

Configure CI/CD Pipeline in Azure DevOps

Lab 1: Creating the project

Lab 2: Continuous Integration - Build

Lab 3: Create an Azure Web App

Lab 4: Continuous Deployment – Release

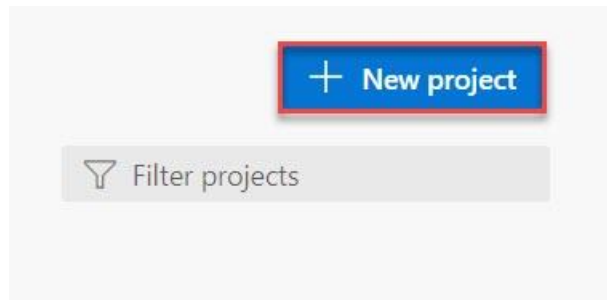
Lab 1: Creating the project

Step 1: Open **Azure DevOps**

<https://dev.azure.com>

Step 2: Create New Azure DevOps project

+ New Project or + Create Project



Project Name: **DevOpsProject**

Visibility: **Private**

Click on + **Create project**

Create new project



Project name *

DevOpsProject



Description

Visibility



Public

Anyone on the internet can view the project. Certain features like TFVC are not supported.



Private

Only people you give access to will be able to view this project.

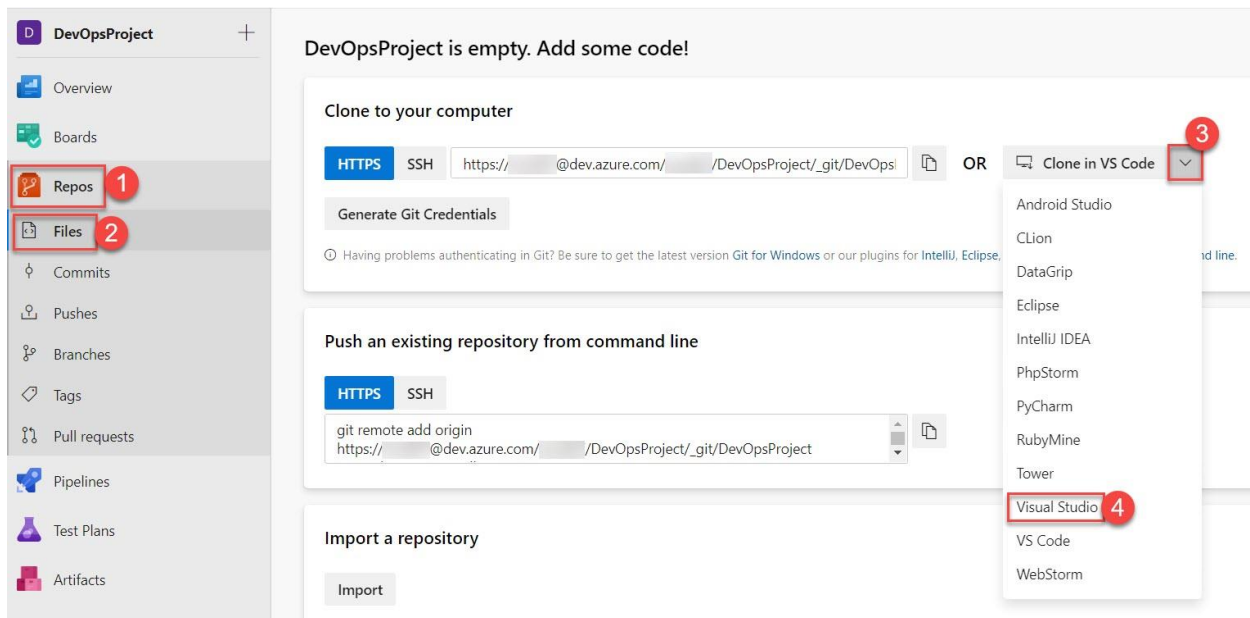


Advanced

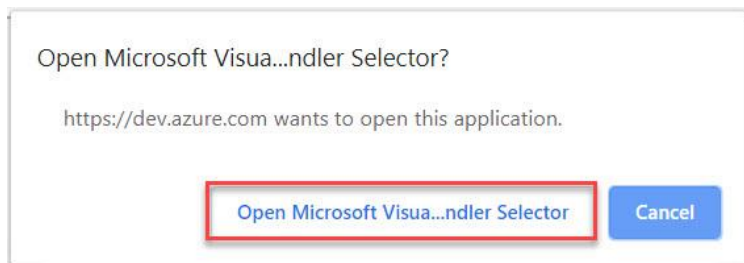
Cancel

Create

Step 3: First Select Repos -> Files -> Select Visual Studio

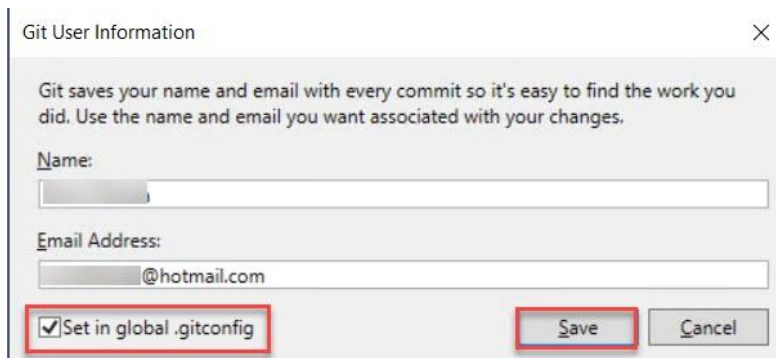


Step 4: Select Open Microsoft Visual Studio Handler Selector option

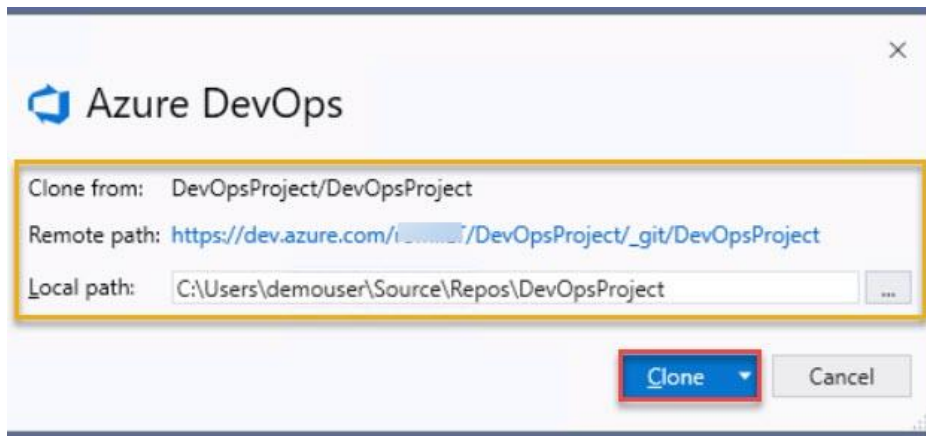


Note: if it will prompt sign in dialog so enter credentials

Go with default settings & click on **Save** button

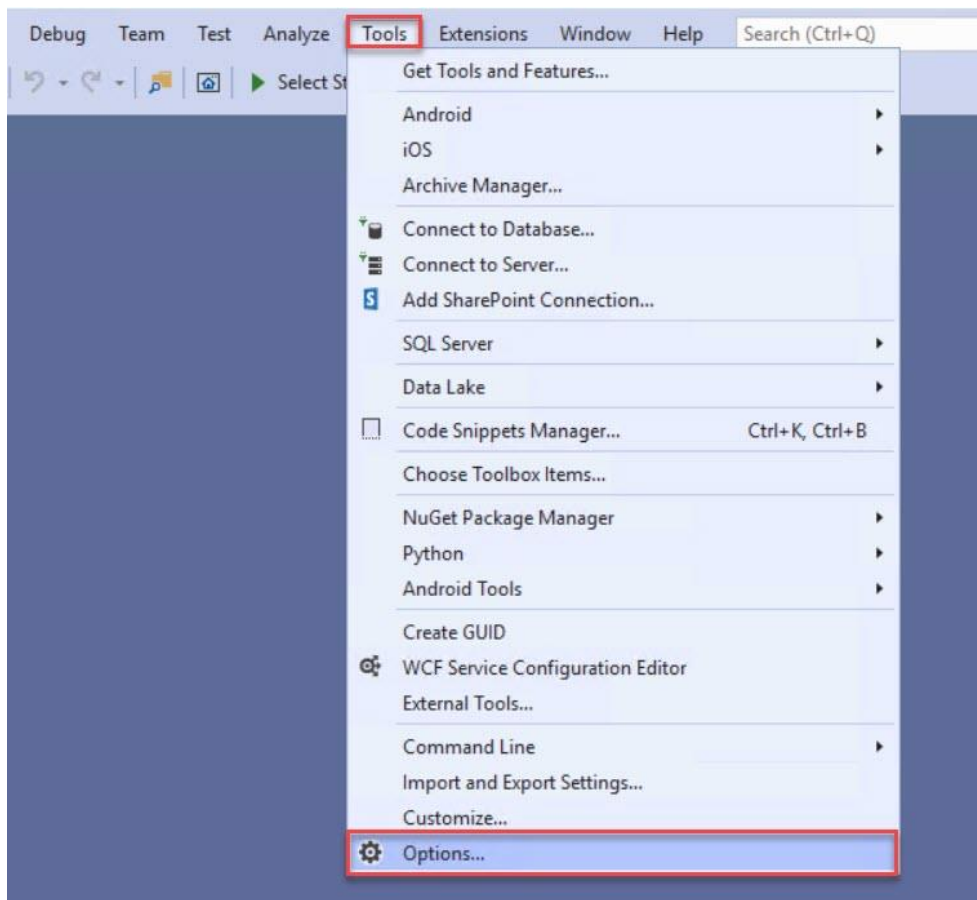


Step 5: Automatic Clone dialog will open and click on **Clone** button



Change Git experience

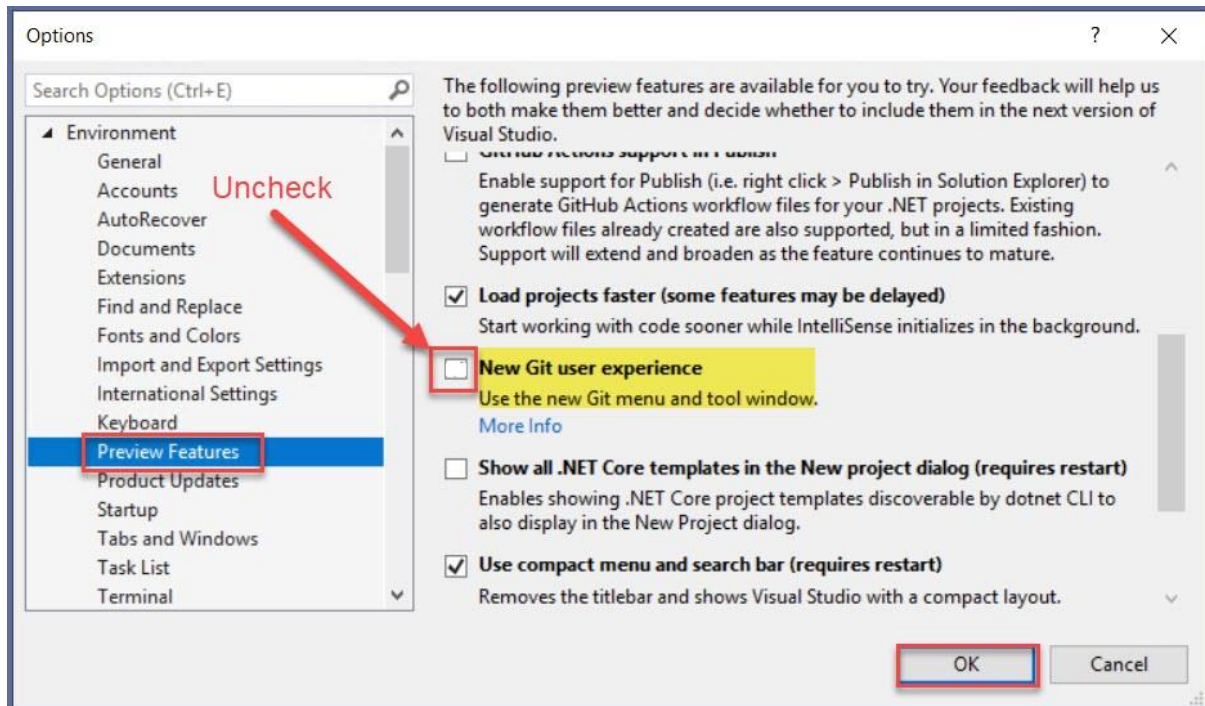
Tools -> Options...



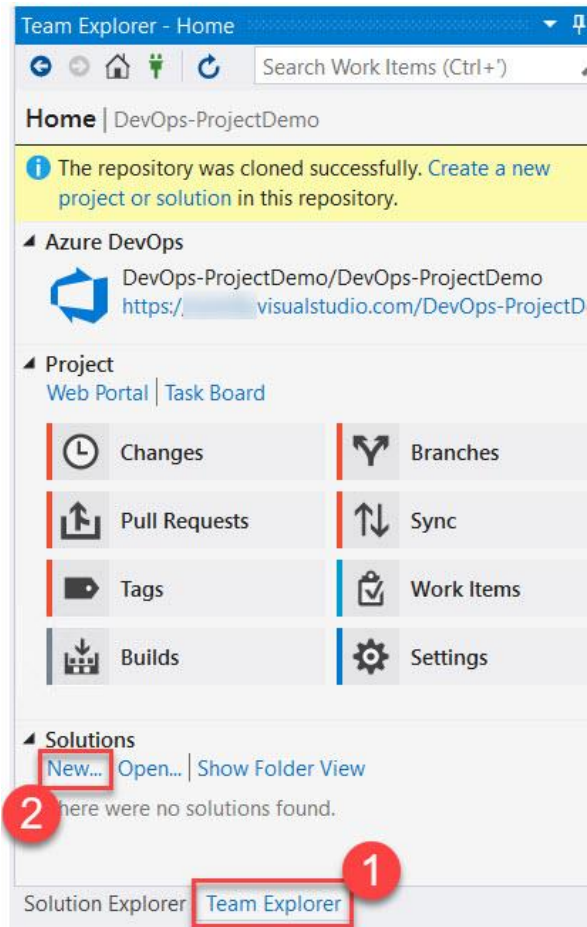
Select **Preview Features**

Uncheck New Git use experience

Click on **OK** button



Step 6: Select **Team Explorer** tab and Create New Project by selecting **New** option



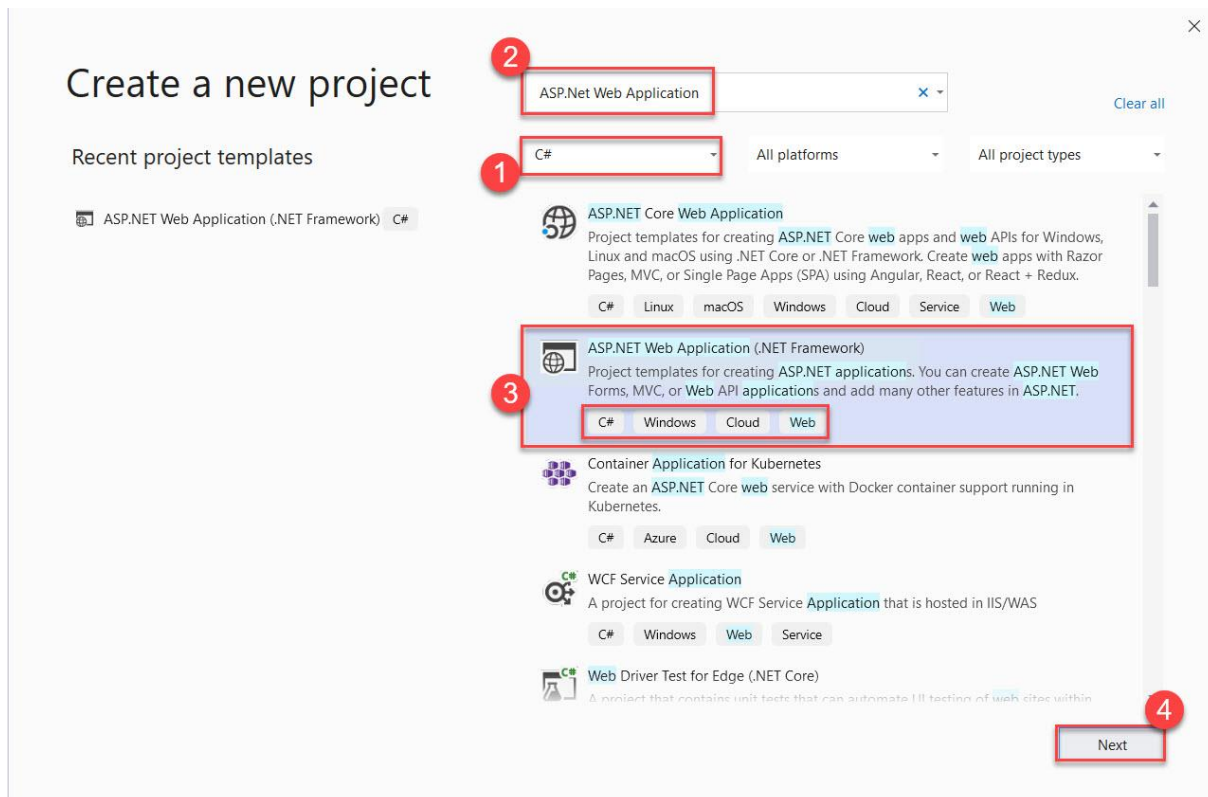
Step 7: Create New Project

Language: **C#**

Search for **ASP.Net Web Application**

Select **ASP.NET Web Application (.NET Framework)**

Click on **Next** button



Step 8: Enter Project Name: **WebAppDemo**

Click on **Create** button

Configure your new project

ASP.NET Web Application (.NET Framework) C# Windows Cloud Web

Project name

WebAppDemo

Location

C:\Users\demouser\source\repos\DevOpsProject

Solution

Create new solution

Solution name ⓘ

WebAppDemo

☐ Place solution and project in the same directory

Framework


.NET Framework 4.7.2


Back Create


Step 9: Choose MVC Template and Add Test Project


Click on **Create** button


Create a new ASP.NET Web Application

**Empty**
An empty project template for creating ASP.NET applications. This template does not have any content in it.

**Web Forms**
A project template for creating ASP.NET Web Forms applications. ASP.NET Web Forms lets you build dynamic websites using a familiar drag-and-drop, event-driven model. A design surface and hundreds of controls and components let you rapidly build sophisticated, powerful UI-driven sites with data access.

**MVC**
A project template for creating ASP.NET MVC applications. ASP.NET MVC allows you to build applications using the Model-View-Controller architecture. ASP.NET MVC includes many features that enable fast, test-driven development for creating applications that use the latest standards.

**Web API**
A project template for creating RESTful HTTP services that can reach a broad range of clients including browsers and mobile devices.

**Single Page Application**
A project template for creating rich client side JavaScript driven HTML5 applications using ASP.NET Web API. Single Page Applications provide a rich user experience which includes client-side interactions using HTML5, CSS3, and JavaScript.

Authentication
No Authentication
[Change](#)

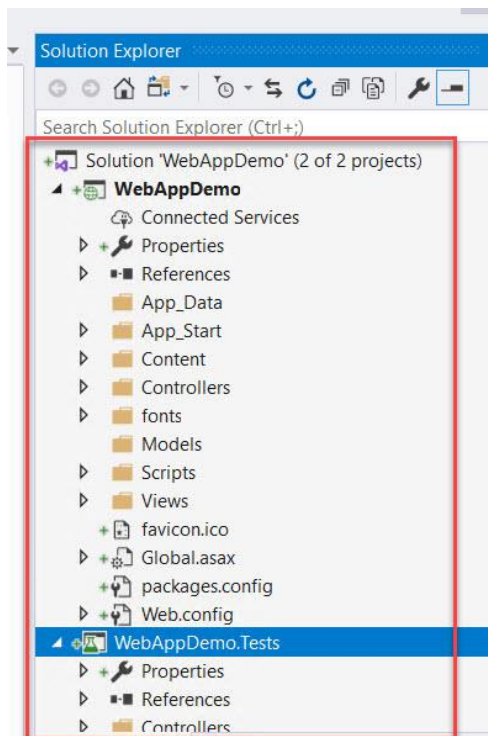
Add folders & core references
☐ Web Forms
☒ MVC
☐ Web API

Advanced
☒ Configure for HTTPS
☐ Docker support
(Requires [Docker Desktop](#))
☒ Also create a project for unit tests
WebAppDemo.Tests

Back

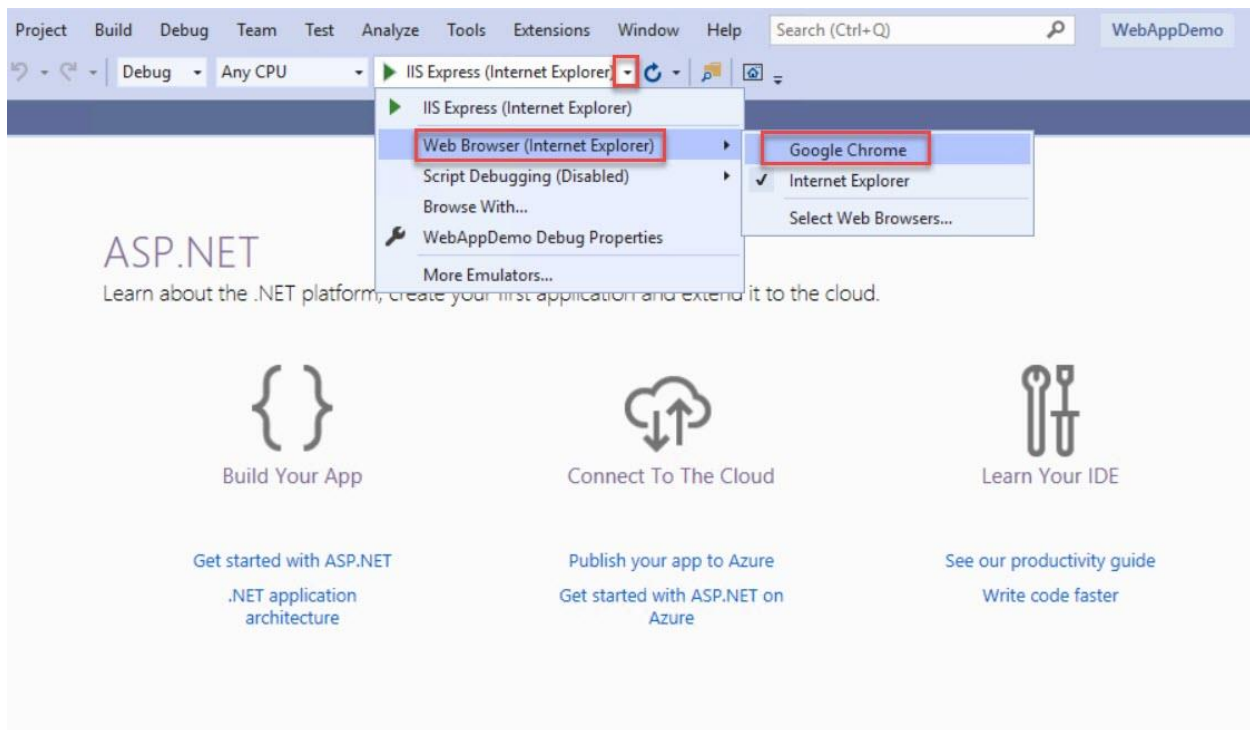
Create

Sample Project loaded as below:

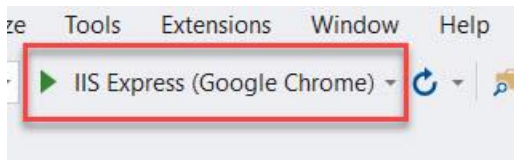


Step 10: Below **Tools & Extensions** Menu (header) **IIS Express** button available

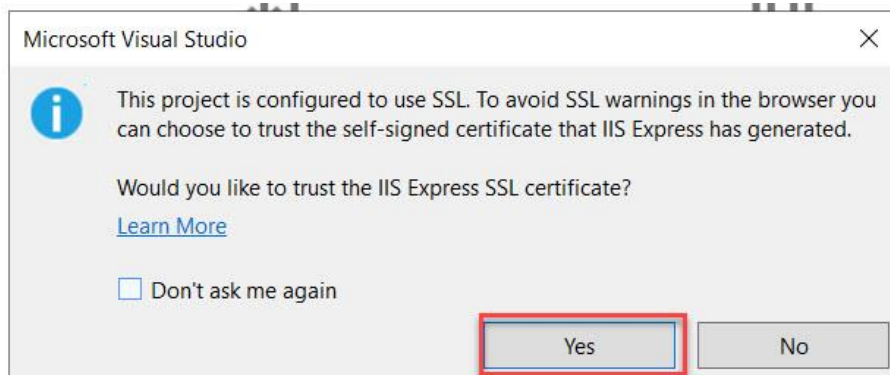
Now time to Run project locally. Change Browser if you require.



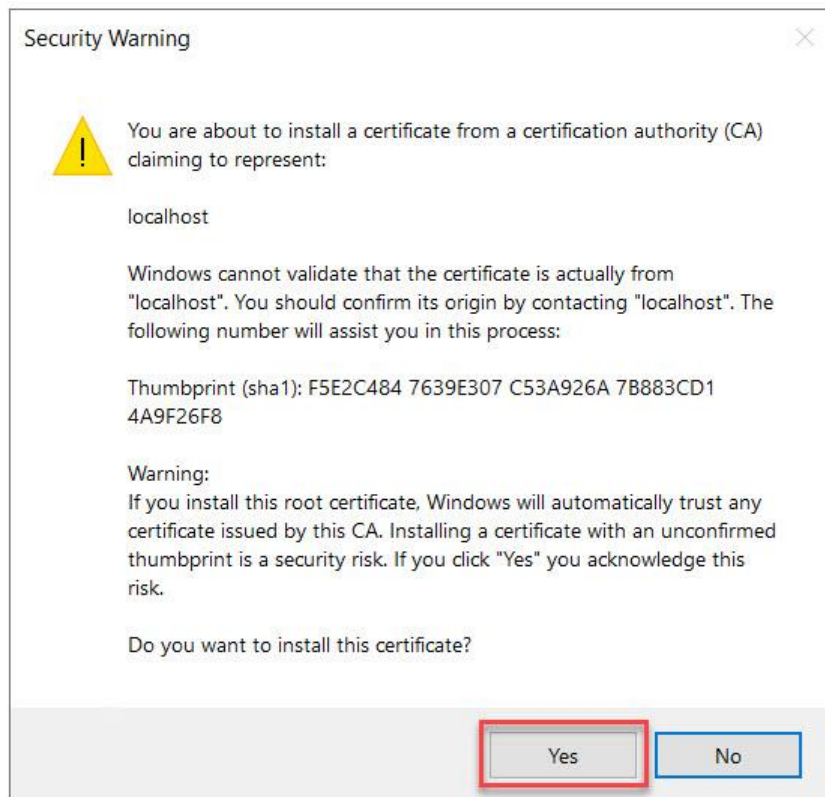
Click on **IIS Express (Google Chrome)** button



Click on **Yes** button



Click on **Yes** button



Click on **Reload** button



This site can't be reached

localhost refused to connect.

Try:

- Checking the connection
- [Checking the proxy and the firewall](#)

ERR_CONNECTION_REFUSED



Click on **Advanced** button



Your connection is not private

Attackers might be trying to steal your information from **localhost** (for example, passwords, messages, or credit cards). [Learn more](#)

NET::ERR_CERT_COMMON_NAME_INVALID

Advanced

Back to safety

Click on **Process to localhost (unsafe)** option



Your connection is not private

Attackers might be trying to steal your information from **localhost** (for example, passwords, messages, or credit cards). [Learn more](#)

NET::ERR_CERT_COMMON_NAME_INVALID

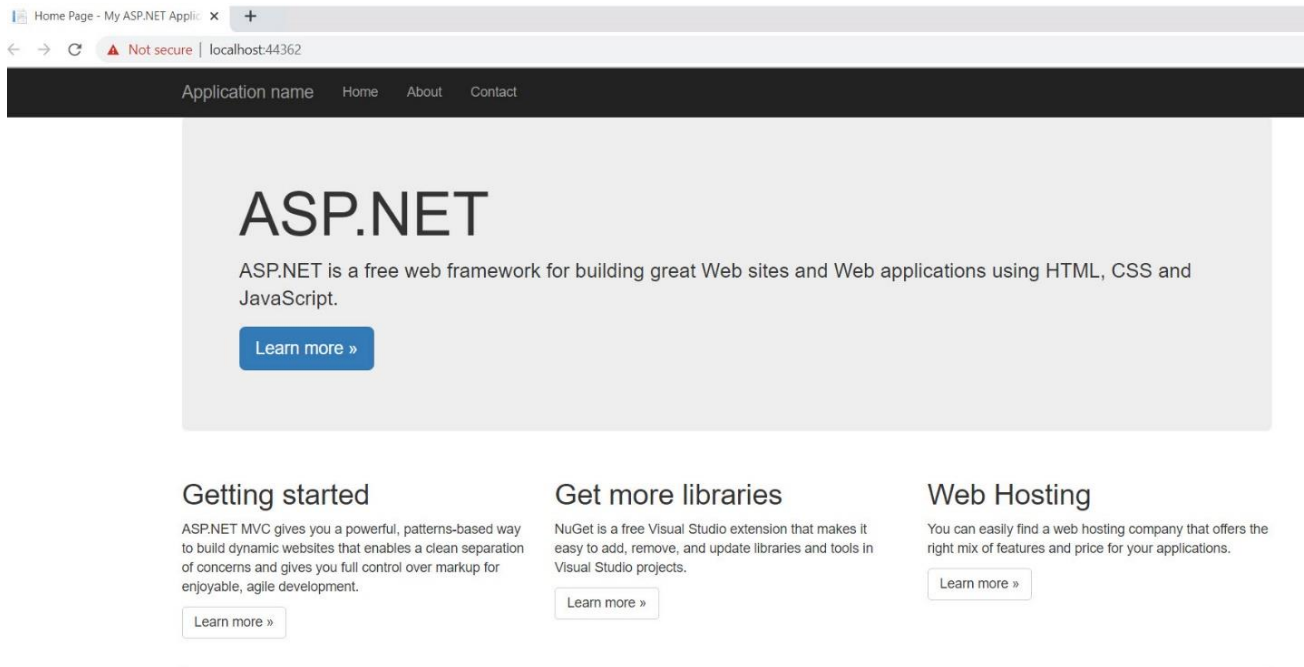
Hide advanced

Back to safety

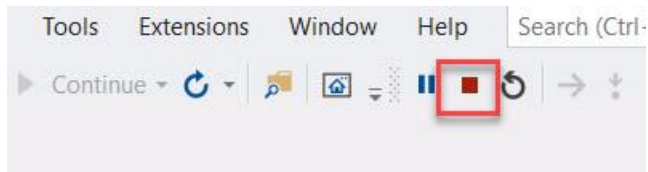
This server could not prove that it is **localhost**; its security certificate does not specify Subject Alternative Names. This may be caused by a misconfiguration or an attacker intercepting your connection.

[Proceed to localhost \(unsafe\)](#)

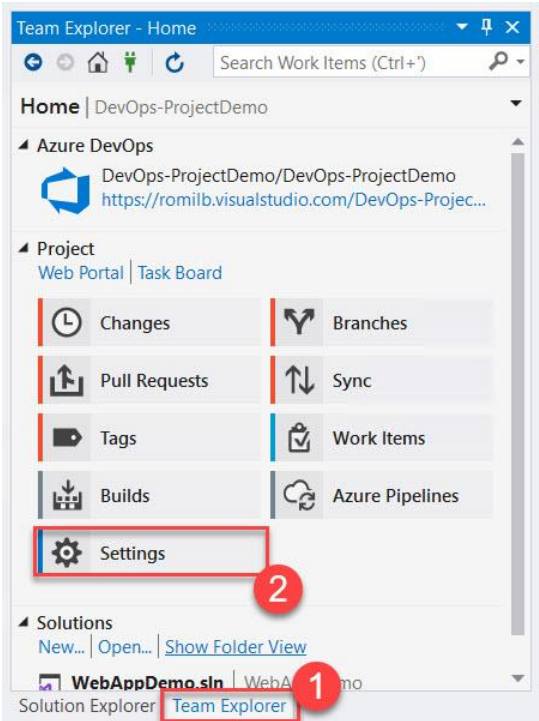
Sample MVC Application will run as below:



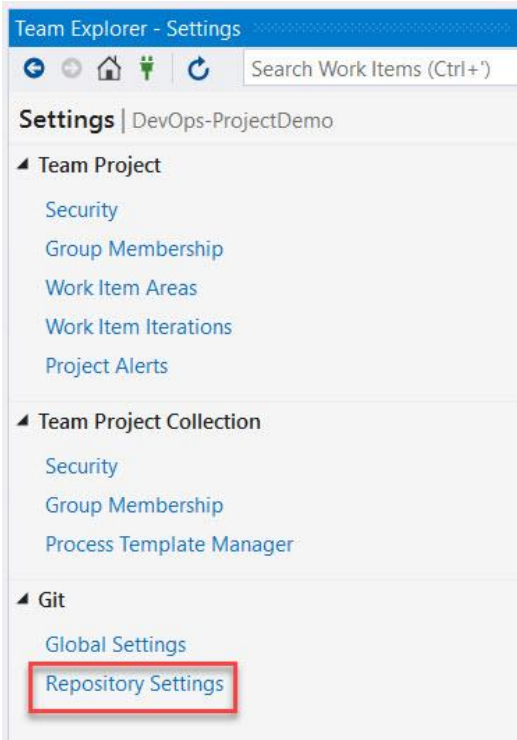
Step 11: Now stop the running project



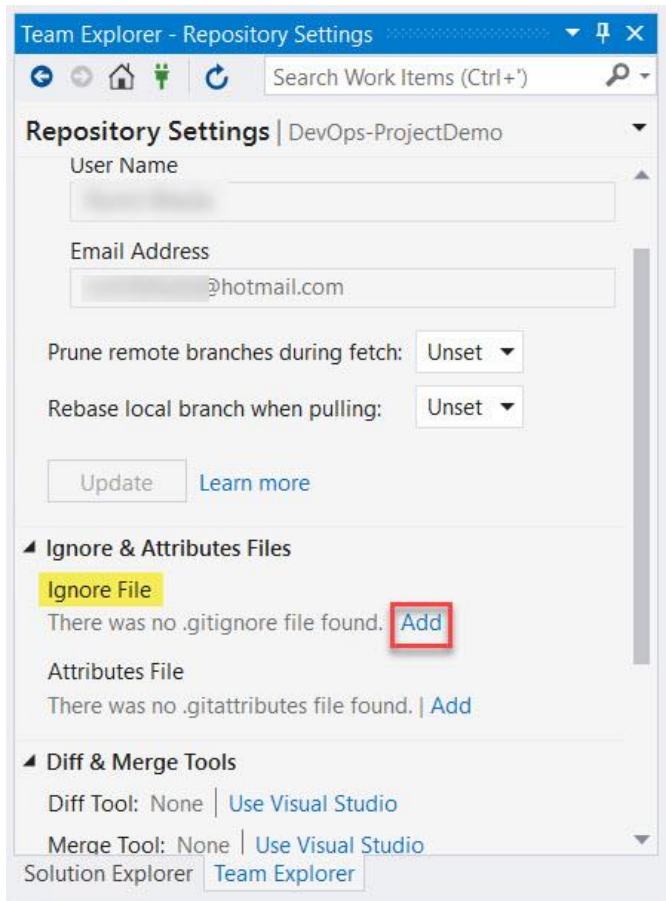
Step 12: Once again, Navigate to **Team Explorer** tab and select **Settings** option



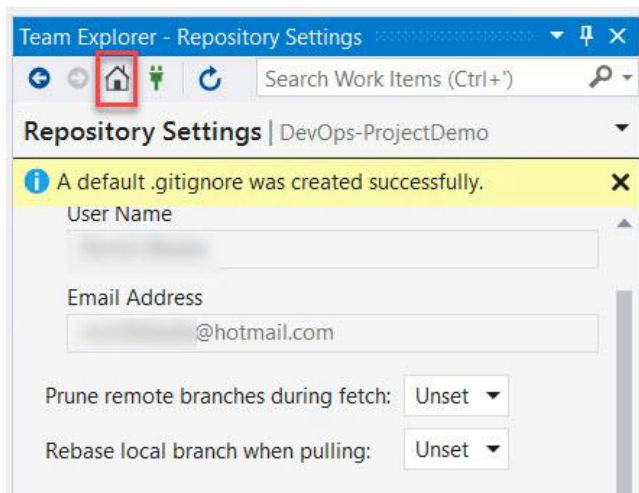
Step 13: Select **Repository Settings** under **Git** option



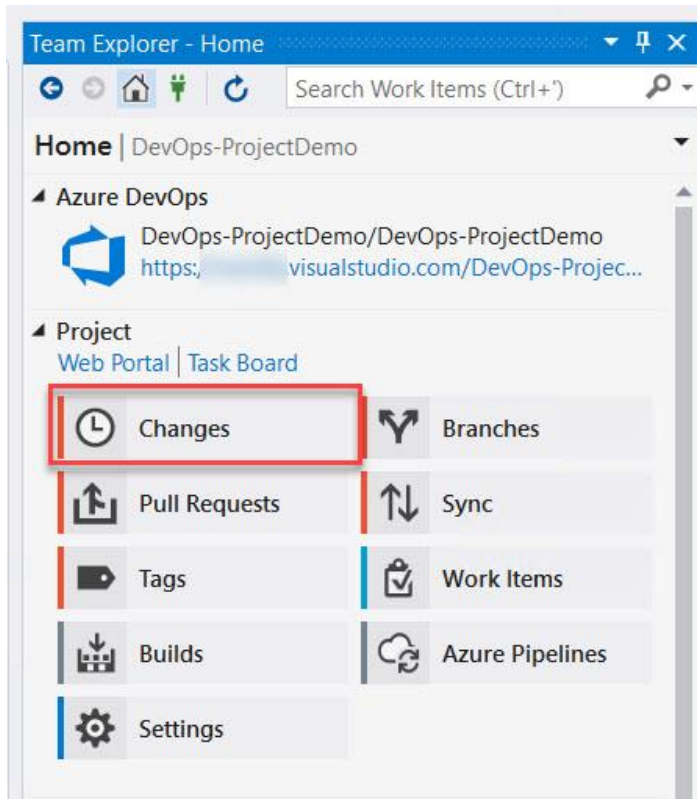
Step 14: Click on **Add** option under **Ignore File**



Step 15: Click on **Home** option

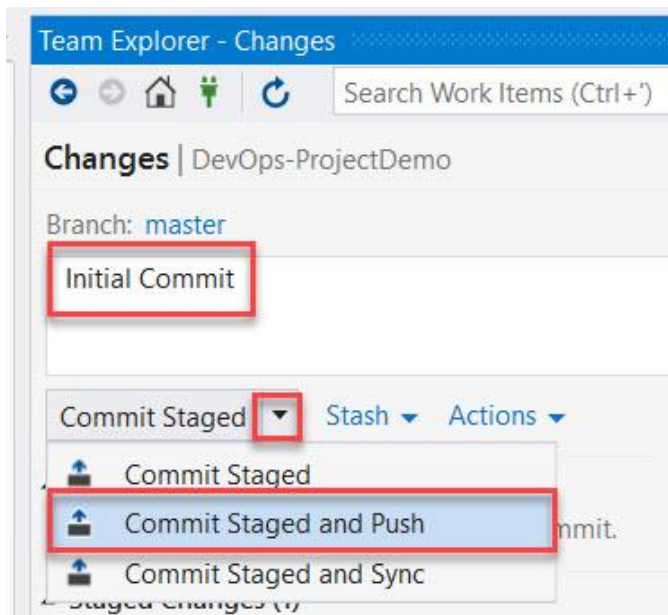


Step 16: Click on **Changes** option

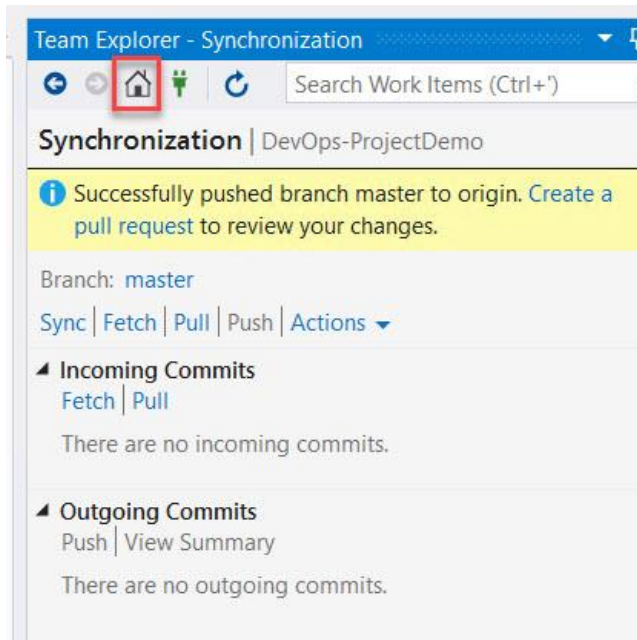


Step 17: Enter message: **Initial Commit**

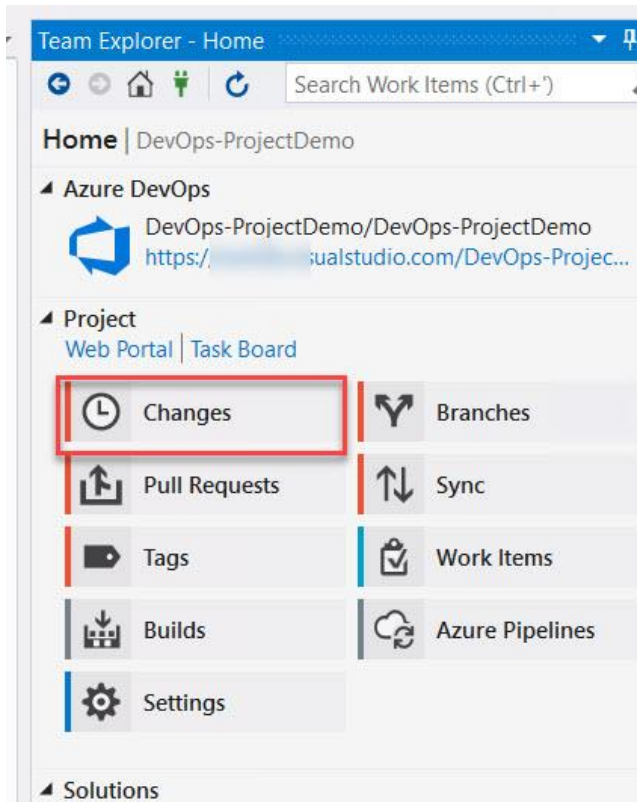
Choose **Commit Staged and Push** option



Step 18: Click on **Home** option

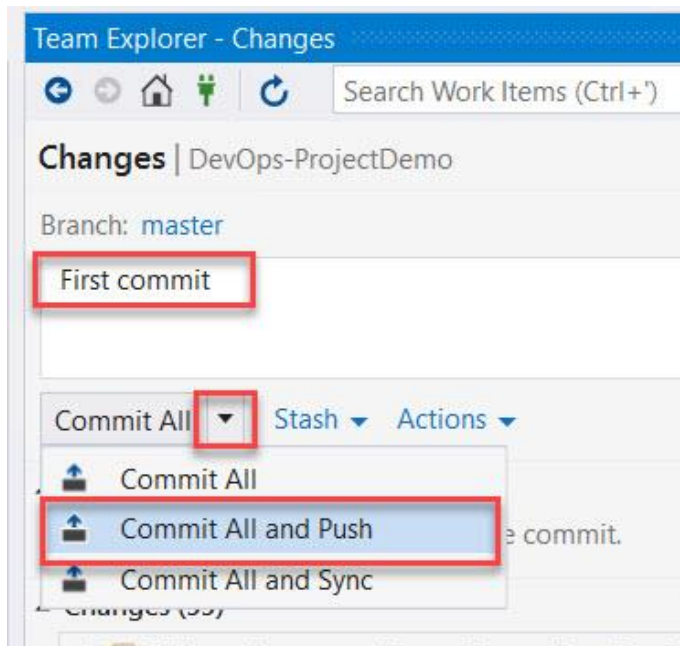


Step 19: Once again, Select **Changes** option

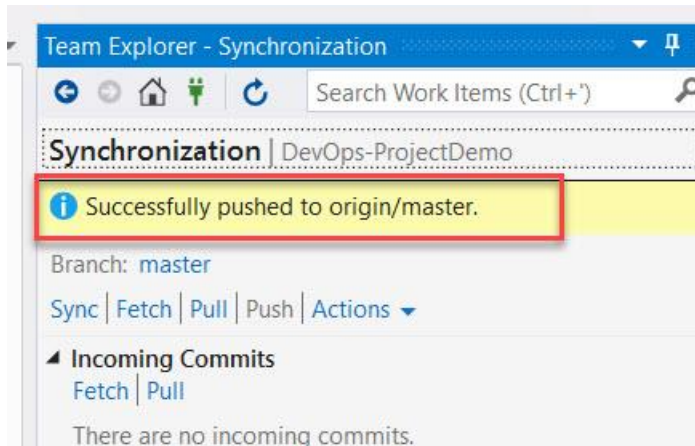


Step 20: Commit Message: **First Commit**

Choose **Commit All and Push** option



Check the status “**Successfully pushed to origin/master**”



Step 21: Navigate to Azure DevOps Project

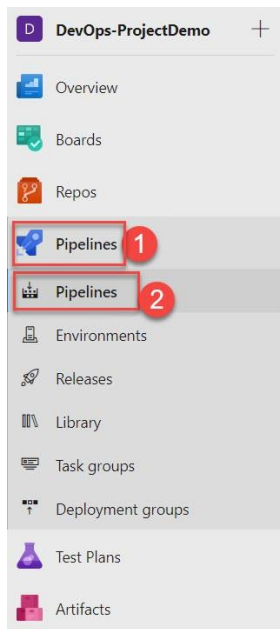
Click on **Files** and check the Project available here.

The screenshot shows the Azure DevOps web interface. On the left sidebar, the 'Files' option is highlighted with a red box and a red circle containing the number 1. In the main area, the breadcrumb navigation shows 'DevOps-ProjectDemo' > 'WebAppDemo', with 'WebAppDemo' highlighted by a red box and a red circle containing the number 2. Below this, a file explorer shows the contents of the 'WebAppDemo' directory, including 'WebAppDemo.Tests', 'WebAppDemo.sln', and '.gitignore'. To the right, the 'Contents' tab is active, displaying a table of files and folders. A red box and a red circle containing the number 3 highlight the table header and the first few rows of data.

Name	Last change	Commits
App_Start	a minute ago	5dc5cb63 First commit
Content	a minute ago	5dc5cb63 First commit
Controllers	a minute ago	5dc5cb63 First commit
fonts	a minute ago	5dc5cb63 First commit
Properties	a minute ago	5dc5cb63 First commit
Scripts	a minute ago	5dc5cb63 First commit
Views	a minute ago	5dc5cb63 First commit
favicon.ico	a minute ago	5dc5cb63 First commit
Global.asax	a minute ago	5dc5cb63 First commit

Lab 2: Continuous Integration

Step 22: Create Pipeline under Pipelines option



Create your first Pipeline

Automate your build and release processes using our wizard, and go from code to cloud-hosted within minutes.



Step 23: Click on Use the classic editor option



New pipeline

Where is your code?



Azure Repos Git YAML
Free private Git repositories, pull requests, and code search



Bitbucket Cloud YAML
Hosted by Atlassian



GitHub YAML
Home to the world's largest community of developers



GitHub Enterprise Server YAML
The self-hosted version of GitHub Enterprise



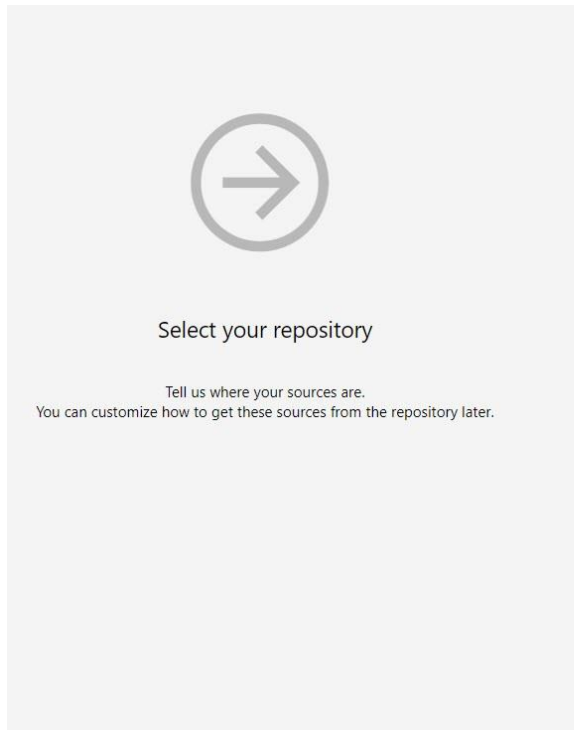
Other Git
Any generic Git repository



Subversion
Centralized version control by Apache

[Use the classic editor](#) to create a pipeline without YAML.


Step 24: Select **Azure Repos Git** as a Source and Click on **Continue** button.





Select your repository


Tell us where your sources are.
You can customize how to get these sources from the repository later.

Select a source

 Azure Repos Git

 GitHub

 GitHub Enterprise Server

 Subversion

Team project

DevOpsProject

Repository

DevOpsProject

Default branch for manual and scheduled builds

master

Continue


Step 25: Choose template according to your project. Ex. **ASP.NET**

Select a template


Or start with an [Empty job](#)


Search


Configuration as code


 **YAML**
Looking for a better experience to configure your pipelines using YAML files? Try the new YAML pipeline creation experience. [Learn more](#)

Featured

 **.NET Desktop**
Build and test a .NET or Windows classic desktop solution.

 **Android**
Build, test, sign, and align an Android APK.

 **ASP.NET**
Build and test an ASP.NET web application.

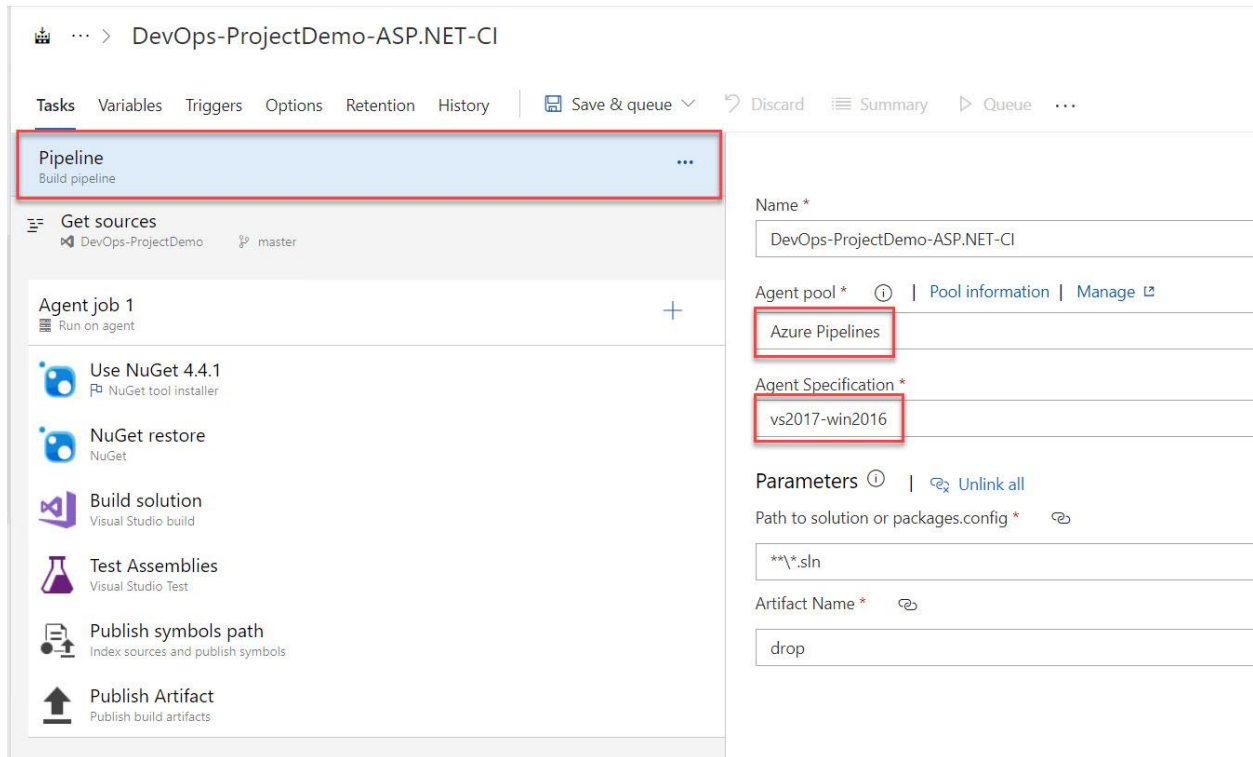
 **Azure Web App for ASP.NET**
Build, package, test, and deploy an ASP.NET Azure Web App.

Apply

Step 26: Select Pipeline

Agent pool: **Azure Pipelines**

Agent Specification: **vs2017-win2016**



DevOps-ProjectDemo-ASP.NET-CI

Tasks Variables Triggers Options Retention History Save & queue Discard Summary Queue ...

Pipeline Build pipeline

Get sources DevOps-ProjectDemo master

Agent job 1 Run on agent

- Use NuGet 4.4.1 NuGet tool installer
- NuGet restore NuGet
- Build solution Visual Studio build
- Test Assemblies Visual Studio Test
- Publish symbols path Index sources and publish symbols
- Publish Artifact Publish build artifacts

Name * DevOps-ProjectDemo-ASP.NET-CI

Agent pool * Azure Pipelines Pool information Manage

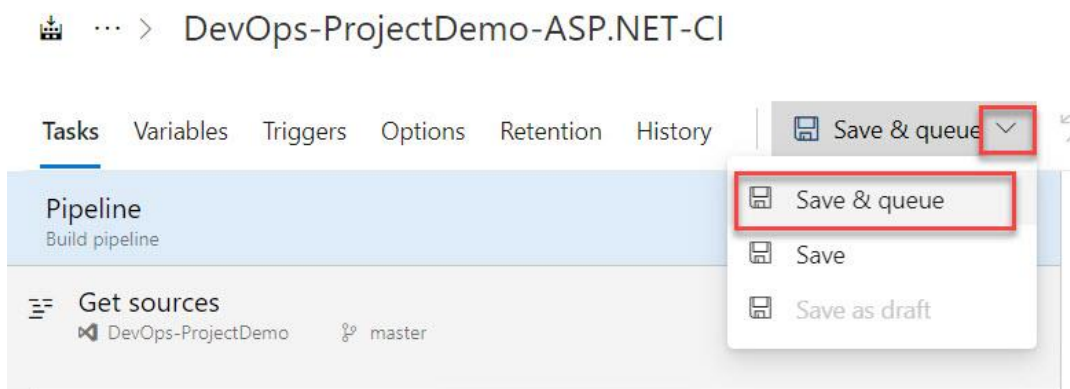
Agent Specification * vs2017-win2016

Parameters Unlink all

Path to solution or packages.config * ***.sln

Artifact Name * drop

Step 27: Select Save & queue button



DevOps-ProjectDemo-ASP.NET-CI

Tasks Variables Triggers Options Retention History Save & queue

Pipeline Build pipeline

Get sources DevOps-ProjectDemo master

Save & queue Save Save as draft

Step 28: Click on **Save and Run** button

Run pipeline

×

Select parameters below and manually run the pipeline

Save comment


Agent pool

Azure Pipelines

Agent Specification *


vs2017-win2016


Branch/tag


 master

Select the branch, commit or commit tag

Variables

 BuildConfiguration
= release

 BuildPlatform
= any cpu


 system.debug
= false

☐ Enable system diagnostics


Cancel

Save and run

Click on **Agent job 1**

 **#20200504.1 First Commit**
on DevOps-ProjectDemo-ASP.NET-CI

Summary


Manually run by 

Repository and version
DevOps-ProjectDemo
master 4f2f34c


Time started and elapsed
Just now
33s

Related
0 work items
0 artifacts

Jobs


Name	Status	Duration
 Agent job 1	Running	32s

Wait few couple of minutes to complete build pipeline. If completed click on **back arrow** option

 **Jobs in run #20200504.1**
DevOps-ProjectDemo-ASP.NET-CI

Jobs

✓	Agent job 1	1m 24s
✓	Initialize job	9s
✓	Checkout DevOps-Proj...	6s
✓	Use NuGet 4.4.1	1s
✓	NuGet restore	22s
✓	Build solution	23s
✓	Test Assemblies	11s
✓	Publish symbols path	4s
✓	Publish Artifact	4s
✓	Post-job: Checkout D...	<1s
✓	Finalize Job	<1s
✓	Report build status	<1s

 **Agent job 1**

```
1 Pool: Azure Pipelines
2 Image: vs2017-win2016
3 Agent: Hosted Agent
4 Started: Just now
5 Duration: 1m 24s
6
7 ► Job preparation parameters
8 ► fx 3 queue time variables used
9 1 artifact produced
10 100% tests passed
11 Job live console data:
12 Finishing: Agent job 1
```

Step 29: Click on **1 published** to check artifact

✓

#20200504.1 First Commit

on DevOps-ProjectDemo-ASP.NET-CI [Retained](#)

Summary

Tests

Code Coverage

Manually run by

Repository and version

DevOps-ProjectDemo

master 4f2f34c

Time started and elapsed

Today at 2:31 PM

1m 26s

Related

0 work items

1 published

Jobs

Name	Status	Duration
✓ Agent job 1	Success	1m 24s

Expand drop folder and you can see **WebAppDemo.zip** file available

←

Artifacts

2

Published

Consumed

Name	Size
✓ drop 1	10 MB
WebAppDemo.deploy-readme.txt	4 KB
WebAppDemo.deploy.cmd	15 KB
WebAppDemo.SetParameters.xml	165 B
WebAppDemo.SourceManifest.xml	426 B
WebAppDemo.zip	10 MB

Step 30: Select **Edit pipeline** option

#20200504.1 First Commit
on DevOps-ProjectDemo-ASP.NET-CI ✨ Retained

Summary Tests Code Coverage

Manually run by [User]

Repository and version	Time started and elapsed	Related	Tests and Setup co
DevOps-ProjectDemo master 4f2f34c	Today at 2:31 PM 1m 26s	0 work items 1 published	100% Setup co

View retention leases
Retain
Delete

Jobs

Name	Status	Duration
Agent job 1	Success	1m 24s

Step 31: Select **Triggers** tab

Enable **Continuous integration** option

DevOps-ProjectDemo-ASP.NET-CI

Tasks Variables **Triggers** Options Retention History Save & queue Discard Summary Queue

Continuous integration

DevOps-ProjectDemo
Enabled

Scheduled + Add
No builds scheduled

Build completion + Add
Build when another build completes

DevOps-ProjectDemo

☒ Enable continuous integration
☐ Batch changes while a build is in progress

Branch filters

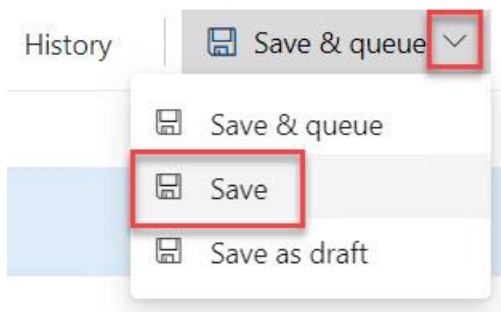
Type Branch specification

Include master

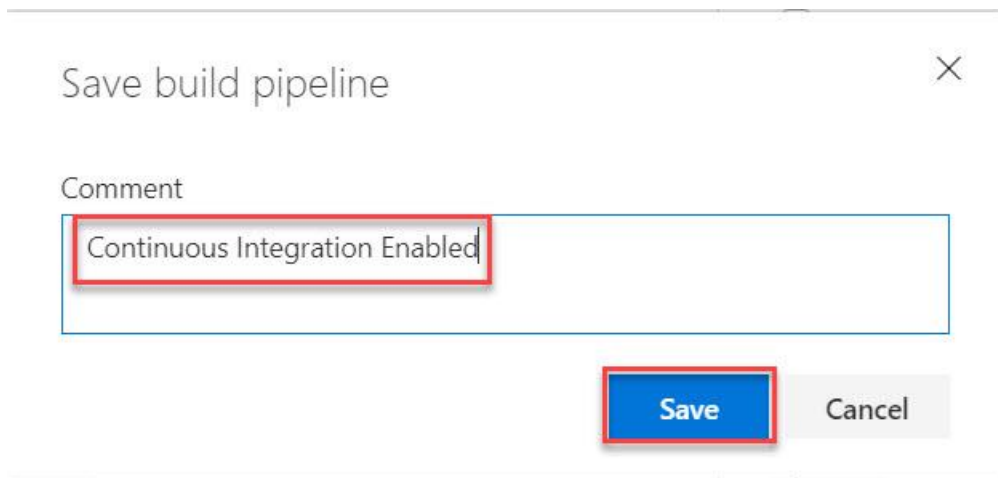
+ Add

Path filters
+ Add

Step 32: Now select **Save** button



Comment: **Continuous Integration Enabled**

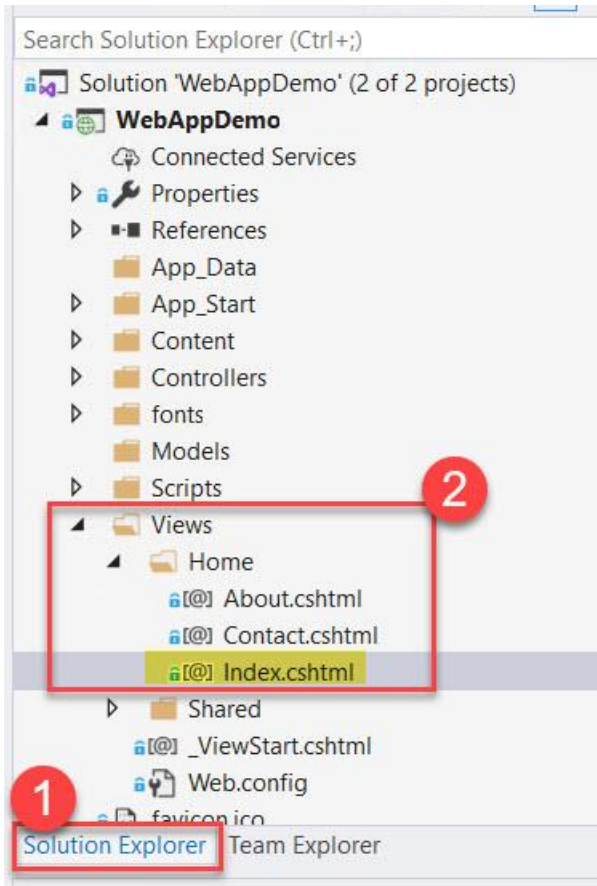
A screenshot of a 'Save build pipeline' dialog box. The dialog has a title bar with a close button (X) in the top right corner. Below the title, there is a 'Comment' label followed by a text input field. The text 'Continuous Integration Enabled' is entered into this field and is highlighted with a red rectangular box. At the bottom right of the dialog, there are two buttons: a blue 'Save' button and a grey 'Cancel' button. The 'Save' button is highlighted with a red rectangular box.

Step 33: Navigate to Visual Studio Project

Select **Solution Explorer** tab

Open **Index.cshtml** page

Views/Home/Index.cshtml



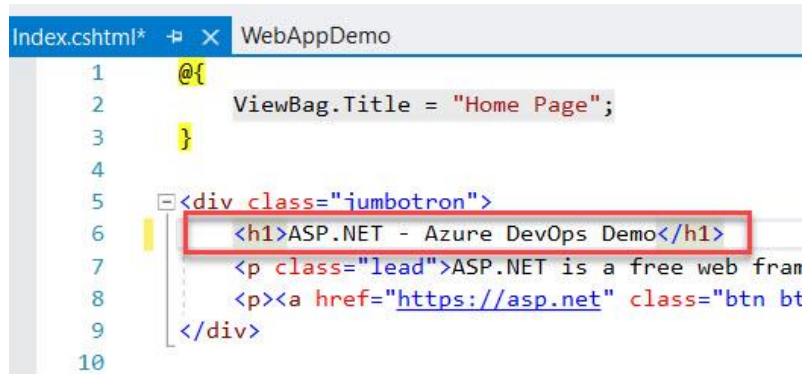
Step 34: Update text as below:

From:

```
<h1>ASP.NET</h1>
```

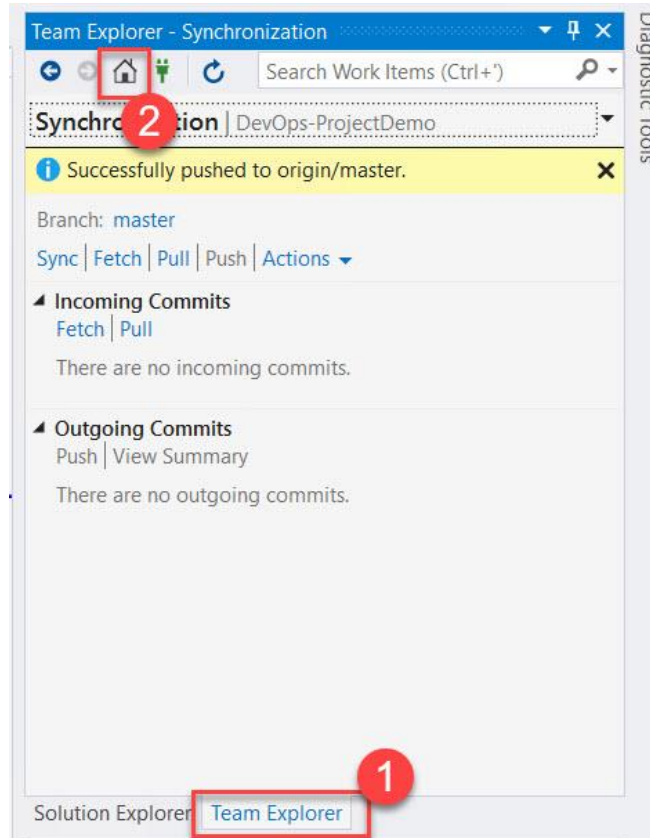
To:

```
<h1>ASP.NET - Azure DevOps Demo</h1>
```

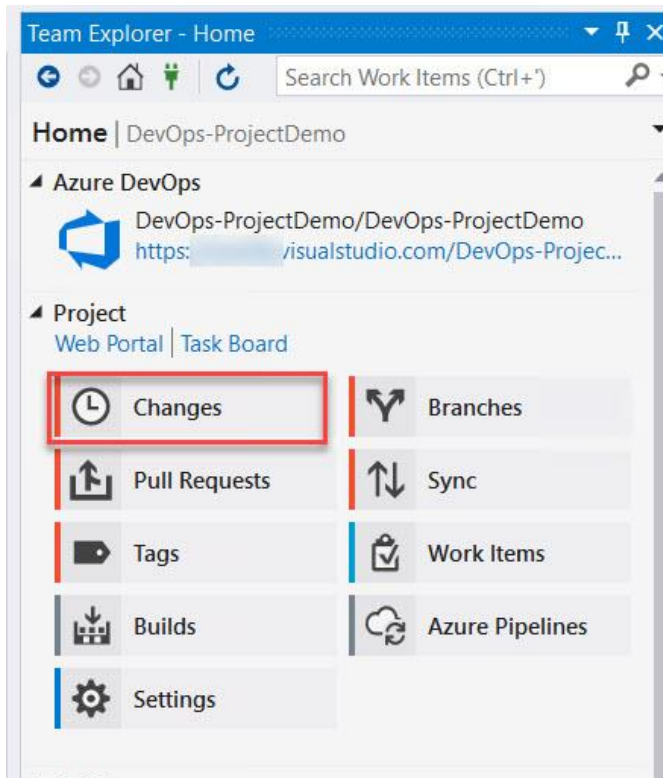


```
Index.cshtml* WebAppDemo
1  @{}
2      ViewBag.Title = "Home Page";
3  }
4
5  <div class="jumbotron">
6      <h1>ASP.NET - Azure DevOps Demo</h1>
7      <p class="lead">ASP.NET is a free web fram
8      <p><a href="https://asp.net" class="btn bt
9  </div>
10
```

Step 35: Select **Team Explorer** tab and Select **Home** option

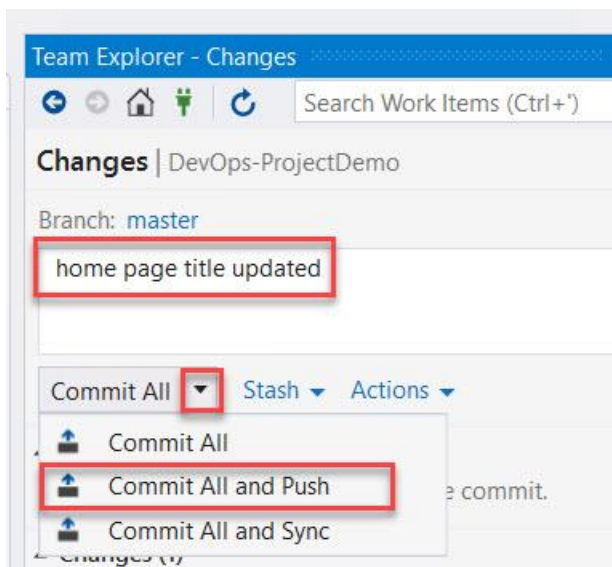


Step 36: Select **Changes** option

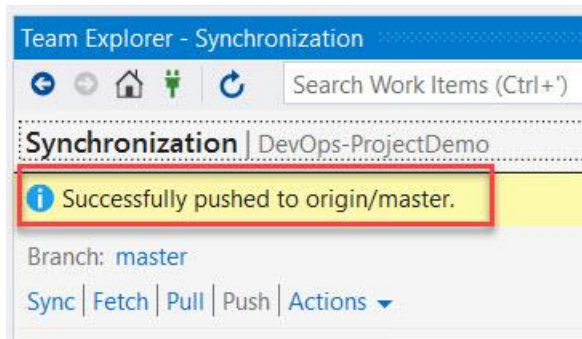


Step 37: Message: **Home page title updated**

Choose **Commit All and Push** option



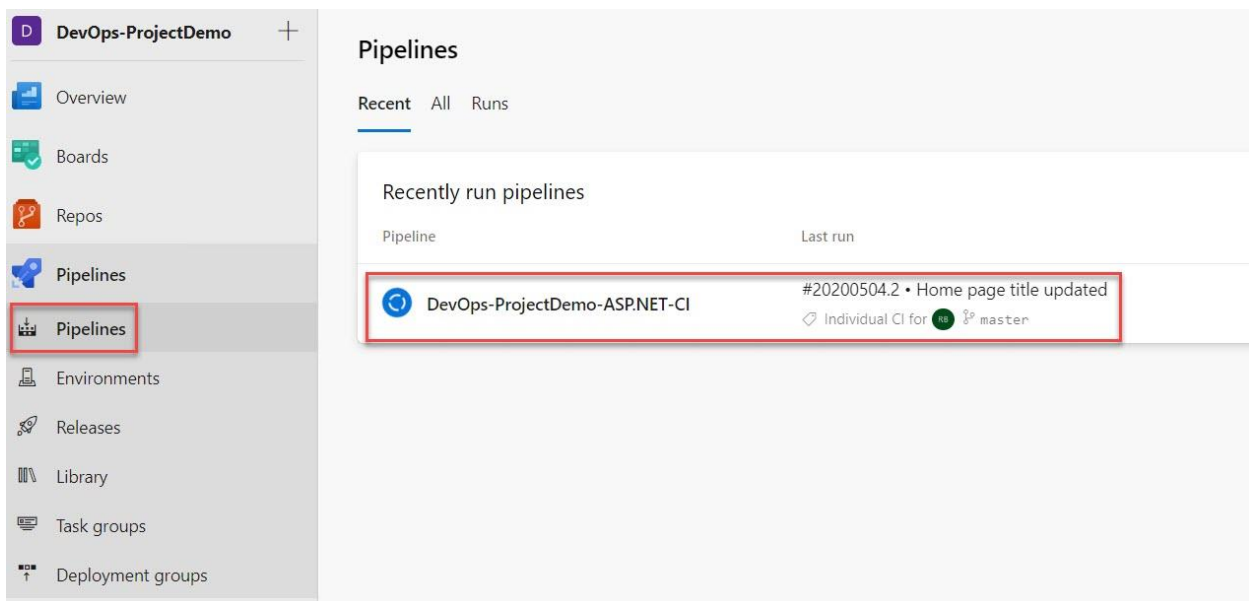
Successfully pushed to origin/master message will display.



Step 38: Navigate to **Azure DevOps Portal**

Select **Pipelines**







Click on running Pipeline




Select recent build Ex. **2020XXXX.2 Home page title updated**

[←](#) DevOps-ProjectDemo-ASP.NET-CI

Runs Branches Analytics


Description	Stages
<div>#20200504.2 Home page title updated</div> <div>Individual CI for  master </div>	
<div>#20200504.1 First Commit</div> <div>Manually triggered for  master </div>	

Click on **Agent job 1**


 #20200504.2 Home page title updated



on DevOps-ProjectDemo-ASP.NET-CI

Summary


Triggered by 


Repository and version

 DevOps-ProjectDemo


 master 


Time started and elapsed

 Just now



 1m 5s

Related

 0 work items


 0 artifacts

Jobs

Name	Status	Duration
 Agent job 1	Running	 1m 3s


Wait for couple minutes to complete build.

If build completed click on **back arrow** button

 **Jobs in run #20200504.2**
DevOps-ProjectDemo-ASP.NET-CI

Jobs

✓	Agent job 1	1m 48s
✓	Initialize job	10s
✓	Checkout DevOps-Proj...	7s
✓	Use NuGet 4.4.1	<1s
✓	NuGet restore	33s
✓	Build solution	34s
✓	Test Assemblies	14s
✓	Publish symbols path	5s
✓	Publish Artifact	2s
✓	Post-job: Checkout D...	<1s
✓	Finalize Job	<1s
✓	Report build status	<1s

 **Agent job 1**

1 Pool: [Azure Pipelines](#)

2 Image: [vs2017-win2016](#)


3 Agent: Hosted Agent


4 Started: Today at 2:54 PM

5 Duration: 1m 48s

6

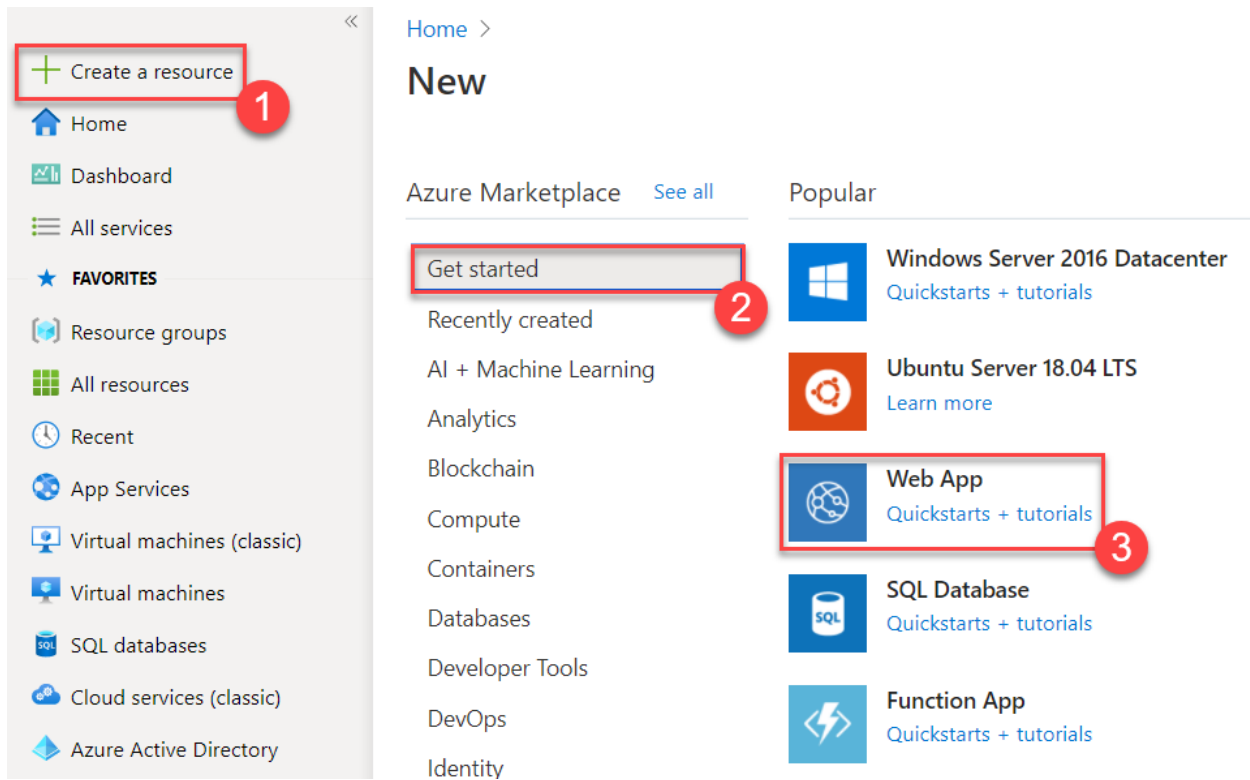
7 ▶ Job preparation parameters

8  [1 artifact](#) produced

9  [100% tests](#) passed

Lab 3: Create an Azure Web App

Step 39: + Create a resource -> Get started -> Web App



The screenshot displays the Azure portal interface. On the left sidebar, the 'Create a resource' button is highlighted with a red box and a red circle containing the number 1. The main content area is titled 'New' and features a 'Get started' button, also highlighted with a red box and a red circle containing the number 2. Below this, a list of categories is shown, including 'Recently created', 'AI + Machine Learning', 'Analytics', 'Blockchain', 'Compute', 'Containers', 'Databases', 'Developer Tools', 'DevOps', and 'Identity'. On the right side, under the 'Popular' section, the 'Web App' option is highlighted with a red box and a red circle containing the number 3. The 'Web App' option includes a 'Quickstarts + tutorials' link.

Home >

New

Azure Marketplace [See all](#)

Get started

Recently created

AI + Machine Learning

Analytics

Blockchain

Compute

Containers

Databases

Developer Tools

DevOps

Identity

Popular

Windows Server 2016 Datacenter
[Quickstarts + tutorials](#)

Ubuntu Server 18.04 LTS
[Learn more](#)

Web App
[Quickstarts + tutorials](#)

SQL Database
[Quickstarts + tutorials](#)

Function App
[Quickstarts + tutorials](#)

Step 40: Create Web App

Subscription: **Choose active Subscription**

Resource Group: **Create New Resource Group** Ex. **WebAppDevOpsLabRG**

Name: **Enter unique name of web app**

Publish: **Code**


Runtime stack: **ASP.NET v4.8**

Operating System: **Windows**

Region: **Choose nearest region**

Create Web App

Basics Monitoring Tags Review + create

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 * ⓘ

MSDN Platforms

Resource Group * ⓘ

(New) WebAppDevOpsLabRG

[Create new](#)

Instance Details

Name *

webappdevopsdemo1

.azurewebsites.net

Publish *



Code



Docker Container

Runtime stack *

ASP.NET V4.8

Operating System *




Linux



Windows

Region *

Southeast Asia


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

Plan: **Create New Plan** Ex. webappdevopsPlan

Click on **Next: Monitoring >** button

App Service Plan

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

[Learn more](#) 

Windows Plan (Southeast Asia) * ⓘ

2

(New) webappdevopsPlan

1

[Create new](#)

Sku and size *

Standard S1

100 total ACU, 1.75 GB memory

[Change size](#)

Review + create

< Previous

Next : Monitoring >


3

Step 41: Application insights: **No**

Click on **Review + Create** button

Create Web App

Basics Monitoring Tags Review + create

Application Insights is a code-less attach to provide detailed observability in to your application. [Learn more](#) 

Application Insights

Enable Application Insights *



No



Yes

Review + create

< Previous


Next : Tags >

Step 42: Click on **Create** button

Web App

[Basics](#) [Monitoring](#) [Tags](#) [Review + create](#)

Summary

 **Web App**
by Microsoft

Details

Subscription	efbee838-8a8d-4bf4-8847-90d47291555f
Resource Group	WebAppDevOpsLabRG
Name	webappdevopsdemo
Publish	Code
Runtime stack	ASP.NET V4.7

App Service Plan (New)

Name	webappdevopsPlan
Operating System	Windows
Region	Southeast Asia
SKU	Standard
Size	Small
ACU	100 total ACU
Memory	1.75 GB memory

Monitoring


Create

< Previous





Next >


[Download a template for automation](#)


Click on **Go to resource** button


 **Microsoft.Web-WebApp-Portal-ef8ea02e-9e68 - Overview**
Deployment


<<


 Delete  Cancel  Redeploy  Refresh


 Overview


 Inputs


 Outputs

 Template

 **Your deployment is complete**

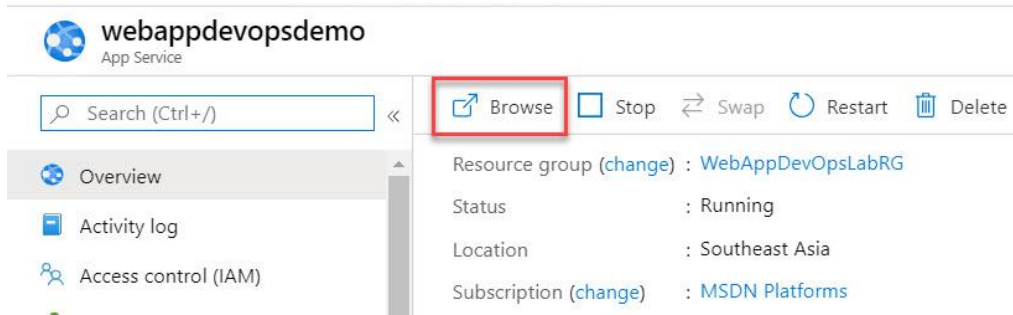
 Deployment name: Microsoft.Web-WebApp-Portal-ef8ea02e-9e68
Subscription: [MSDN Platforms](#)
Resource group: [WebAppDevOpsLabRG](#)

 **Deployment details** [\(Download\)](#)

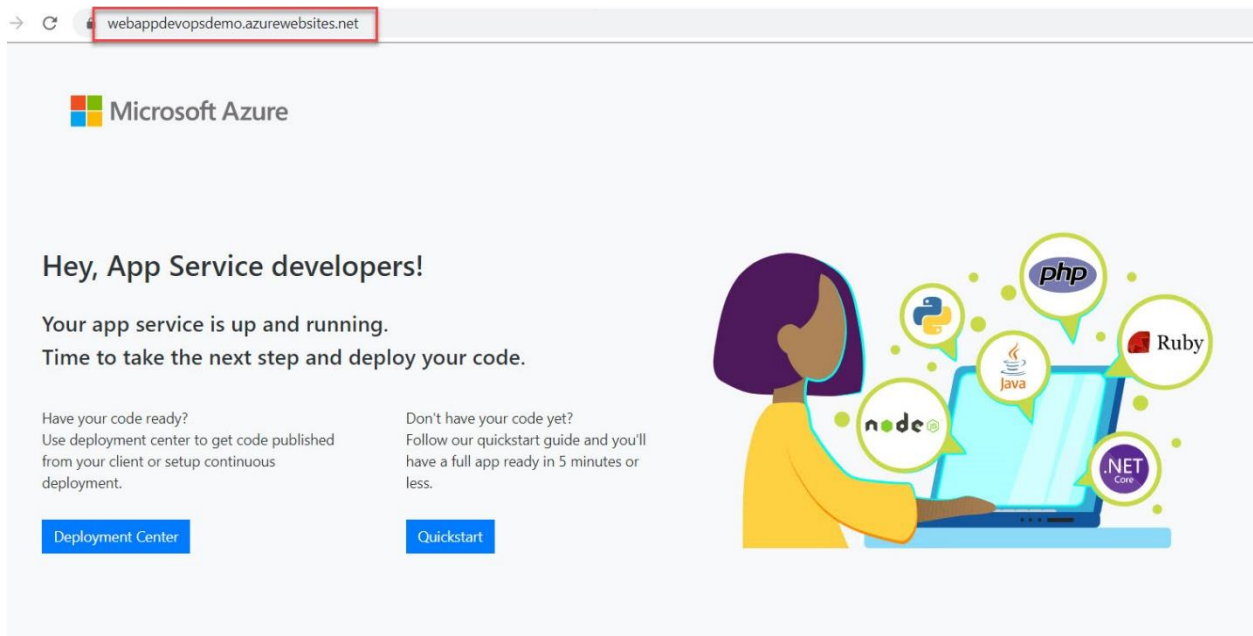
 **Next steps**

Go to resource

Step 43: Click on **Browse** button



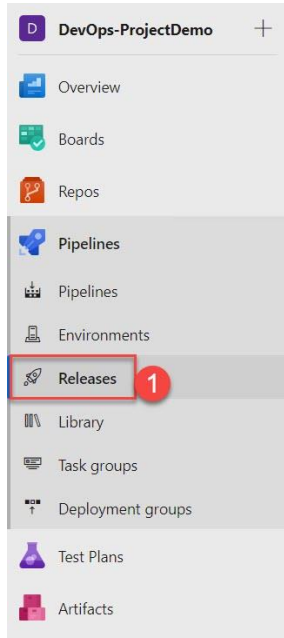
Sample Web App Page will open



Lab 4: Continuous Deployment

Step 44: Navigate to Azure DevOps Portal

Click on **Releases** and Create **New Pipeline**



No release pipelines found

Automate your release process in a few easy steps with a new pipeline

New pipeline 2

Step 45: Select Azure App Service deployment option

Select a template

Or start with an [Empty job](#)

Search

Featured



Azure App Service deployment

Deploy your application to Azure App Service. Choose from Web App on Windows, Linux, containers, Function Apps, or WebJobs.

Apply



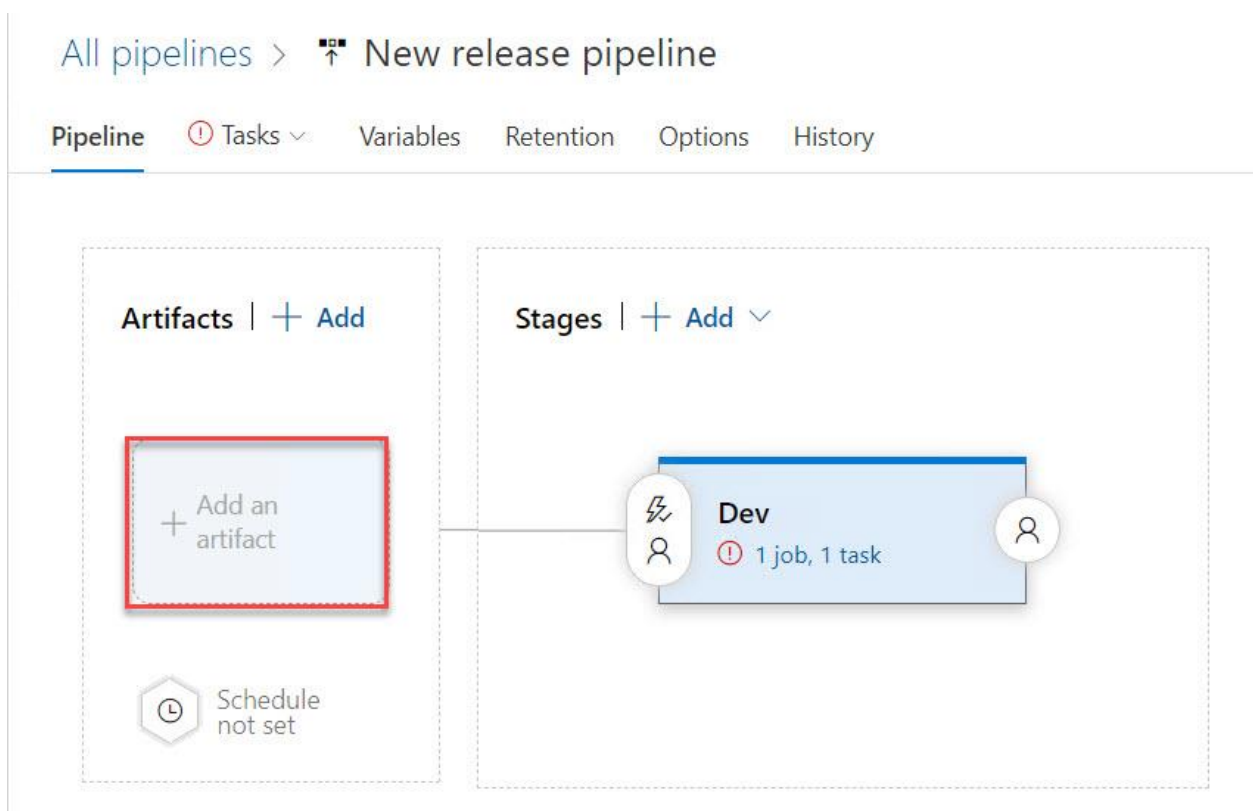
Deploy a Java app to Azure App Service

Deploy a Java application to an Azure Web App.

Stage Name: **Dev**

Click on **Close** button

Step 46: Click on **+ Add an artifact** option



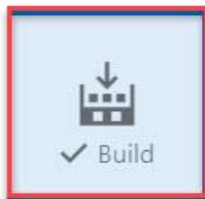
Step 47: Select Source type: **Build**

Source (build pipeline): **Choose from drop-down option** Ex. **ProjectName-ASP.NET-CI**

Click on **Add** button

Add an artifact

Source type



5 more artifact types ▾

Project * ⓘ

DevOps-ProjectDemo ▾

Source (build pipeline) * ⓘ

DevOps-ProjectDemo-ASP.NET-CI ▾

Default version * ⓘ

Latest ▾

Source alias * ⓘ

_DevOps-ProjectDemo-ASP.NET-CI

ⓘ The artifacts published by each version will be available for deployment in release pipelines. The latest successful build of **DevOps-ProjectDemo-ASP.NET-CI** published the following artifacts: **drop**.

Add

Step 48: Enable Deployment Trigger option

Click on **Thunder** icon and **Enable** option

All pipelines > New release pipeline

Save Create release View releases ...

Pipeline Tasks Variables Retention Options History

Artifacts | + Add

Stages | + Add

1

2

3

Continuous deployment trigger

Build: _DevOps-ProjectDemo-ASP.NET-CI

Enabled

Creates a release every time a new build is available.

Build branch filters

No filters added.

+ Add

Pull request trigger

Build: _DevOps-ProjectDemo-ASP.NET-CI

Disabled

Enabling this will create a release every time a selected artifact is available as part of a pull request workflow

Step 49: Click on 1 job, 1 task under Dev stage

Artifacts | + Add

Stages | + Add

1 job, 1 task

Step 50: Select Dev

Azure Subscription: **Choose Subscription** and click on **Authorize** button

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Dev
Some settings need attention

Run on agent
Run on agent

Deploy Azure App Service
Some settings need attention

Stage name
Dev

Parameters | Unlink all

Azure subscription * | Manage

MSDN Platforms Authorize

Click Authorize to configure an Azure service connection. A new Azure service principal will be created and added to the Contributor role, having access to all resources in the selected subscription. To restrict the scope of the service principal to a specific resource group, see [connect to Microsoft Azure](#).

This field is linked to 1 setting in 'Deploy Azure App Service'

App type
Web App on Windows

App service name *
This setting is required.

Enter Microsoft Azure Credentials

Microsoft

Sign in

Email, phone, or Skype

Can't access your account?

Sign in with a security key ?

Next

Please enter Sign in details

Step 51: App type: Select **Web App on Windows**

App Service name: Choose **Web App** (created from Lab 3)

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Dev
Some settings need attention

Run on agent
Run on agent

Deploy Azure App Service
Some settings need attention

Stage name
Dev

Parameters | Unlink all

Azure subscription *
Scoped to subscription 'Azure Pass - Sponsorship'
This field is linked to 1 setting in 'Deploy Azure App Service'

App type
Web App on Windows

App service name *
webappdevopsdemo
This field is linked to 1 setting in 'Deploy Azure App Service'

Step 52: Select **Run on agent**

Agent pool: **Azure Pipelines**

Agent Specification: **vs2017-win2016**

Pipeline Tasks Variables Retention Options History

Dev
Deployment process

Run on agent
Run on agent

Deploy Azure App Service
Azure App Service deploy

Agent job

Display name *
Run on agent

Agent selection ^

Agent pool | Pool information | Manage

Azure Pipelines

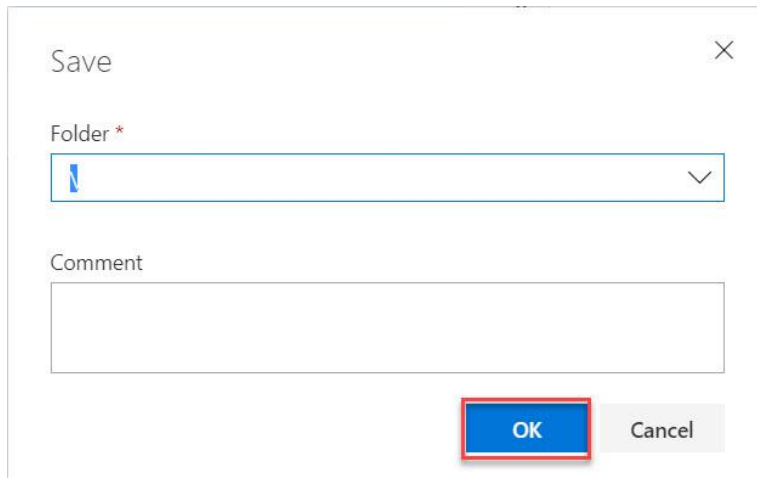
Agent Specification *
vs2017-win2016

Demands

Step 53: Click on **Save** button



Click on **OK** button

A 'Save' dialog box with a title bar containing the word 'Save' and a close button (X). Inside the dialog, there is a 'Folder *' label above a text input field containing a folder icon and a dropdown arrow. Below this is a 'Comment' label above a larger text input field. At the bottom right, there are two buttons: a blue 'OK' button and a grey 'Cancel' button. The 'OK' button is highlighted with a red rectangular border.

Step 54: Click on **Create release** button



Verify Artifacts and Click on **Create** button

Create a new release

New release pipeline

Pipeline ^
Click on a stage to change its trigger from automated to manual.

Dev

Stages for a trigger change from automated to manual. ⓘ

Artifacts ^
Select the version for the artifact sources for this release

Source alias	Version
_DevOps-ProjectDemo-ASP.NET-CI	20191217.2

Release description

Create Cancel

Click on **Release-1**

All pipelines > New release pipeline

✓ Release **Release-1** has been created

Release pipeline started. To check status, click on **Logs** button

↑ New release pipeline > Release-1 ▾

Pipeline Variables History | + Deploy ▾ ⏸ Cancel ↻ Refresh ✎ Edit ▾ ⋮

Release

Manually triggered
by Romil Bheda
12/17/2019, 6:52 PM

Artifacts
 _DevOps-ProjectDemo...
20191217.2
🔗 master

Stages

Dev
🔄 In progress
1/1 tasks
Initialize job
⌚ 00:20
⏸ Cancel **☰ Logs**

Wait for couple of duration to complete job

↑ New release pipeline > Release-1 > Dev ▾ ✓ Succeeded

← Pipeline Tasks Variables **Logs** Tests | ☁ Deploy ⏸ Cancel ↻ Refresh ⬇ Download all logs ✎ Edit ▾ ⋮

Deployment process

Succeeded

✓ **Run on agent**
Succeeded

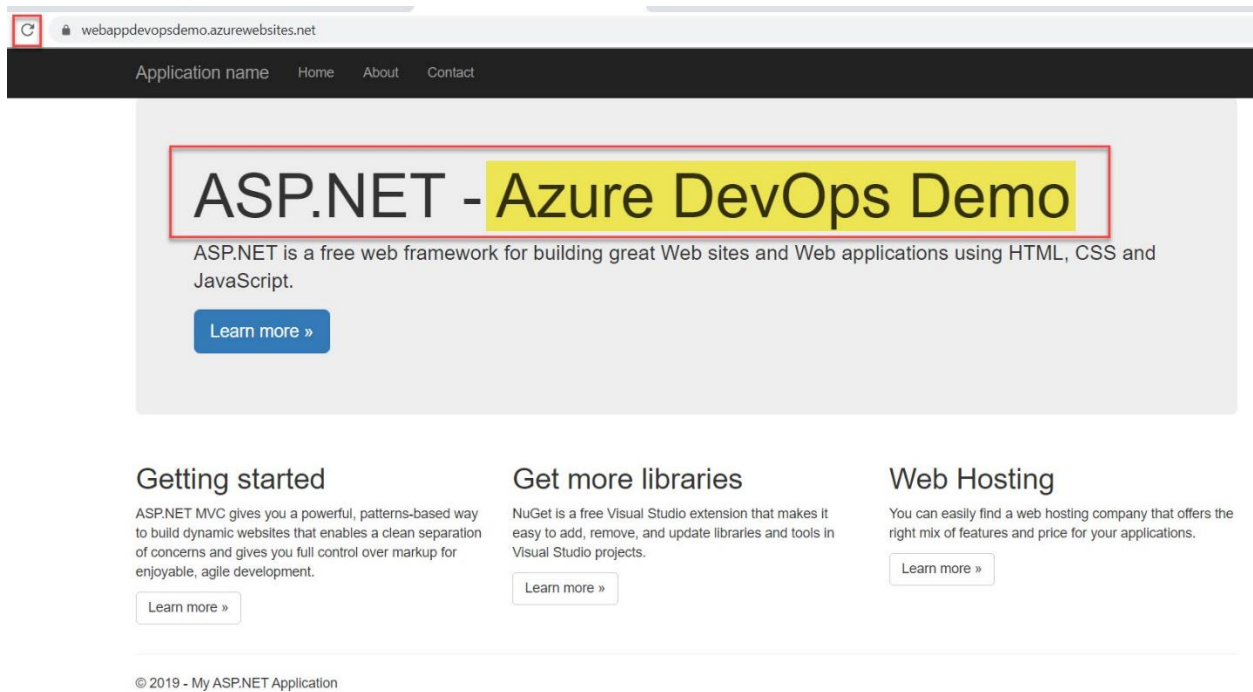
Run on agent

Pool: [Azure Pipelines](#) · Agent: Hosted Agent

✓ Initialize job · **succeeded**
✓ Download artifact - _DevOps-ProjectDemo-ASP.NET-CI - drop · **succeeded**
✓ Deploy Azure App Service · **succeeded**
✓ Finalize Job · **succeeded**

Step 55: Navigate to Web App and click on **Refresh** button.

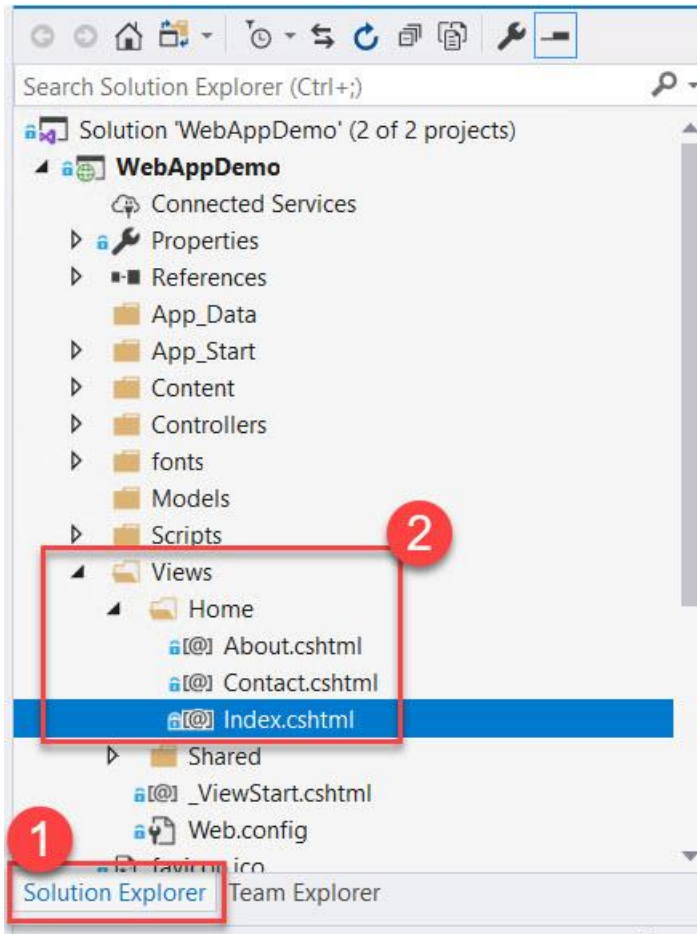
You can see Web App Content updated.



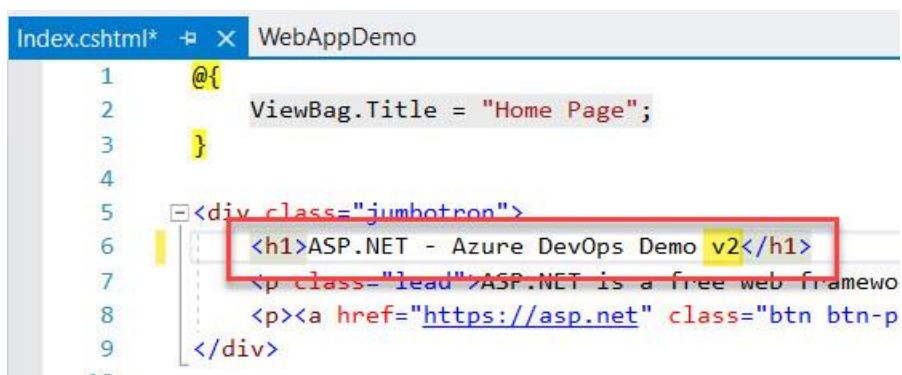
Step 56: Now to check complete flow of CI/CD Pipeline

Navigate to **Visual Studio Sample project**

Edit **Index.cshtml** page

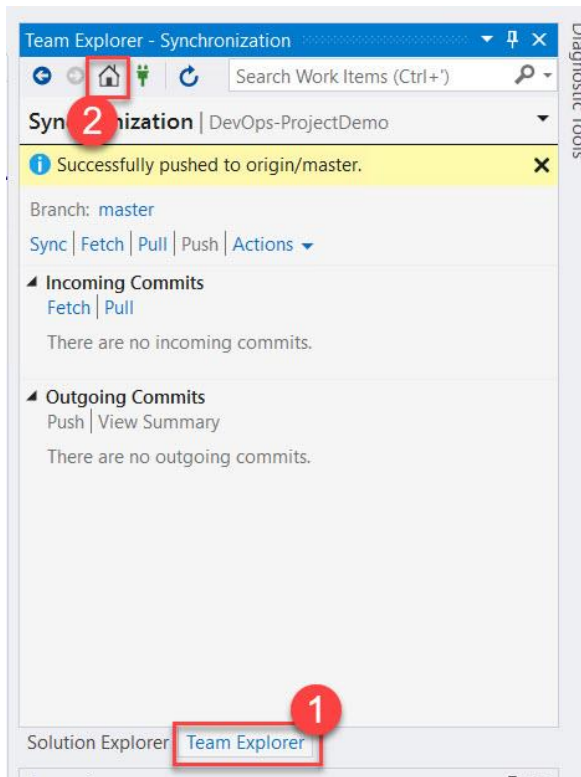


Step 57: Update text as below:

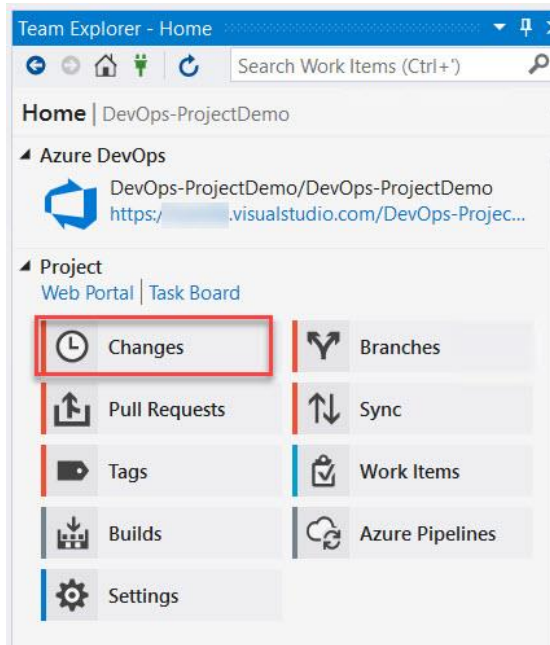


Step 58: Select **Team Explorer** tab

Click on **Home** option

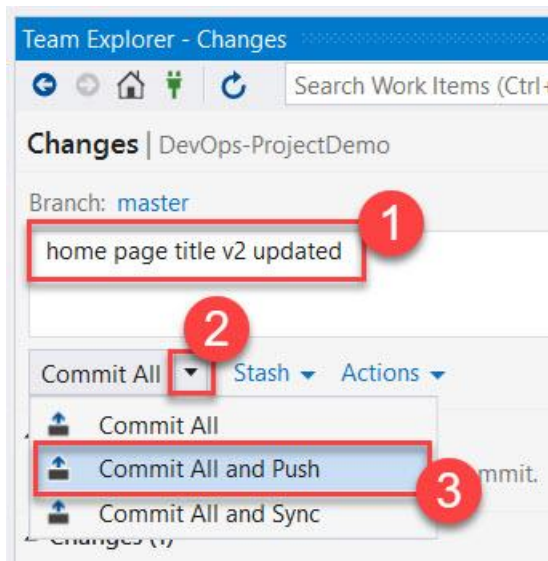


Step 59: Click on **Changes** option

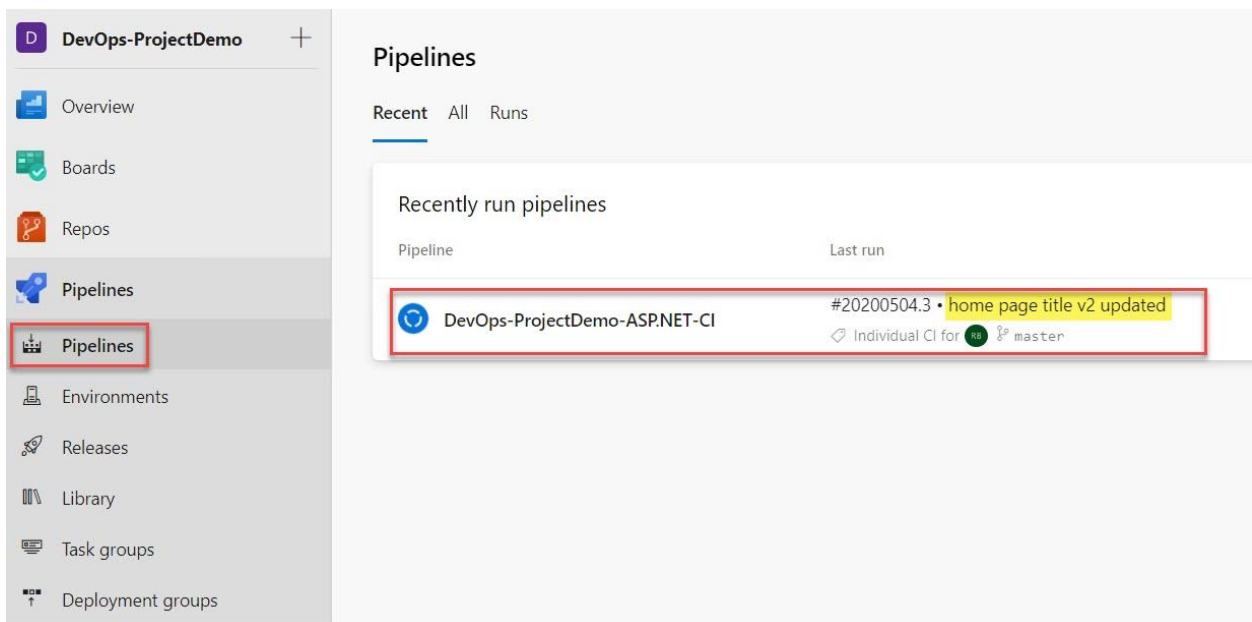


Step 60: Message: **home page title v2 updated**

Choose **Commit All and Push** option



Step 61: Automatic **Build Pipeline** started



If Build Pipeline completed, Release Pipeline will start.

Step 62: Once again **refresh** web app and you can see changes

