

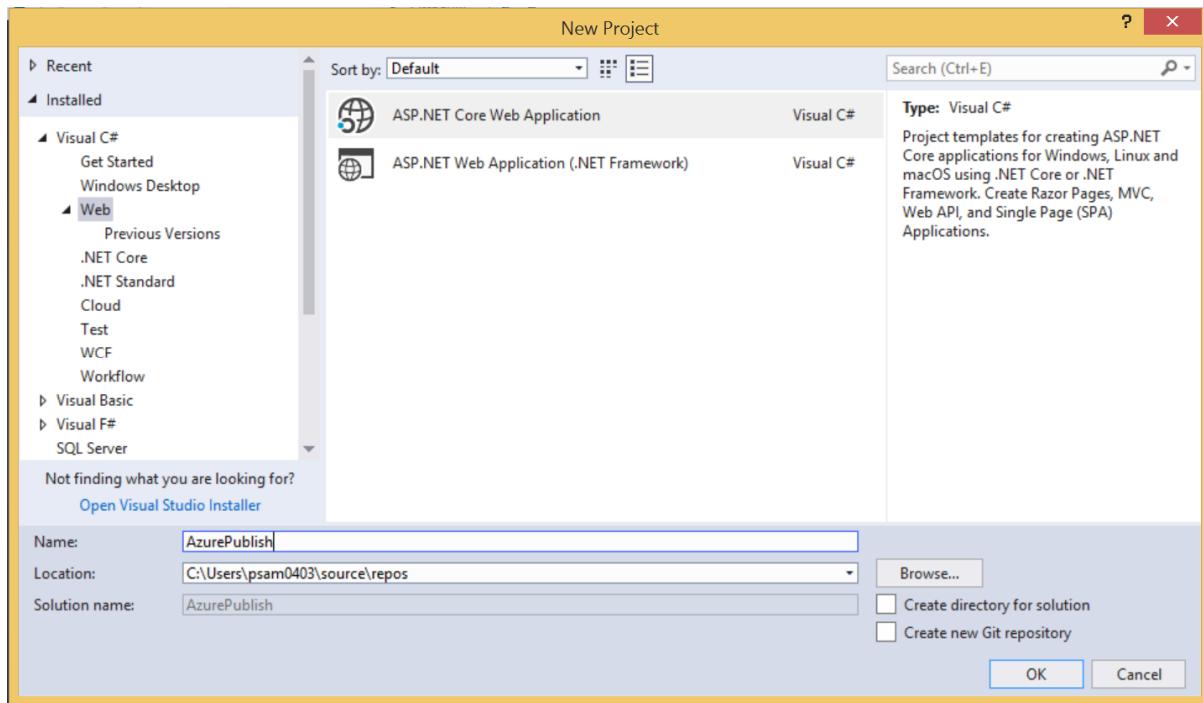
## **How to Publish ASP.NET Core MVC Web application to Azure**

In this tutorial I'm going to show how to:

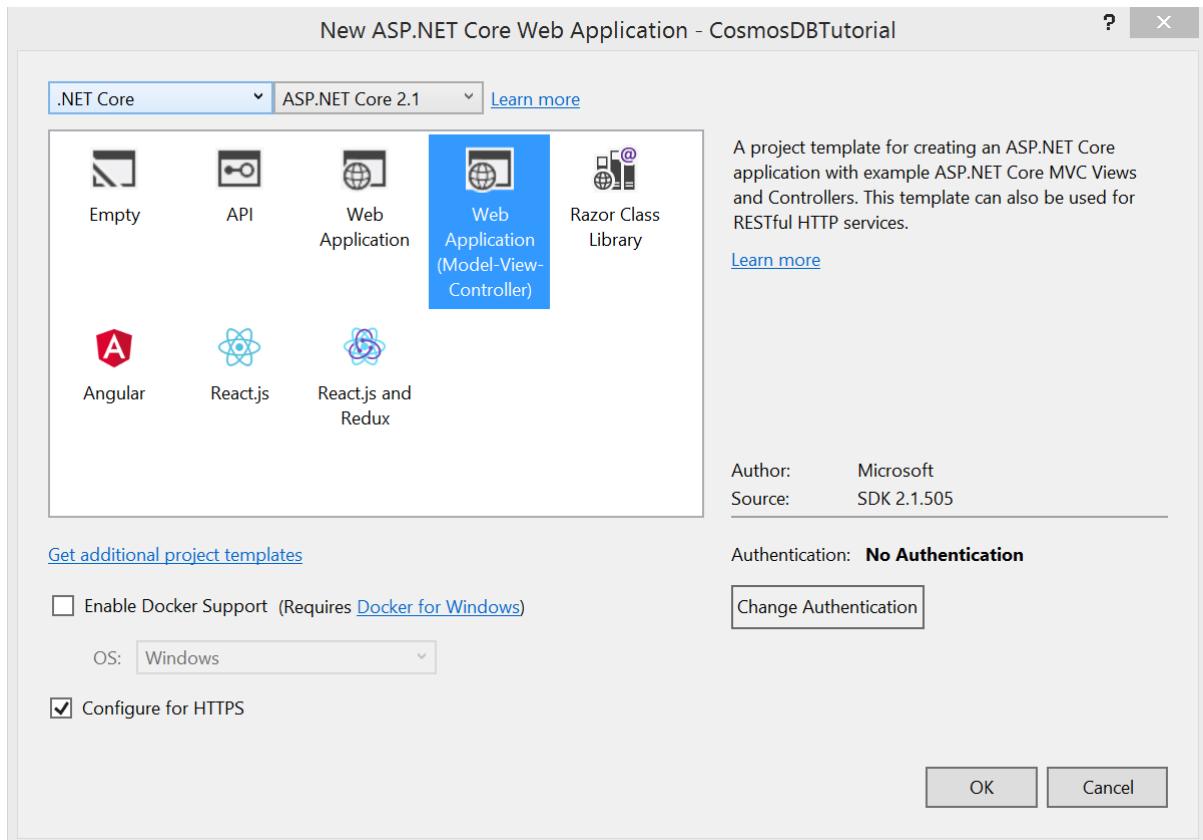
- Create an ASP.NET Core MVC Application
- Create an App Service Plan
- Create an App Service
- Publish the code to Azure

## Step 01: Create an ASP.NET Core MVC Application

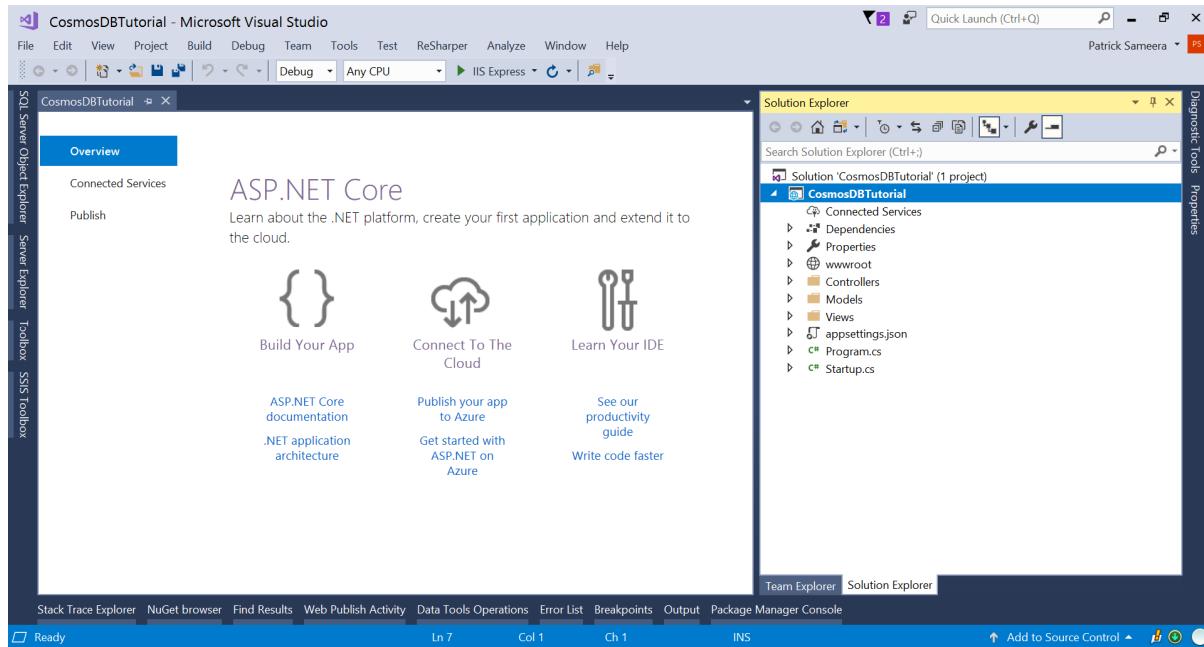
Create a new ASP .Net Core Web Project – Name it AzurePublish.



Select ASP .Net Core 2.1 as the .Net Core version and MVC and click OK.



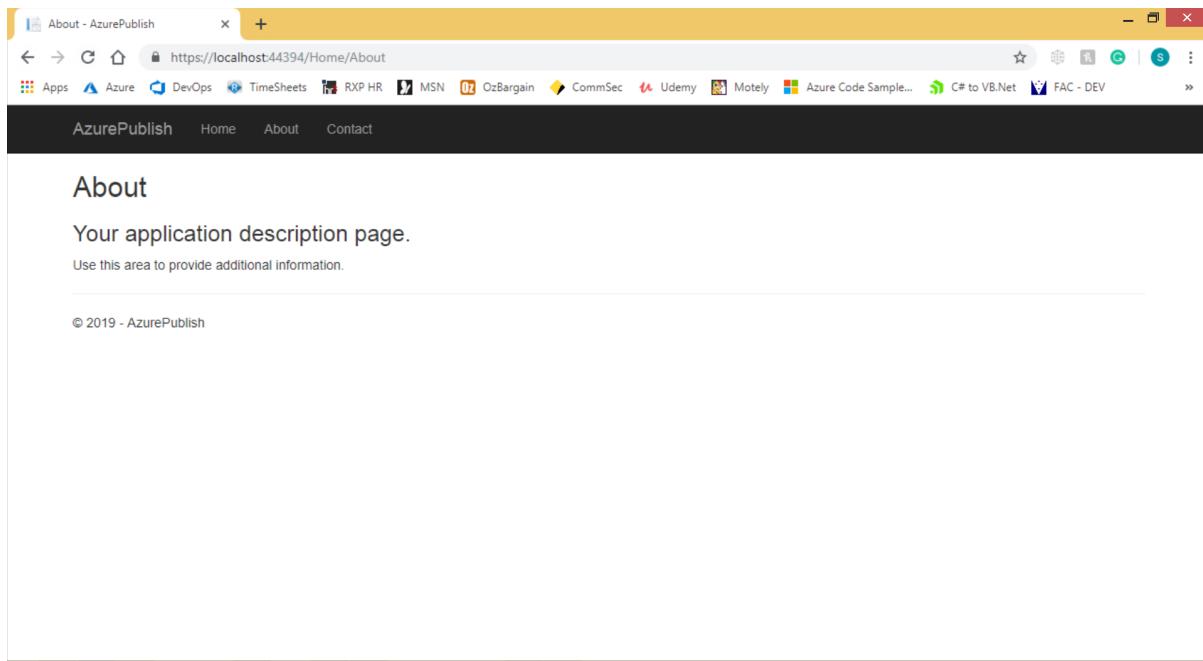
Once Project gets created Click F5 to run the Project, just to make sure it compiles properly.



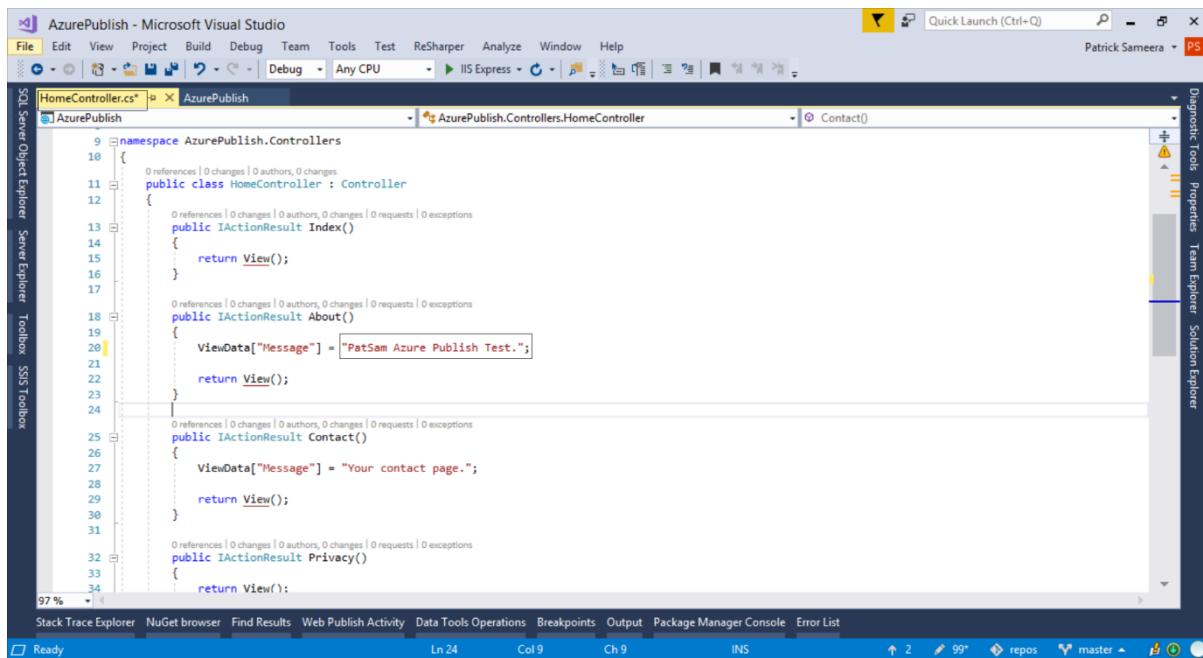
It runs properly.

A screenshot of a web browser displaying the 'Home Page - AzurePublish' at https://localhost:44394. The page features a blue header with the title 'AzurePublish' and navigation links for 'Home', 'About', and 'Contact'. Below the header is a large blue banner with the text 'ASP.NET Core | Windows | Linux | OSX'. On the banner, there's a call-to-action 'Learn how to build ASP.NET apps that can run anywhere.' followed by a 'Learn More' button. At the bottom of the banner, there are three small circular icons. The main content area below the banner is divided into four sections: 'Application uses', 'How to', 'Overview', and 'Run &amp; Deploy', each containing a list of bullet points.

Click on About link.

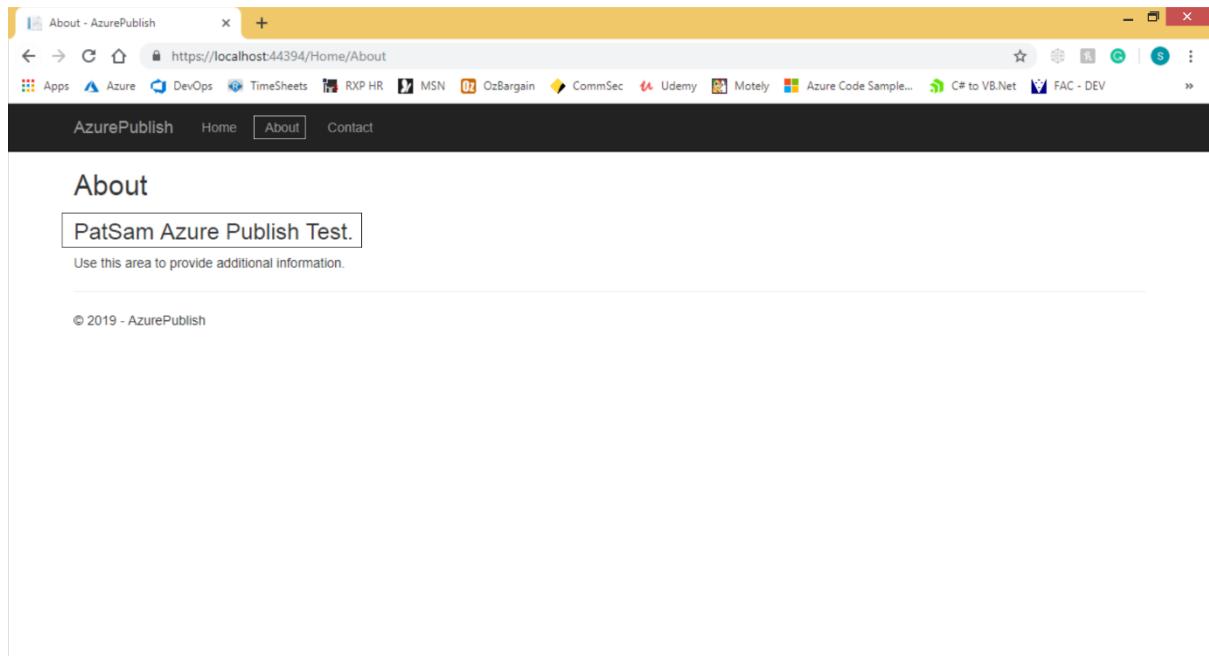


Just to make sure the page gets published correctly do a small change in HomeController.cs



Run the Project again click on About link.

We can see the change we made locally.



## Step 02: Create an App Service Plan

I have a Resource Group already existing and I will be using that resource group for this tutorial.

- Name: patsam-rg
- Location: Central US

The screenshot shows the 'Resource groups' blade in the Azure portal. At the top, there are buttons for '+ Add', 'Edit columns', 'Refresh', 'Export to CSV', 'Assign tags', and 'Feedback'. Below these are filters for 'Filter by name...', 'Subscription == all', 'Location == all', and 'Add filter'. A dropdown menu shows 'No grouping'. The main table lists one record: 'patsam-rg' under 'Name', 'Visual Studio Enterprise - MPN' under 'Subscription', and 'Central US' under 'Location'. There are also 'Subscription ↑↓' and 'Location ↑↓' sorting arrows.

Go to App Service Plans and click + Add button to create a new App Service Plan.

The screenshot shows the 'App Service plans' blade in the Azure portal. At the top, there are buttons for '+ Add', 'Edit columns', 'Refresh', and 'Assign tags'. A message 'Subscriptions: Visual Studio Enterprise – MPN – Don't see a subscription? [Open Directory + Subscription settings]' is displayed. Below are filters for 'Filter by name...', 'All resource groups', 'All locations', 'All tags', and 'No grouping'. The main area shows '0 items' and a table header with columns: 'Name ↑↓', 'Apps', 'Pricing Tier', 'Resource group ↑↓', and 'Subscription ↑↓'. A large cloud icon is centered in the middle of the page. Below it, the text 'No app service plans to display' is shown, followed by a descriptive paragraph about App Service plans and a link to 'Learn more about App Service Plans'. A prominent blue button at the bottom center says 'Create app service plan'.

Provide relevant details.

- Resource group: patsam-rg
- App Service Plan Name: patsam-ps
- Operating system: Windows
- Sku and size: Free F1

The screenshot shows the 'App Service Plan' creation page in the Azure portal. The 'Basics' tab is selected. Under 'Project Details', the subscription is set to 'Visual Studio Enterprise - MPN', resource group to 'patsam-rg', and app name to 'patsam-ps'. The operating system is set to 'Windows'. The region is 'Central US'. In the 'Pricing Tier' section, 'Free F1' is selected. At the bottom, there are buttons for 'Review + create', '< Previous', and 'Next : Tags >'.

Click on Change Size to select the pricing tier. For this example, I'll be using Free F1.

The screenshot shows the 'Spec Picker' dialog. It has three main sections: 'Dev / Test' (for less demanding workloads), 'Production' (for most production workloads), and 'Isolated' (advanced networking and scale). Below these, under 'Recommended pricing tiers', three options are shown: 'F1 Shared infrastructure, 1 GB memory, 60 minutes/day compute, Free' (highlighted with a blue border), 'D1 Shared infrastructure, 1 GB memory, 240 minutes/day compute, 13.03 AUD/Month (Estimated)', and 'B1 100 total ACU, 1.75 GB memory, A-Series compute equivalent, 44.10 AUD/Month (Estimated)'. There is also a link to 'See additional options'. Below this, the 'Included hardware' section lists 'Azure Compute Units (ACU)', 'Memory', and 'Storage'. At the bottom is a large 'Apply' button.

Patrick Sameera Jayalath

Click Review + Create button.

The screenshot shows the 'Microsoft.Web-ASP-Portal-75fa8464-8519 - Overview' page. On the left, there's a navigation menu with 'Overview', 'Inputs', 'Outputs', and 'Template'. The main area has a green checkmark icon and the message 'Your deployment is complete'. Below it, deployment details are listed: Deployment name: Microsoft.Web-ASP-Portal-75fa8464-8519, Subscription: Visual Studio Enterprise – MPN, Start time: 11/14/2019, 9:36:42 PM, Correlation ID: dae92244-1b0b-487b-b758-d479eead3694, and Resource group: patsam-rg. There are sections for 'Deployment details' (with a 'Download' link) and 'Next steps' (with a 'Go to resource' button). A search bar at the top left says 'Search (Ctrl+I)'.

We can see the newly created App Service Plan.

The screenshot shows the 'App Service plans' page. At the top, it says 'App Service plans' and 'RDP Services Ltd'. Below that are buttons for '+ Add', 'Edit columns', 'Refresh', and 'Assign tags'. A note says 'Subscriptions: Visual Studio Enterprise – MPN – Don't see a subscription? Open Directory + Subscription settings'. There are filters for 'Filter by name...', 'All resource groups', 'All locations', 'All tags', and 'No grouping'. The table below shows one item: 'Name' (patsam-sp), 'Apps' (1), 'Pricing Tier' (patsam-sp (F1: Free)), 'Resource group' (patsam-rg), and 'Subscription' (Visual Studio Enterprise – M...).

Name	Apps	Pricing Tier	Resource group	Subscription
patsam-sp	1	patsam-sp (F1: Free)	patsam-rg	Visual Studio Enterprise – M...

### **Step 03: Create an App Service**

Go to App Service and click + Add button to create a new App Service.

The screenshot shows the 'App Services' blade in the Azure portal. At the top, there are navigation links for 'Home > App Services' and a 'RXP Services Ltd' account indicator. Below the header is a toolbar with buttons for '+ Add', 'Edit columns', 'Refresh', 'Export to CSV', 'Assign tags', 'Start', 'Restart', 'Stop', 'Delete', 'Feedback', and 'More'. A search bar labeled 'Filter by name...' is highlighted with a blue border. To its right are filters for 'Subscription == all', 'Resource group == all', 'Location == all', and a 'No grouping' dropdown. Below the toolbar, it says 'Showing 0 to 0 of 0 records.' and lists columns: Name ↑↓, Status ↑↓, Location ↑↓, Pricing Tier ↑↓, App Service Plan ↑↓, Subscription ↑↓, and App. In the center, there's a large gray circular icon with a network-like pattern. Below the icon, the text 'No app services to display' is centered. At the bottom, there's a descriptive paragraph about building web, mobile, and API apps using .NET, Java, Node.js, PHP, and Python, followed by a 'Learn more' link. A prominent blue 'Create app service' button is located at the bottom center.

Provide relevant details.

- Resource group: patsam-rg
- App Service Name: patsam
- Publish: Code
- Runtime stack: .Net Core 2.1 (since we created a .Net Core 2.1 MVC Web Application)
- Operating system: Windows
- App Service Plan: patsam-sp (App Service Plan we created earlier)

The screenshot shows the 'Basics' step of the 'Web App' creation wizard in the Azure portal. The page title is 'Home > App Services > Web App'. The sub-section title is 'Web App'. The tabs at the top are 'Basics' (selected), 'Monitoring', 'Tags', and 'Review + create'. The main content area is titled 'Project Details' and includes fields for 'Subscription' (Visual Studio Enterprise – MPN) and 'Resource Group' (patsam-rg). Below this is the 'Instance Details' section with fields for 'Name' (patsam), 'Publish' (Code selected), 'Runtime stack' (.NET Core 2.1 (LTS)), 'Operating System' (Windows selected), and 'Region' (Central US). The 'App Service Plan' section shows a dropdown for 'Windows Plan (Central US)' which is currently empty. At the bottom are buttons for 'Review + create', '< Previous', and 'Next : Monitoring >'.

Click Review + Create button.

The screenshot shows the 'Microsoft.Web-WebApp-Portal-1a7942a8-8d9e - Overview' page. At the top, there's a search bar and navigation buttons for Delete, Cancel, Redeploy, and Refresh. On the left, a sidebar has 'Overview' selected, along with 'Inputs', 'Outputs', and 'Template'. The main content area displays a green checkmark icon and the message 'Your deployment is complete'. It provides deployment details: Deployment name: Microsoft.Web-WebApp-Portal-1a7942a8-8d9e, Start time: 11/14/2019, 9:45:40 PM, Subscription: Visual Studio Enterprise – MPN, Correlation ID: 6c1d0f77-207d-49d9-b08d-a14b6b072, and Resource group: patsam-rg. There are collapsed sections for 'Deployment details' (with a download link) and 'Next steps', and a 'Go to resource' button.

We can see the newly created App Service.

The screenshot shows the 'App Services' blade. At the top, there are buttons for Add, Edit columns, Refresh, Export to CSV, Assign tags, Start, Restart, Stop, Delete, Feedback, and Leave preview. Below that are filter options for Name, Subscription, Resource group, Location, and an 'Add filter' button, along with a 'No grouping' dropdown. A message indicates 'Showing 1 to 1 of 1 records.' A table lists one record: 'patsam' (Status: Running, Location: Central US, Pricing Tier: Free, App Service Plan: patsam-sp, Subscription: Visual Studio Enterpri..., App Type: Web App).

Next go inside the newly created App Service. Click on it.

The screenshot shows the 'App Services' blade in the Azure portal. It lists one record: 'patsam'. The details are as follows:

Name	Status	Location	Pricing Tier	App Service Plan	Subscription	App Type
patsam	Running	Central US	Free	patsam-sp	Visual Studio Enterprise - MPN	Web App

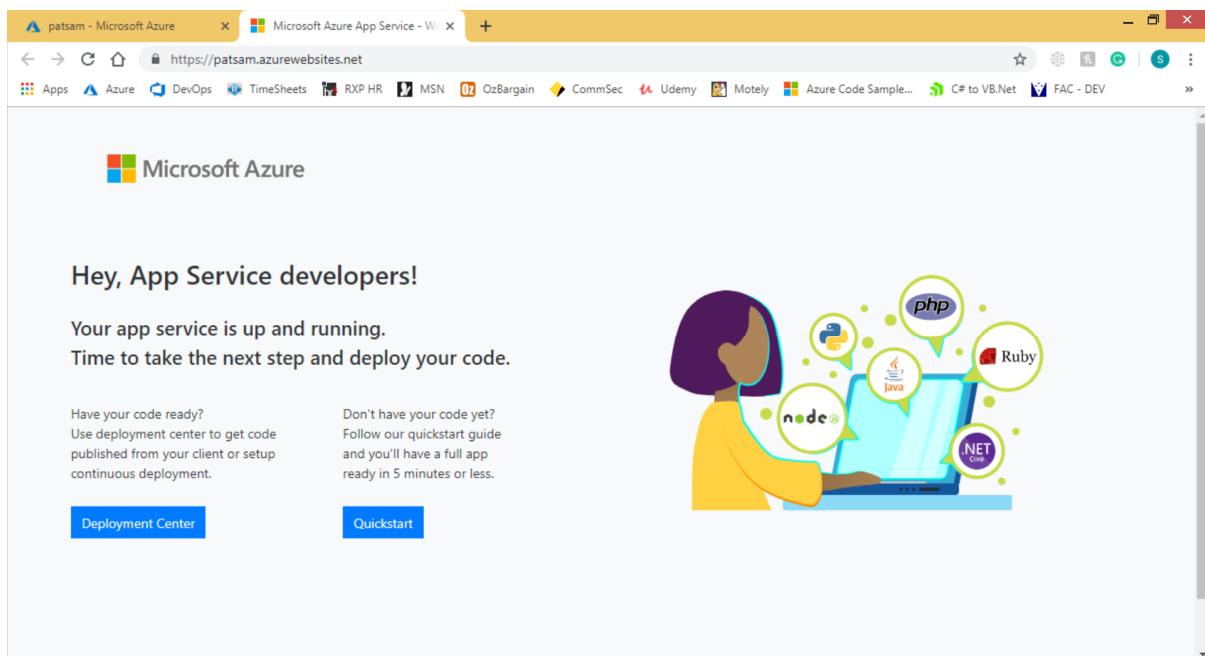
Click on Browse button to check whether we have created the App Service successfully.

The screenshot shows the 'Overview' page for the 'patsam' app service. Key details displayed include:

- Resource group: patsam-rg
- Status: Running
- Location: Central US
- Subscription: Visual Studio Enterprise - MPN
- URL: https://patsam.azurewebsites.net
- App Service Plan: patsam-sp (F1: Free)
- FTP/deployment username: patsam\deploy-patrick-sameera
- FTP hostname: ftp://waws-prod-dm1-155.ftp.azurewebsites.windows.net
- FTPS hostname: https://waws-prod-dm1-155.ftp.azurewebsites.windows.net

On the left sidebar, the 'Overview' tab is selected. Other tabs include Activity log, Access control (IAM), Tags, Diagnose and solve problems, Security, Deployment (Quickstart, Deployment slots, Deployment Center), Settings, and Configuration.

We can see it's working fine.



A screenshot of a web browser showing the Microsoft Azure App Service landing page at https://patsam.azurewebsites.net. The page features a yellow header bar with the Microsoft Azure logo and a navigation bar with links like Apps, Azure, DevOps, TimeSheets, RXP HR, MSN, OzBargain, CommSec, Udemy, Motely, Azure Code Sample..., C# to VB.Net, and FAC - DEV. Below the header, there's a main content area with the Microsoft Azure logo and a greeting: "Hey, App Service developers! Your app service is up and running. Time to take the next step and deploy your code." It includes two buttons: "Deployment Center" and "Quickstart". To the right, there's a cartoon illustration of a person working on a laptop, surrounded by icons for various programming languages: PHP, Python, Java, Ruby, .NET Core, and Node.js.

Next go to the App Service Plan we created. Click on it.

Home > App Service plans

**App Service plans**

RXP Services Ltd

+ Add Edit columns Refresh Assign tags

**Subscriptions:** Visual Studio Enterprise – MPN – Don't see a subscription? [Open Directory + Subscription settings](#)

Filter by name... All resource groups All locations All tags No grouping

1 items

Name	Apps	Pricing Tier	Resource group	Subscription	...
patsam-sp	1	patsam-sp (F1: Free)	patsam-rg	Visual Studio Enterprise – MPN	...

Under Apps tab now we can see the App Service (Web App) we created earlier.

Home > App Service plans > patsam-sp - Apps

**patsam-sp - Apps** App Service plan

Search (Ctrl+ /)

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Settings

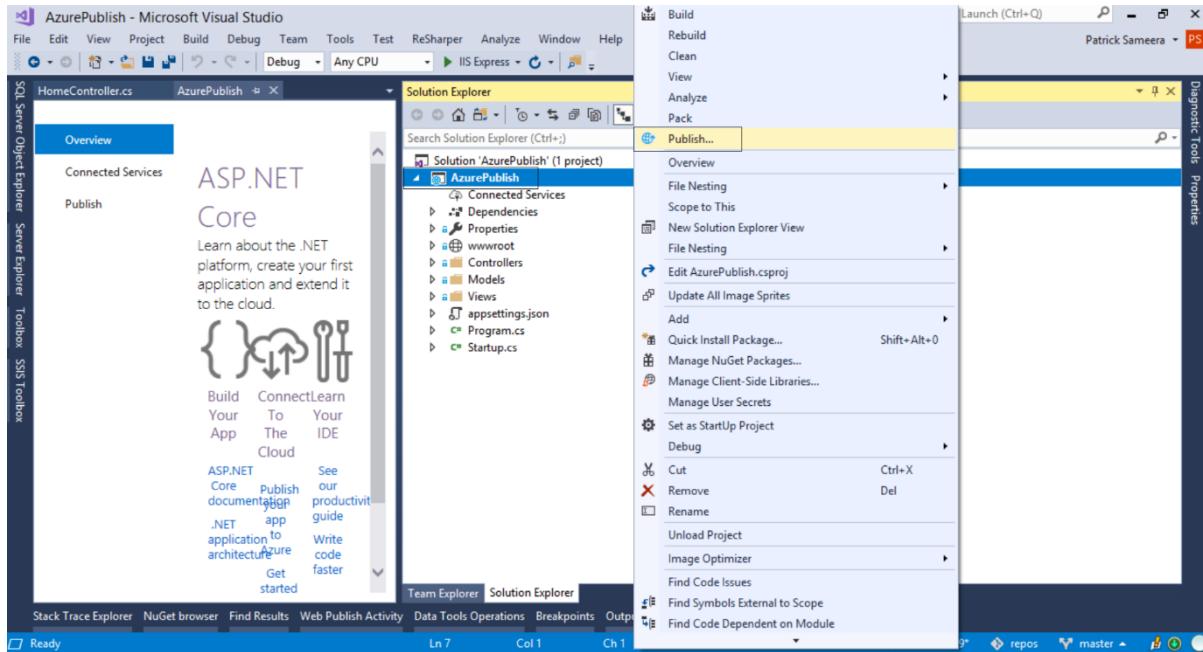
Apps

Name Type Resource Group Status

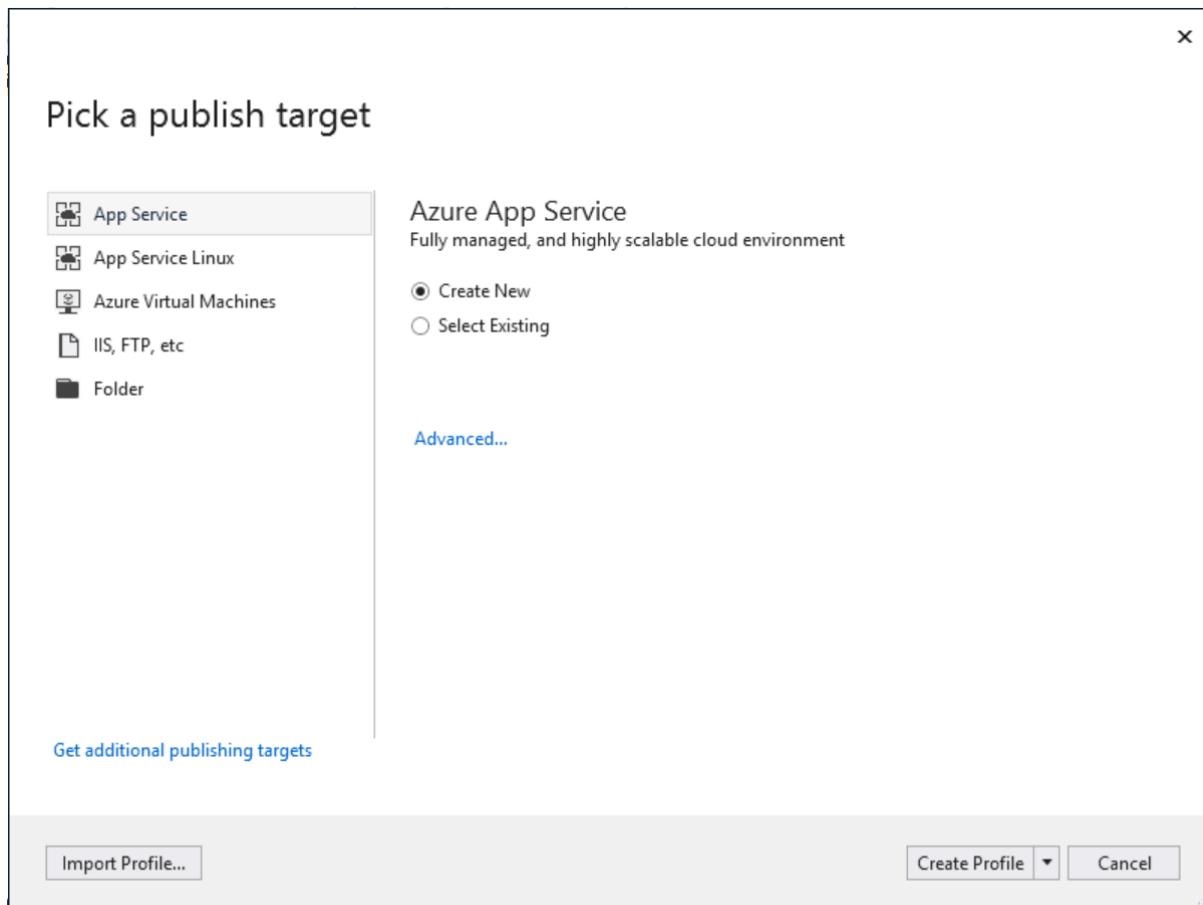
Name	Type	Resource Group	Status
patsam	app	patsam-rg	Running

## Step 04: Publish the code to Azure

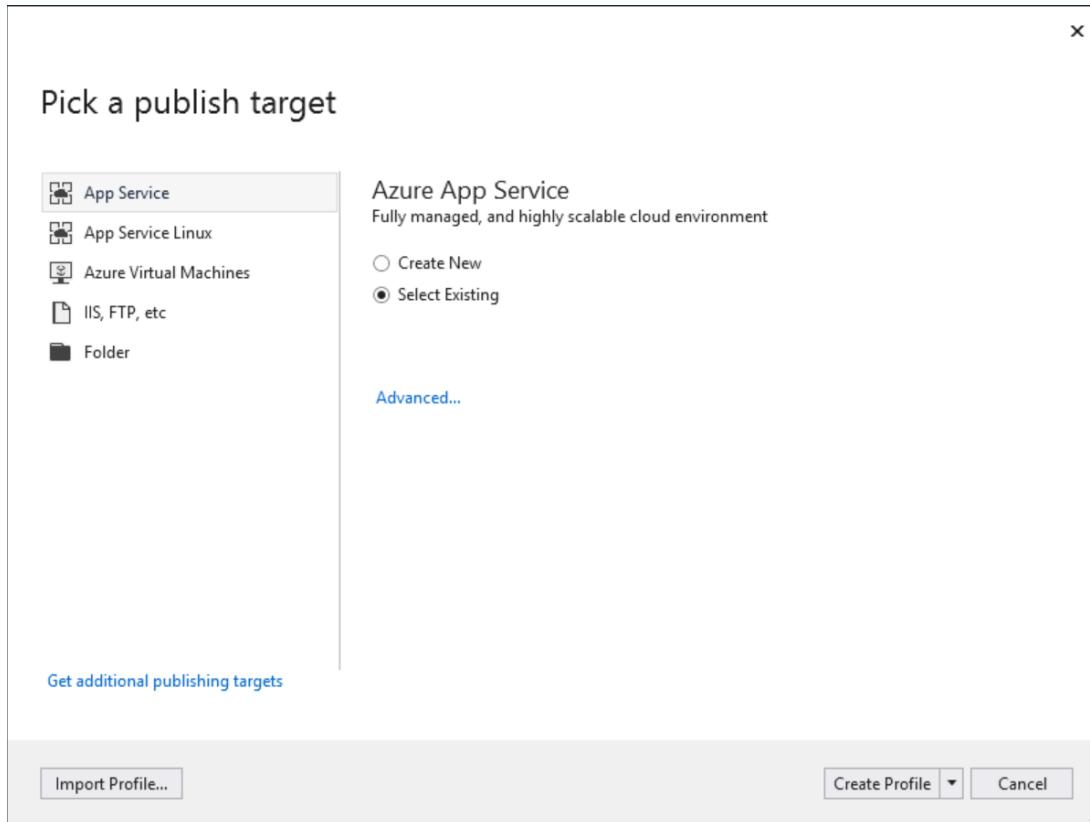
In Visual Studio go Solution Explorer, right click on the Project and select Publish.



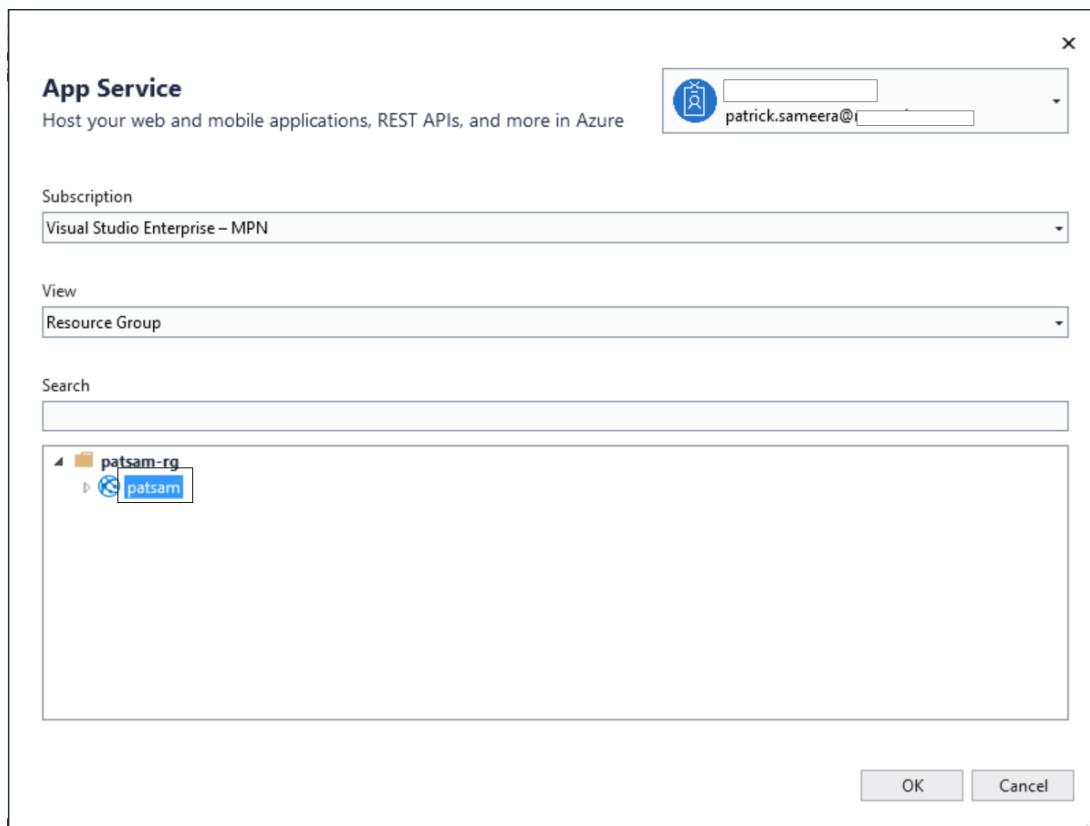
You will get to see bellow window.



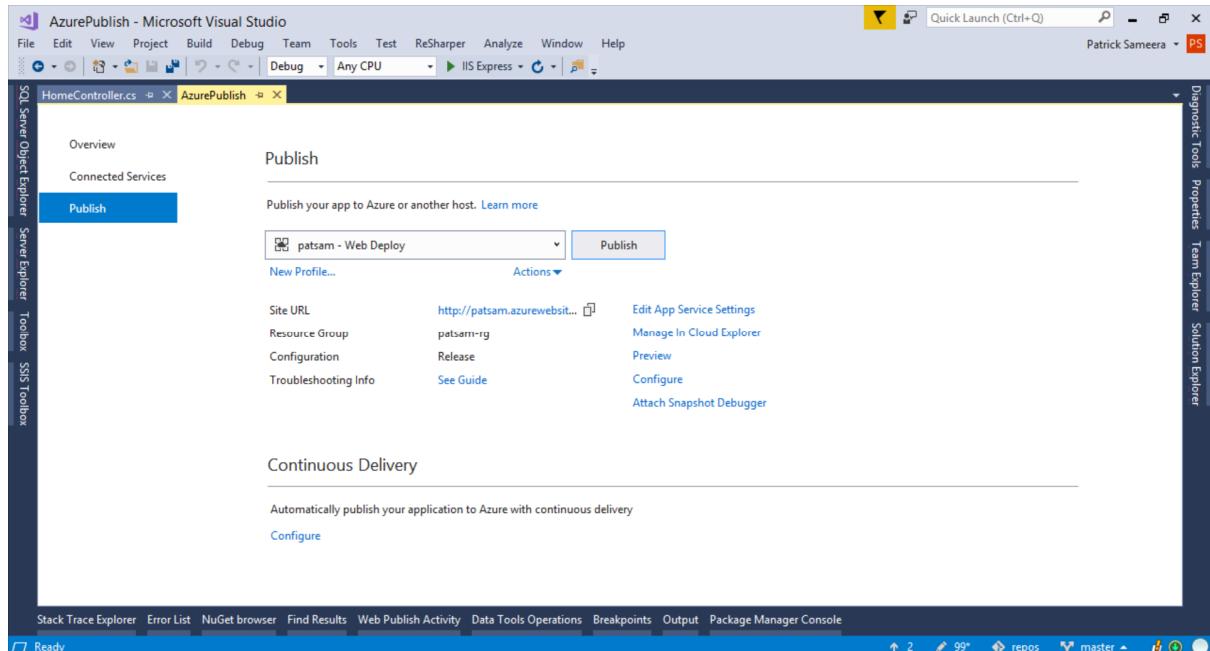
We are going to create a Publish Profile. Select “Select Existing” option and click Create Profile button.



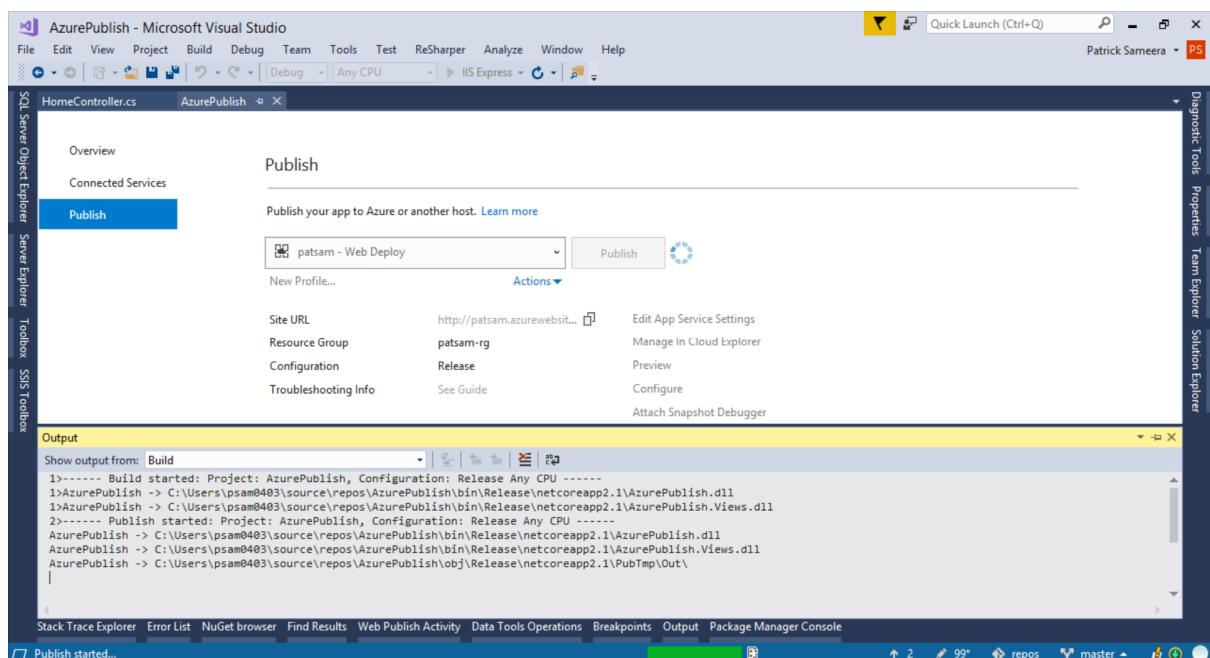
Select the relevant Subscription and select the App Service we created earlier and click OK.



It will setup the Publish Profile for us. Click Publish.

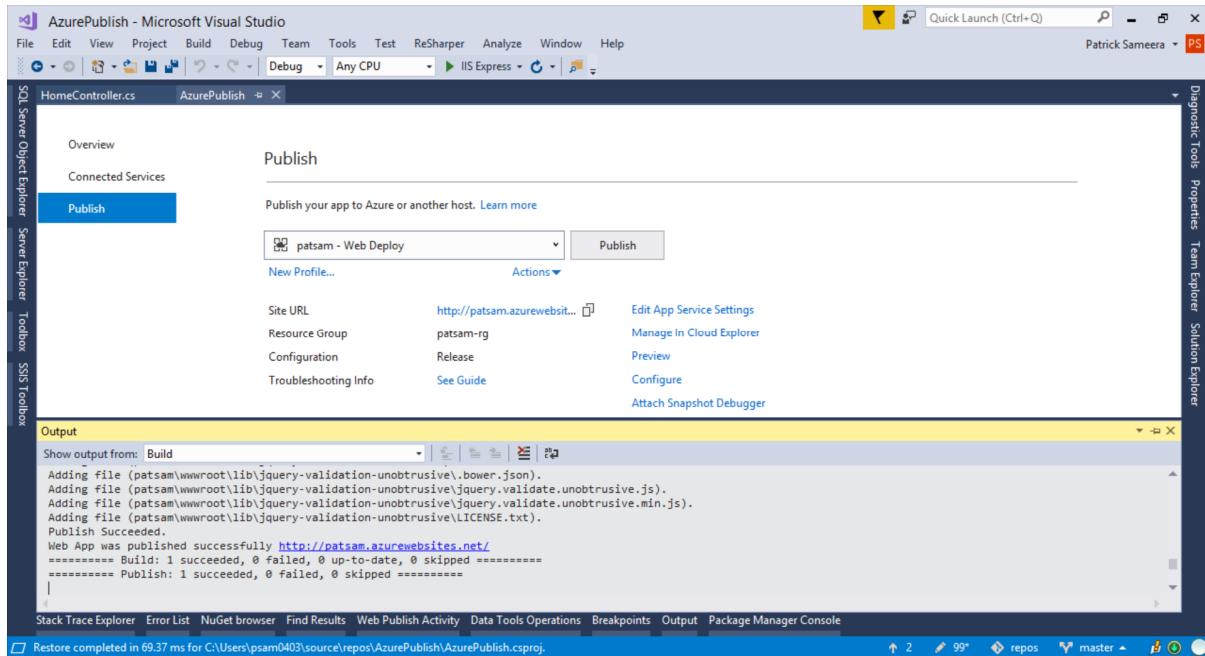


It will start publishing the content to Azure.



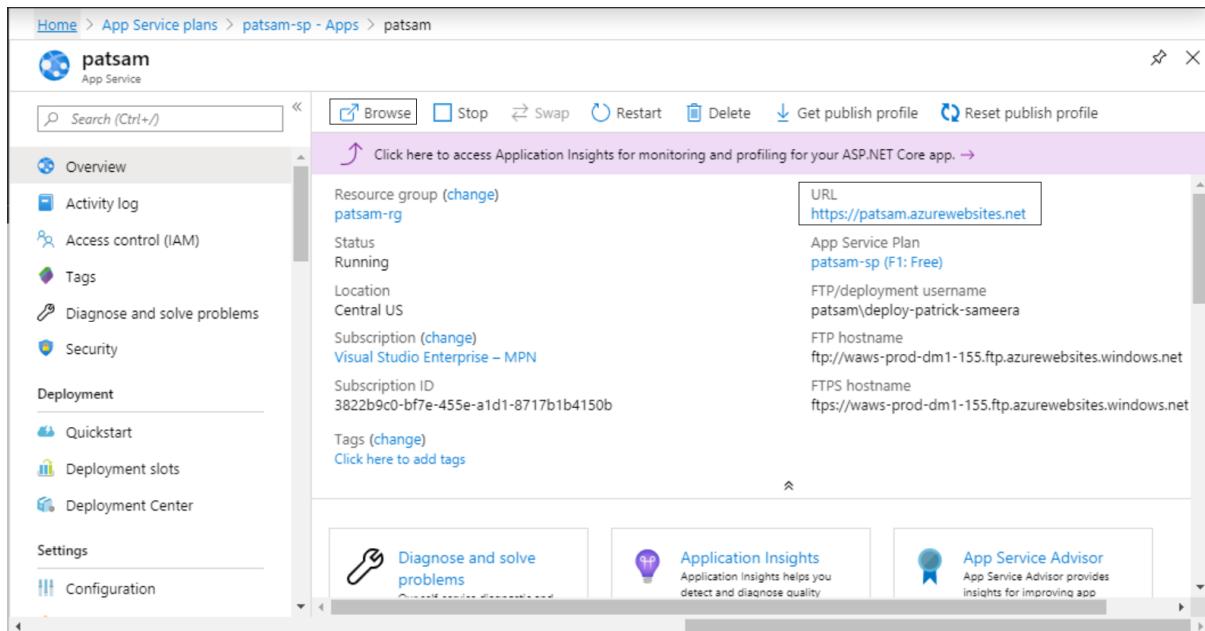
Make sure it's been Published correctly.

Check the Output window for the Success message.



Go to App Service again and click Browse button or manually copy the URL and paste it to a browser.

<https://patsam.azurewebsites.net>



If you go the About page we can see the changes we made.

The screenshot shows a Microsoft Edge browser window with three tabs open. The active tab is titled 'About - AzurePublish' and displays the URL 'patsam.azurewebsites.net/Home/About'. The browser's address bar also shows 'patsam.azurewebsites.net/Home/About'. The page content is titled 'About' and contains the text 'PatSam Azure Publish Test.' within a box. Below this, there is a placeholder text 'Use this area to provide additional information.' At the bottom of the page, a copyright notice reads '© 2019 - AzurePublish'. The browser interface includes a navigation bar with back, forward, and search icons, as well as a toolbar with various links and settings. The overall layout is clean and professional, typical of a corporate website.