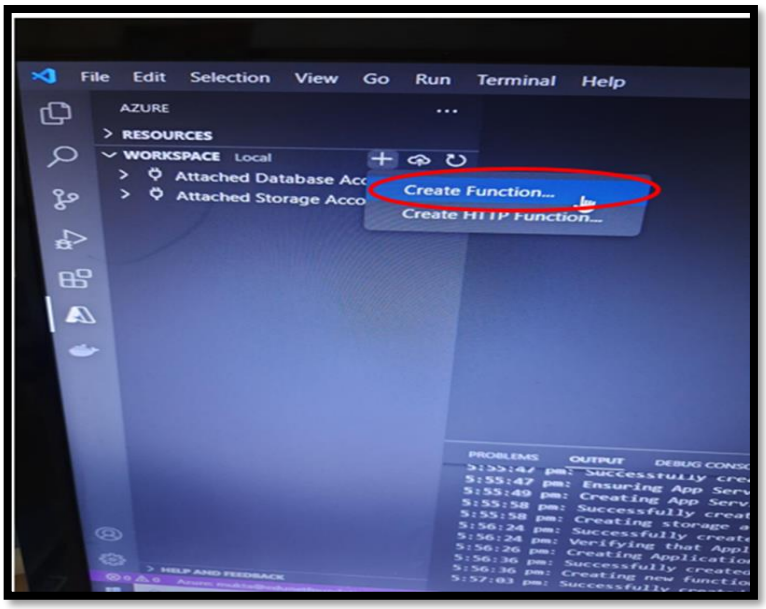
Requirements

Before you begin make sure you have the following requirements in place:

- An **Azure account** with an active subscription. If you don't already have one, you can sign up for a free trial at https://azure.com/free.
- The Azure Functions Core Tools version 4.x.
- Visual Studio Code on one of the supported platforms.
- .NET 6 is the target framework for the steps below.
- The C# extension for Visual Studio Code.
- The Azure Functions extension for Visual Studio Code.

Steps

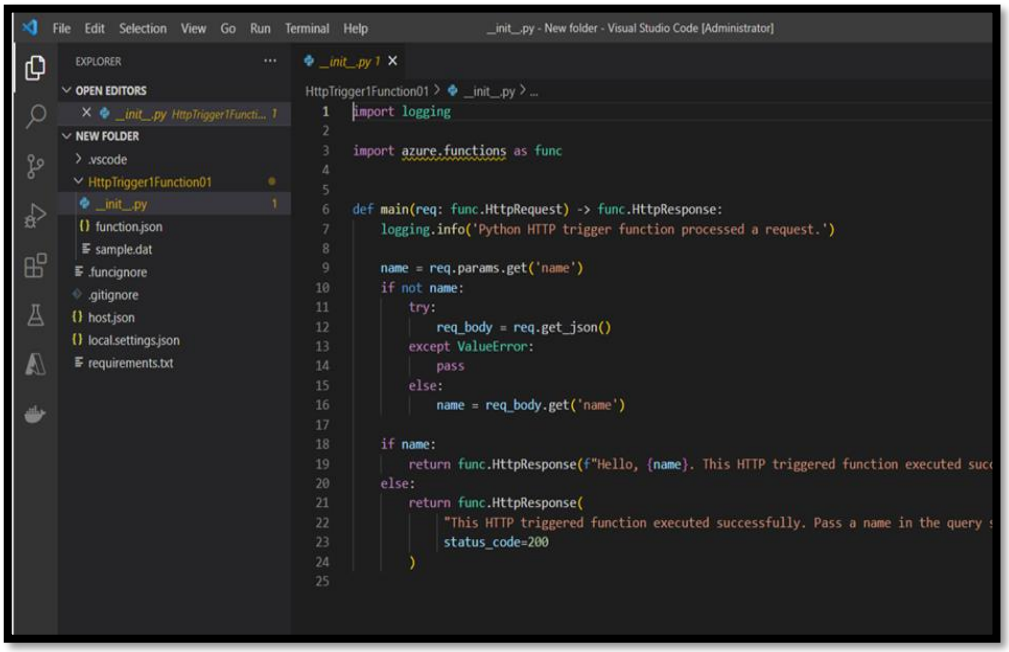
1. Choose the Azure icon in the Activity bar. Then in the **Workspace (local)** area, select the **+** button, choose **Create Function** in the dropdown. When prompted, choose **Create new project**.



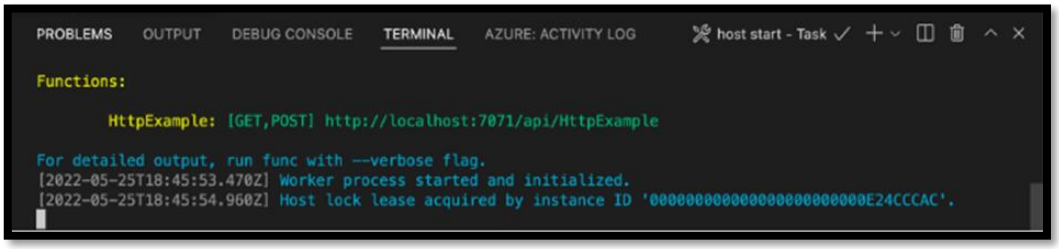
2. Enter following information when prompted

- Select a language - Choose Python.
- Select a Python interpreter to create a virtual environment - Choose your preferred Python interpreter. If an option isn't shown, type in the full path to your Python binary.
- Select a template for your project's first function - Choose HTTP trigger.
- Provide a function name - Enter name of your choice
- Authorization level - Choose Anonymous,
- Select how you would like to open your project - Choose Add to workspace.

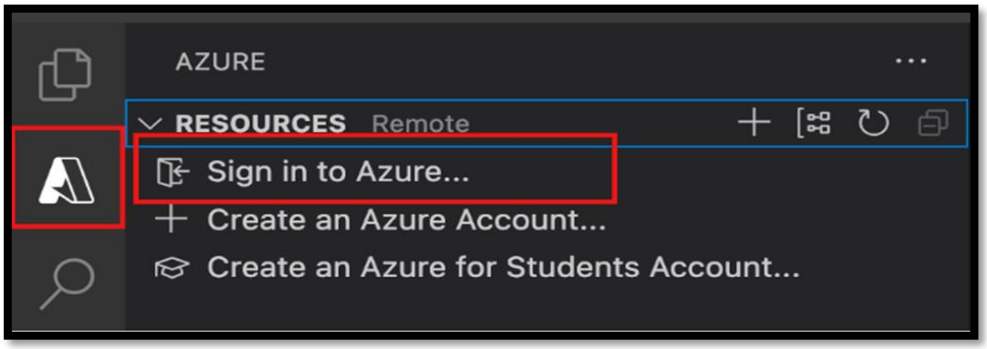
3. Visual Studio Code uses the provided information and generates an Azure Functions project with an HTTP trigger. You can view the local project files in the Explorer.



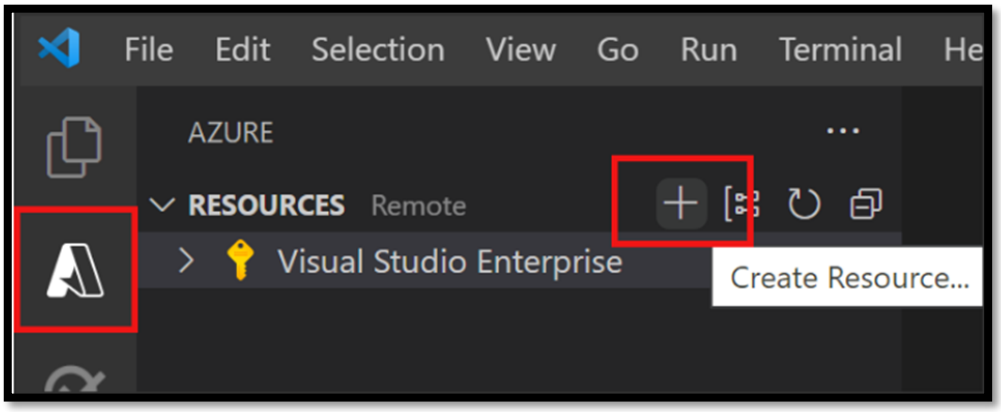
4. To start the function locally, press F5 or the play icon. The **Terminal** panel displays the Output from Core Tools. Your app starts in the **Terminal** panel. You can see the URL endpoint of your HTTP-triggered function running locally.



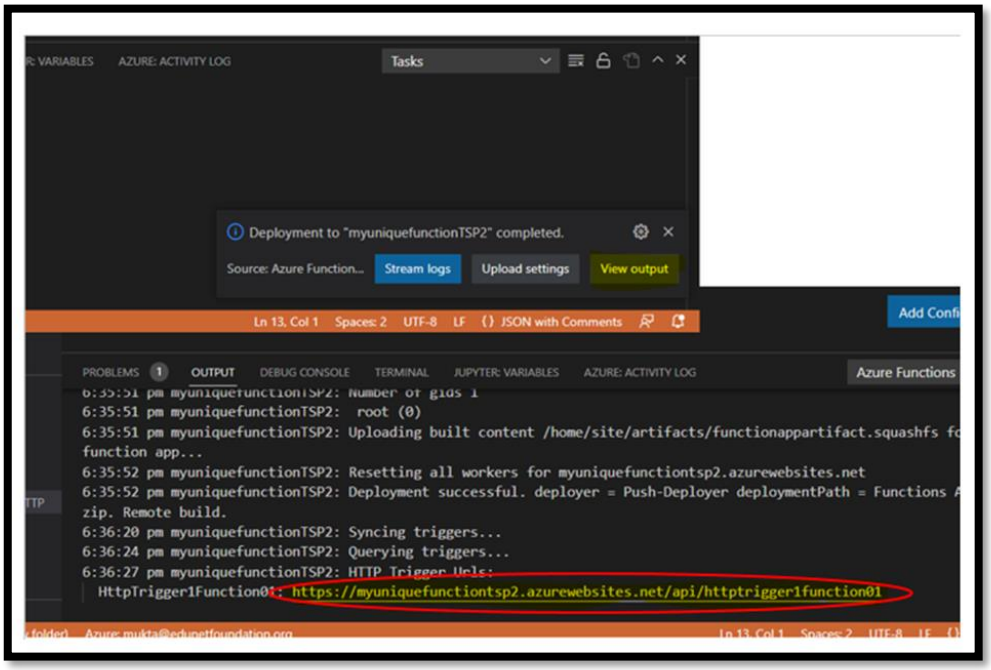
5. Now it's time to use Visual Studio Code to publish the project directly to Azure. Before you can publish your app, you must sign in to Azure.



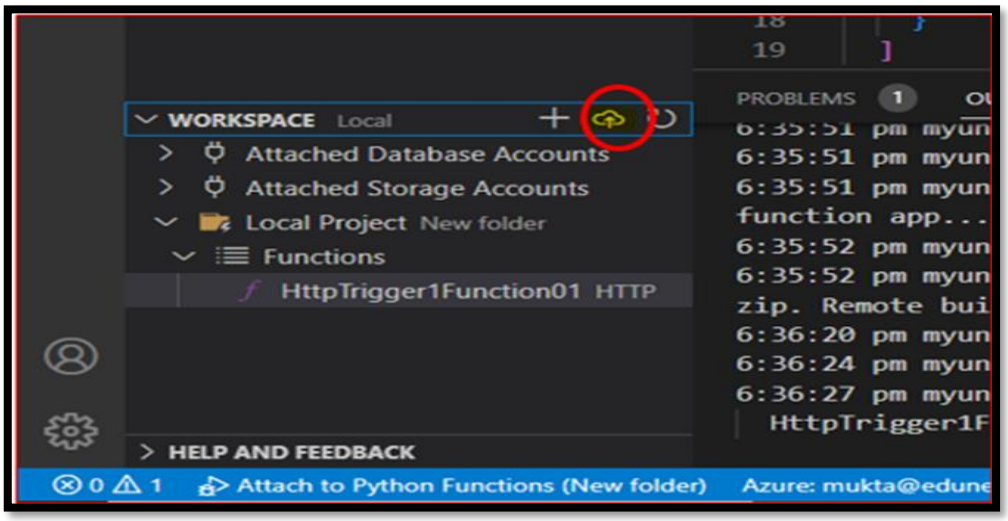
6. Choose the Azure icon in the Activity bar. Then in the **Resources** area, select the **+** icon and choose the **Create Function App in Azure** option.



- Choose the subscription to use.
- Enter a globally unique name for the function app
- Select a runtime stack
- Choose the language version on which you've been running locally.
- Select a location for new resources
- When the creation is complete, you will see the function deployed as follows



7. Deploy to Azure



Click on the cloud icon and select deploy to Azure. Select name of the function to be deployed and press enter. You will get message as follows –

In Enter request body you see the request message body value of { "name": "Azure" }. Press Enter to send this request message to your function.

When the function executes in Azure and returns a response, a notification is raised in Visual Studio Code.