Deploy machine Leaning Model on Azure Cloud

In Azure There are two ways to Deploy the Model

1. Deploy Machine Learning model on Microsoft Azure **Docker Container Instance**
2. Deploying Model as **Web Application** using Azure **App services.**

Note: Azure App Service is a fully managed “**Platform as a Service” (PaaS)** used for building web apps, mobile back ends and RESTful APIs.

Step 1: Build and **train** the model.

Step 2: Create an **API of the model**. (Here we have put it in a flask API).

Step 3: Create the **requirements.txt** file containing all the required libraries.

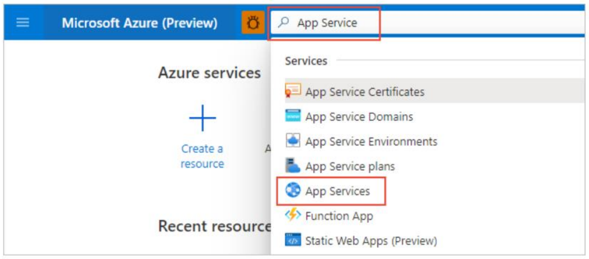
Step 4: Check in Above the code in the **GitHub**

Here we are trying to deploy model as web application using azure App Service

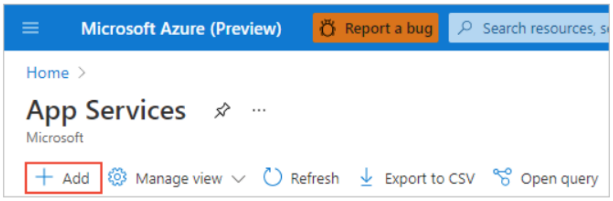
Step 5: Setup the Azure App Service web app

1. Open the Azure portal at https://portal.azure.com and sign in if needed.

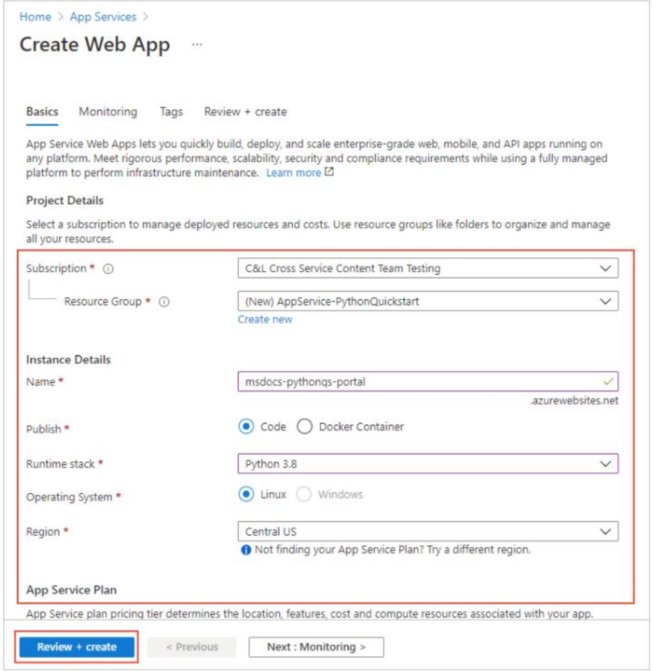
2. In the search bar at the top of the Azure portal, enter "App Service", then select App Services.



3. On the App Services page, select "+Add:



4. On the **Create Web App** page, do the following actions



App Service Web Apps lets you quickly build, deploy, and scale enterprise-grade web, mobile, and API apps running on any platform. Meet rigorous performance, scalability, security and compliance requirements while using a fully managed platform to perform infrastructure maintenance. Learn more

Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * : C&L Cross Service Content Team Testing

Resource Group * : (New) AppService-PythonQuickstart

Create new

Instance Details

Name * : msdocs-pythonqs-portal .azurewebsites.net

Publish * : ● Code ○ Docker Container

Runtime stack * : Python 3.8

Operating System * : ● Linux ○ Windows

Region * : Central US

Not finding your App Service Plan? Try a different region.

App Service Plan

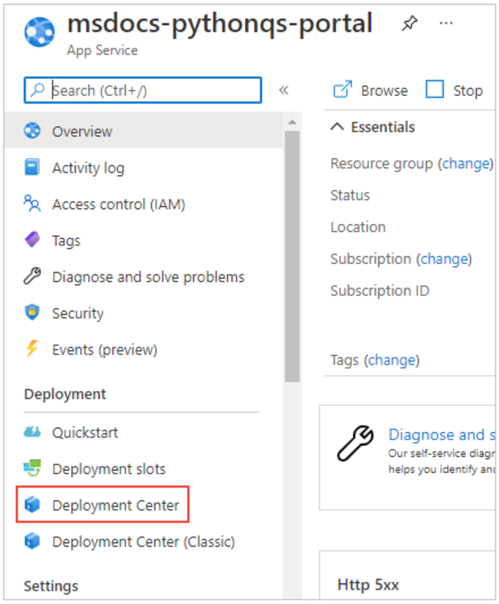
App Service plan pricing tier determines the location, features, cost and compute resources associated with your app.

5. At the bottom of the page, select Review + Create, review the details, then select Create.

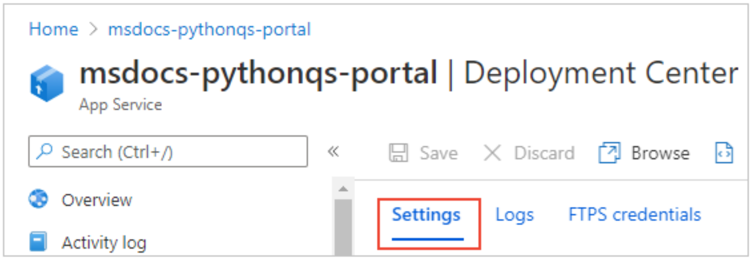
6. When provisioning is complete, select Go to resource to navigate to the new App Service page. Your web app at this point contains only a default page, so the next step deploys sample code.

Step 6: Deploy the sample code

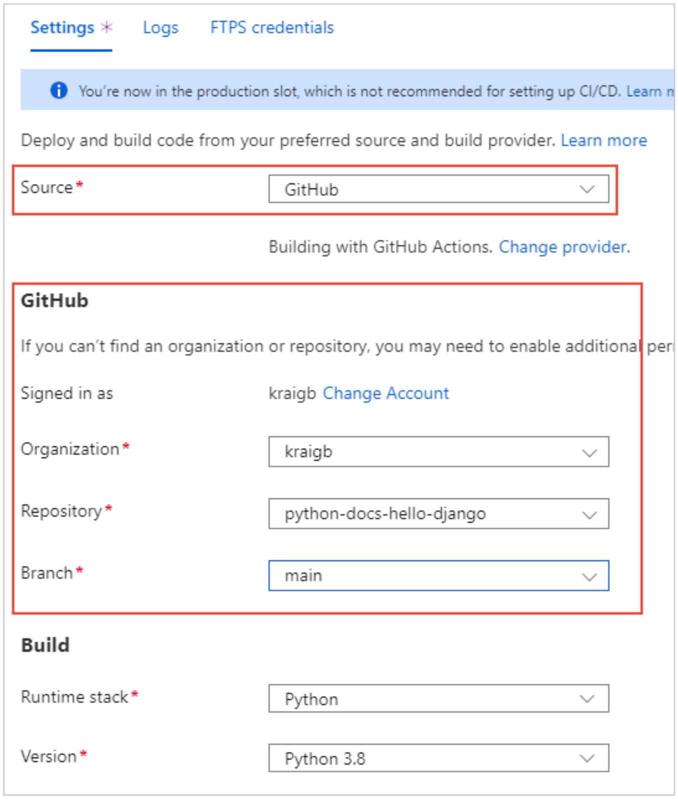
1. On the web app page on the Azure portal, select Deployment Center:



2. On the Deployment Center page, select the Settings tab if it's not already open:



3. Under Source, select GitHub, then on the GitHub form that appears, do the following actions



You're now in the production slot, which is not recommended for setting up CI/CD. Learn m

Deploy and build code from your preferred source and build provider. Learn more

Source * GitHub

Building with GitHub Actions. Change provider.

GitHub

If you can't find an organization or repository, you may need to enable additional per

Signed in as kraigb Change Account

Organization * kraigb

Repository * python-docs-hello-django

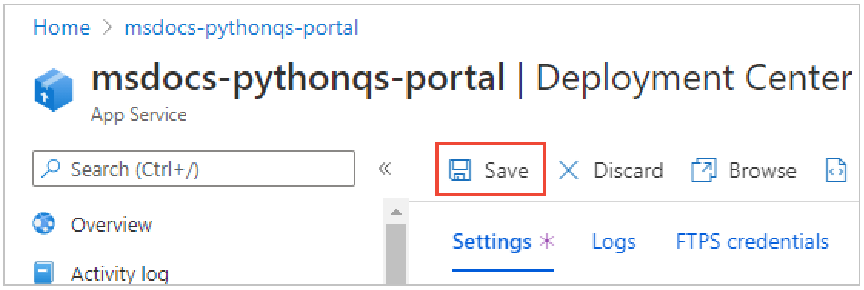
Branch * main

Build

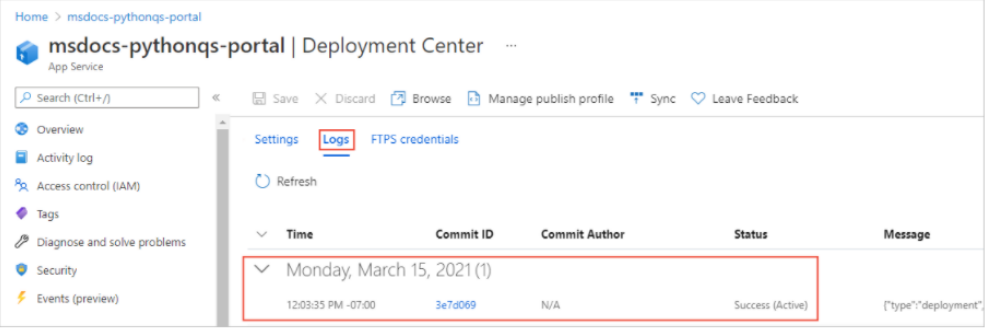
Runtime stack * Python

Version * Python 3.8

4. At the top of the page, select Save to apply the settings.



5. Select the Logs tab to view the status of the deployment. It takes a few minutes to build and deploy the sample and additional logs appear during the process.

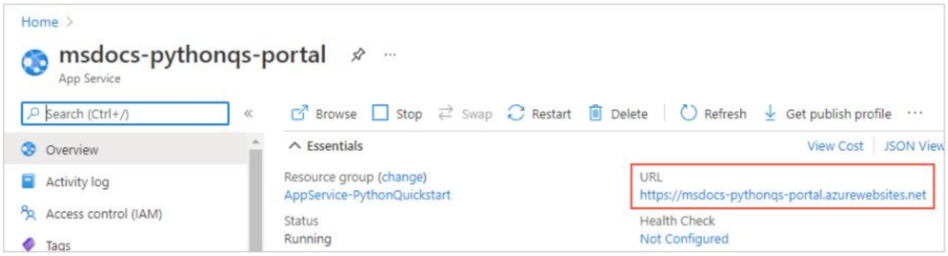


Time	Commit ID	Commit Author	Status	Message
Monday, March 15, 2021 (1)				
12:03:35 PM -07:00	3e7d069	N/A	Success (Active)	{"type":"deployment",

Step 7: Browse to the app

1. Once deployment is complete, select Overview on the left-hand menu to return to the main page for the web app.

2. Select the URL that contains address of the web app



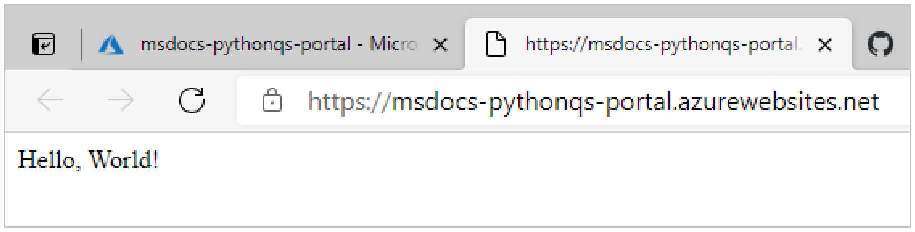
Resource group (change)
AppService-PythonQuickstart

URL
https://msdocs-pythonqs-portal.azurewebsites.net

Status
Running

Health Check
Not Configured

3. Verify that the output of the app is "Hello, World!"


msdocs-pythonqs-portal - Micro
https://msdocs-pythonqs-portal.

https://msdocs-pythonqs-portal.azurewebsites.net

Hello, World!