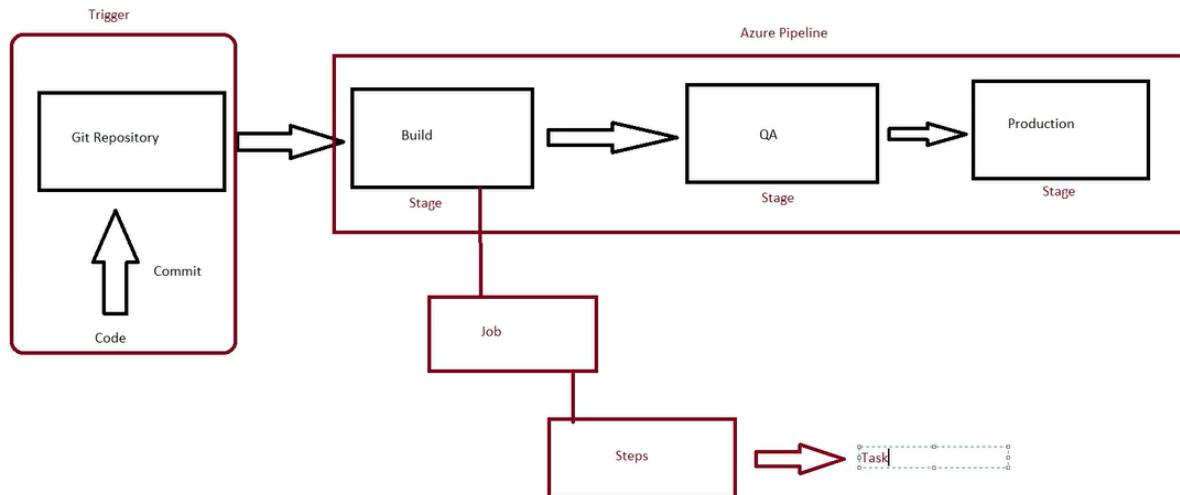
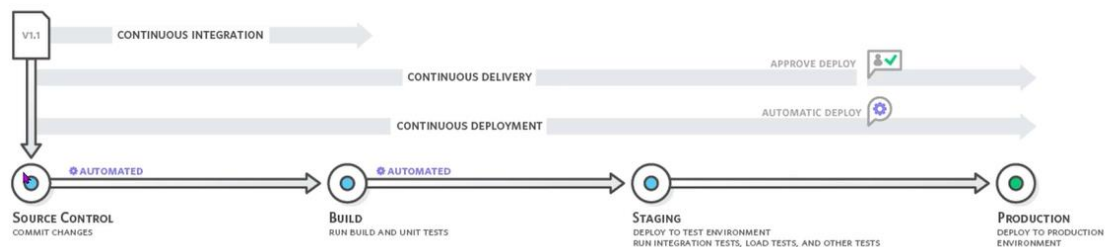


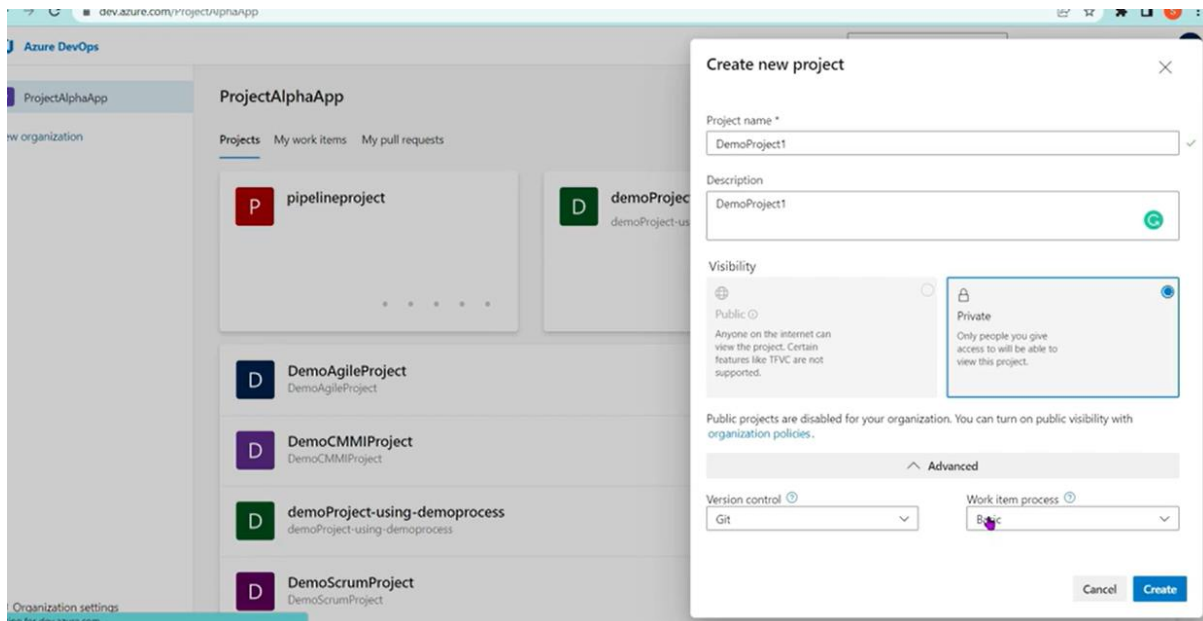
Continuous Integration – Azure Build Pipelines



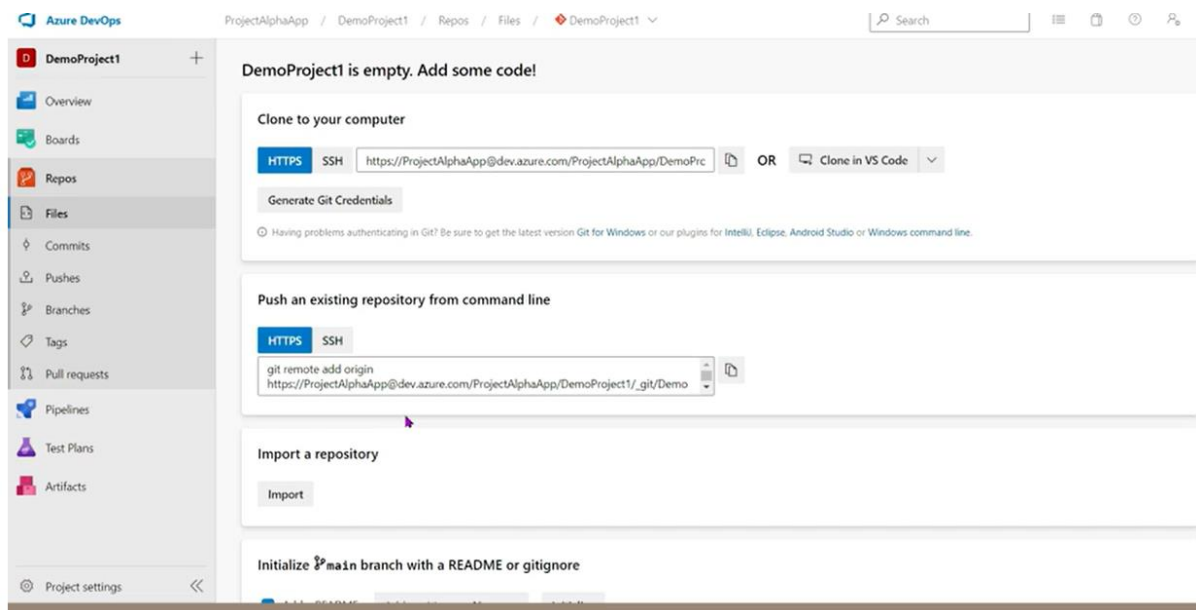
- ✓ With continuous integration, developers frequently commit to a shared repository using a version control system such as Git.
- ✓ Prior to each commit, developers may choose to run local unit tests on their code as an extra verification layer before integrating.
- ✓ A continuous integration service automatically builds and runs unit tests on the new code changes to immediately surface any errors.



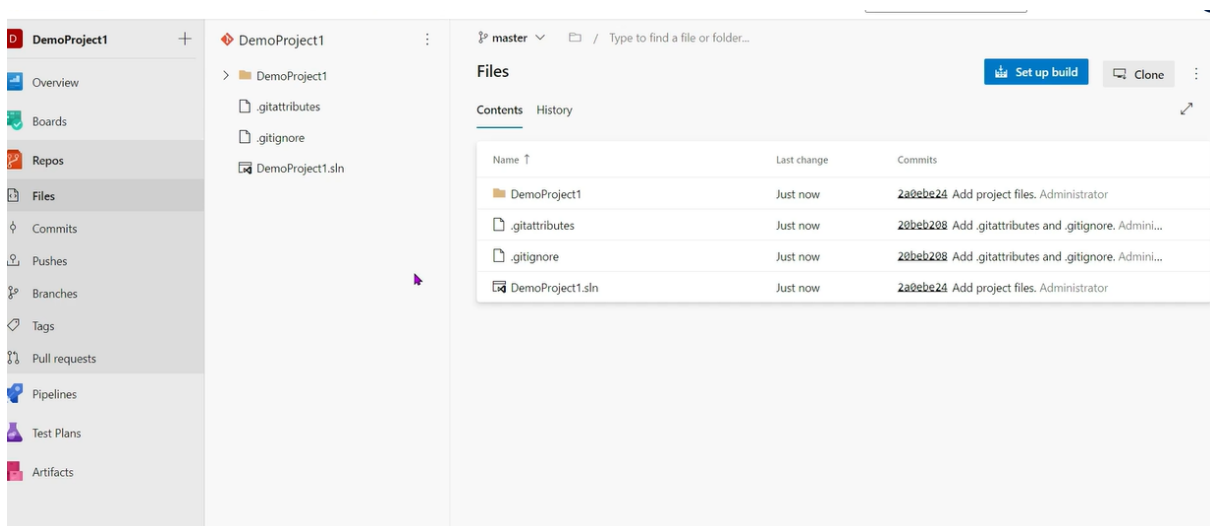
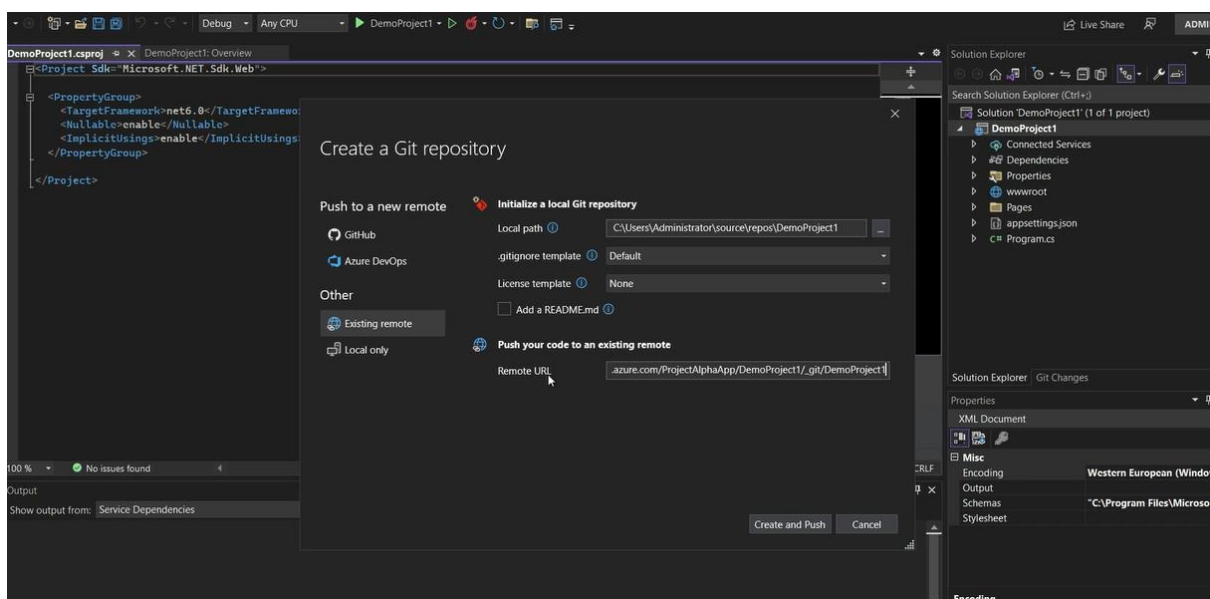
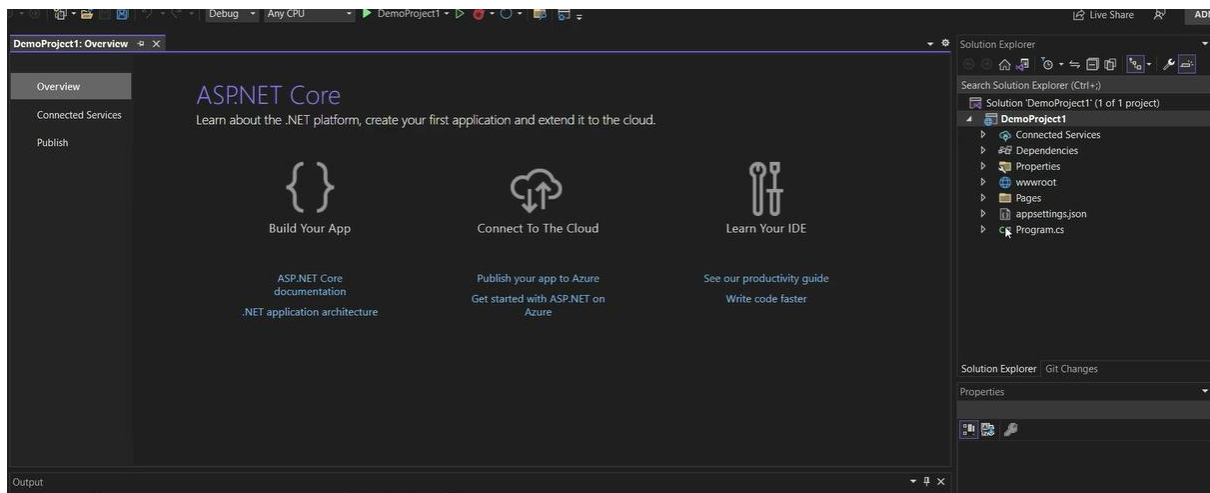
Create a new Project in Azure DevOps organization. Select any work item process. [In our case- Agile]



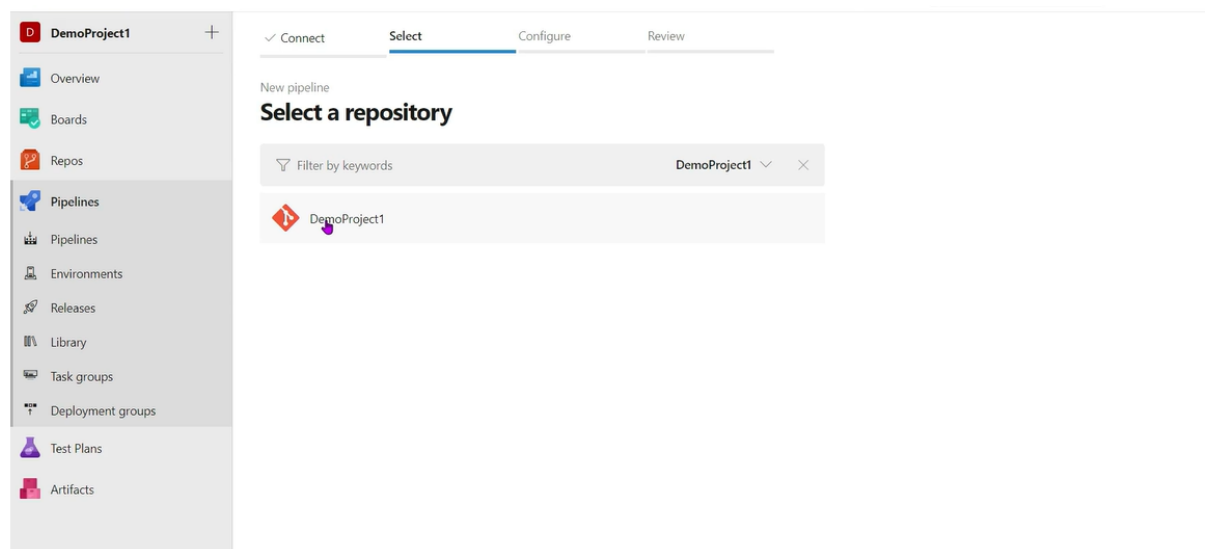
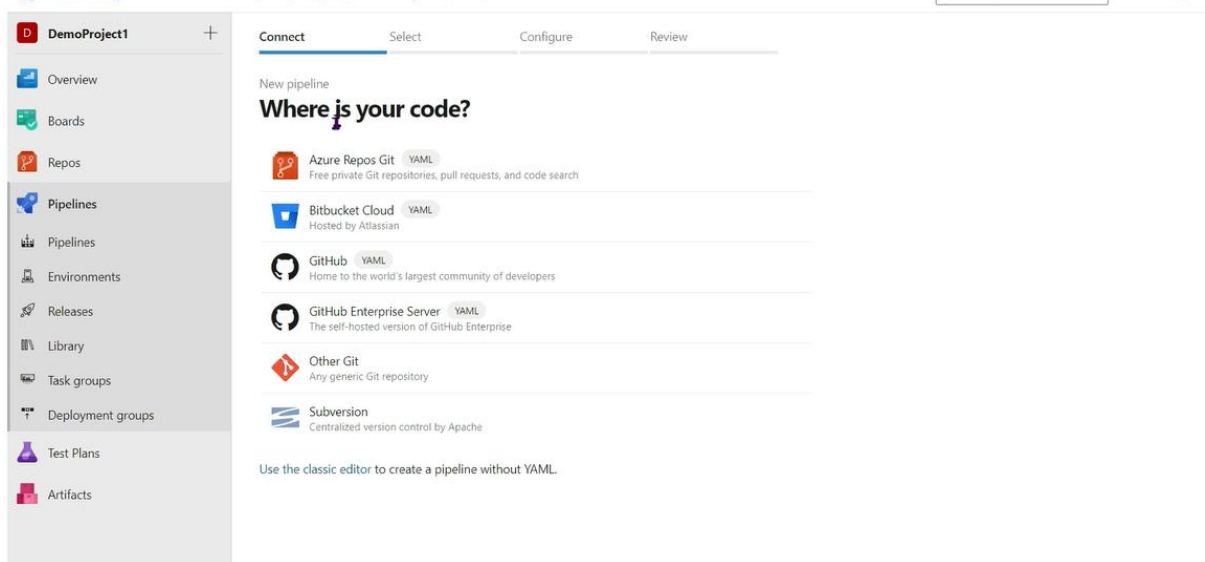
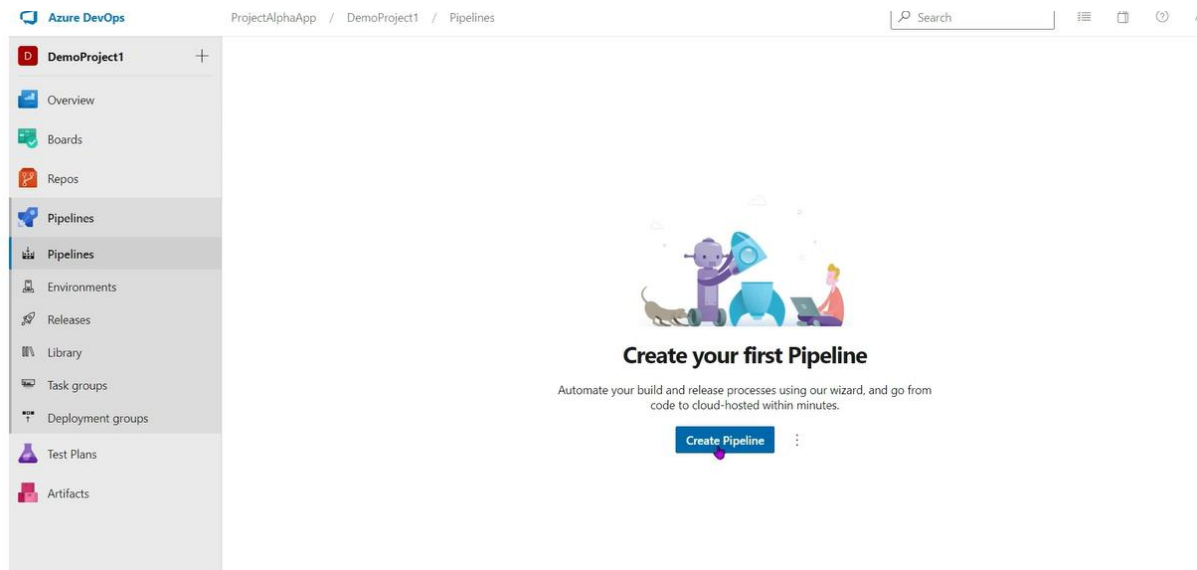
Push code from Local Repository to Azure Repos. Copy the existing Repository URL.



Create ASP.Net Web app Project on your local machine or Virtual Machine and push it to Azure Repos from Git using Existing Remote.



Create Pipeline and Select Azure Repos as the Source.



Select AS.Net Core Framework.

Azure DevOps ProjectAlphaApp / DemoProject1 / Pipelines

Connect Select **Configure** Review

New pipeline

Configure your pipeline

- ASP.NET**
Build and test ASP.NET projects.
- ASP.NET Core (.NET Framework)**
Build and test ASP.NET Core projects targeting the full .NET Framework.
- .NET Desktop**
Build and run tests for .NET Desktop or Windows classic desktop solutions.
- Universal Windows Platform**
Build a Universal Windows Platform project using Visual Studio.
- Xamarin.Android**
Build a Xamarin.Android project.
- Xamarin.iOS**
Build a Xamarin.iOS project.
- Starter pipeline**
Start with a minimal pipeline that you can customize to build and deploy your code.
- Existing Azure Pipelines YAML file**
Select an Azure Pipelines YAML file in any branch of the repository.

Show more

Azure DevOps ProjectAlphaApp / DemoProject1 / Pipelines

Connect Select Configure **Review**

New pipeline

Review your pipeline YAML

Variables Save and run

DemoProject1 / azure-pipelines.yml * Show assistant

```
1 # ASP.NET Core (.NET Framework)
2 # Build and test ASP.NET Core projects targeting the full .NET Framework.
3 # Add steps that publish symbols, save build artifacts, and more:
4 # https://docs.microsoft.com/azure/devops/pipelines/languages/dotnet-core
5
6 trigger:
7   - master
8
9 pool:
10  - vmImage: 'windows-latest'
11
12 variables:
13   - solution: '**/*.sln'
14   - buildPlatform: 'Any CPU'
15   - buildConfiguration: 'Release'
16
17 steps:
18   - task: NuGetToolInstaller@1
19
20   - task: NuGetCommand@2
21     inputs:
22       restoreSolution: '$(solution)'
23
```

Azure DevOps ProjectAlphaApp / DemoProject1 / Pipelines

Connect Select Configure Review

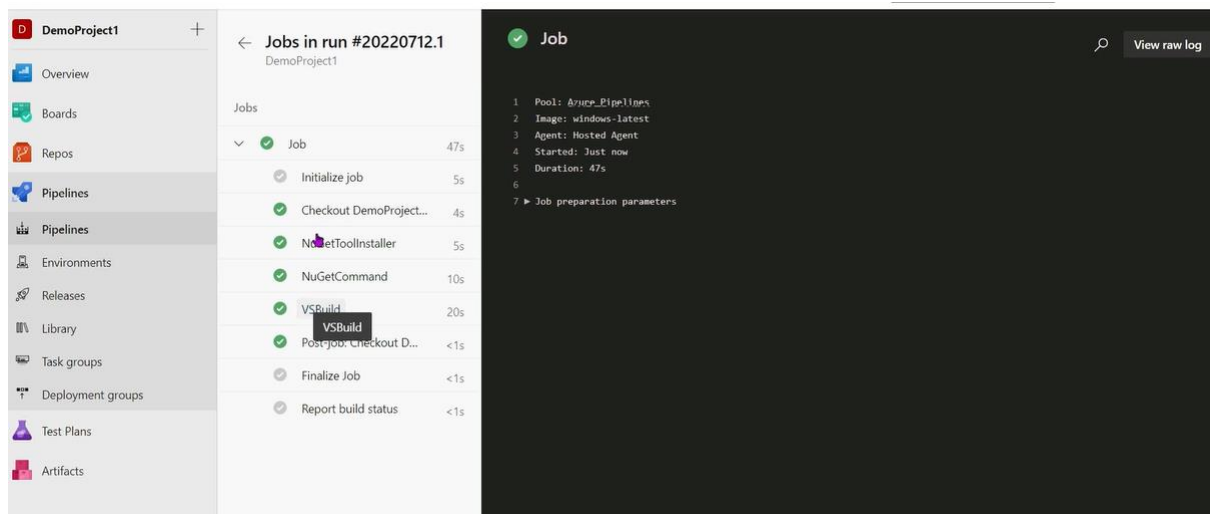
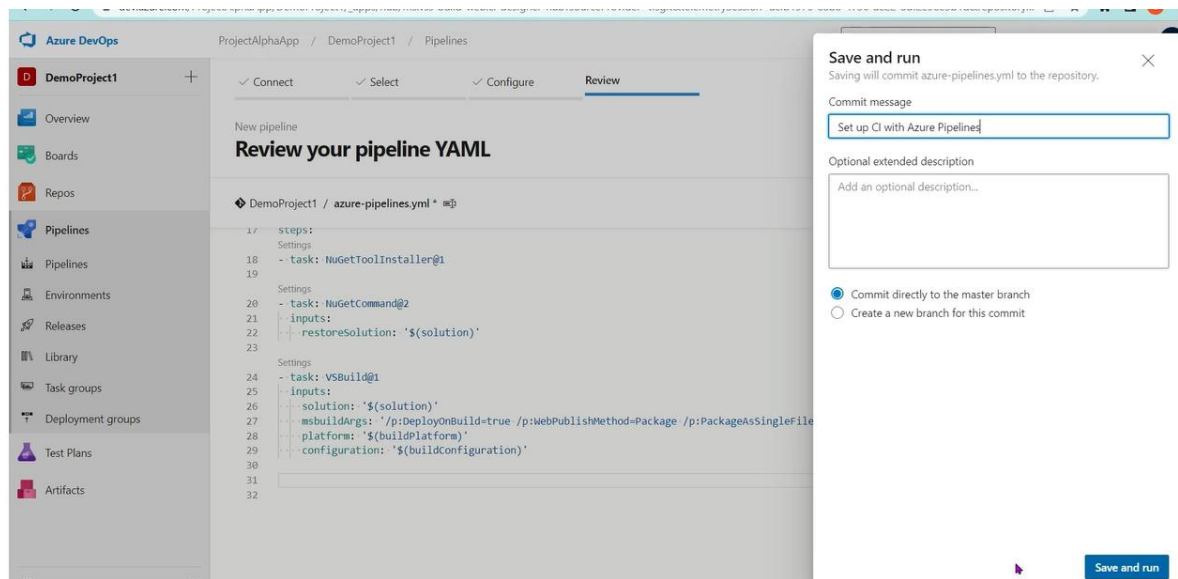
New pipeline

Review your pipeline YAML

Variables Save and run

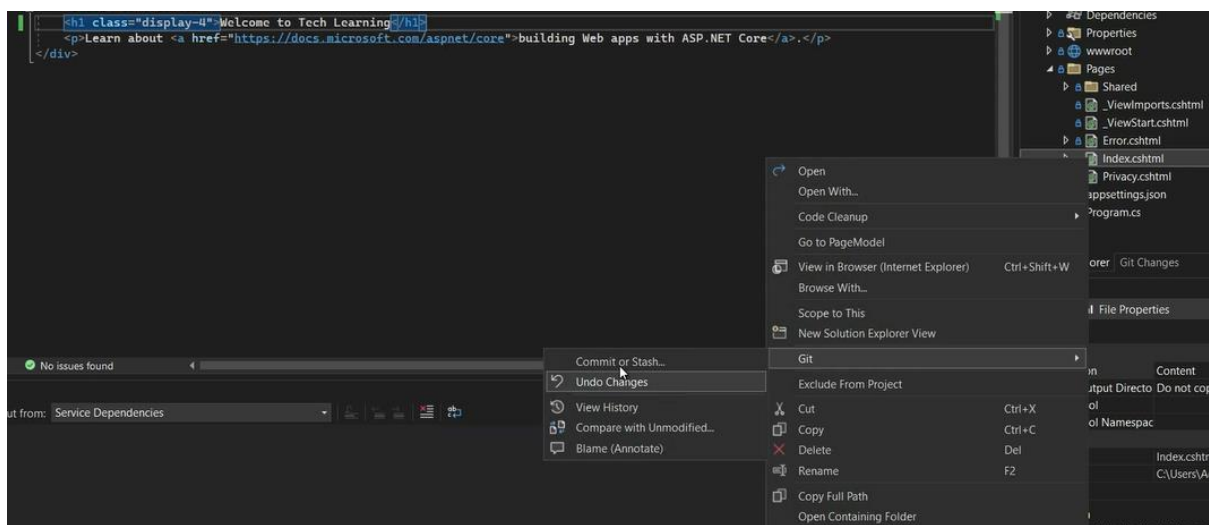
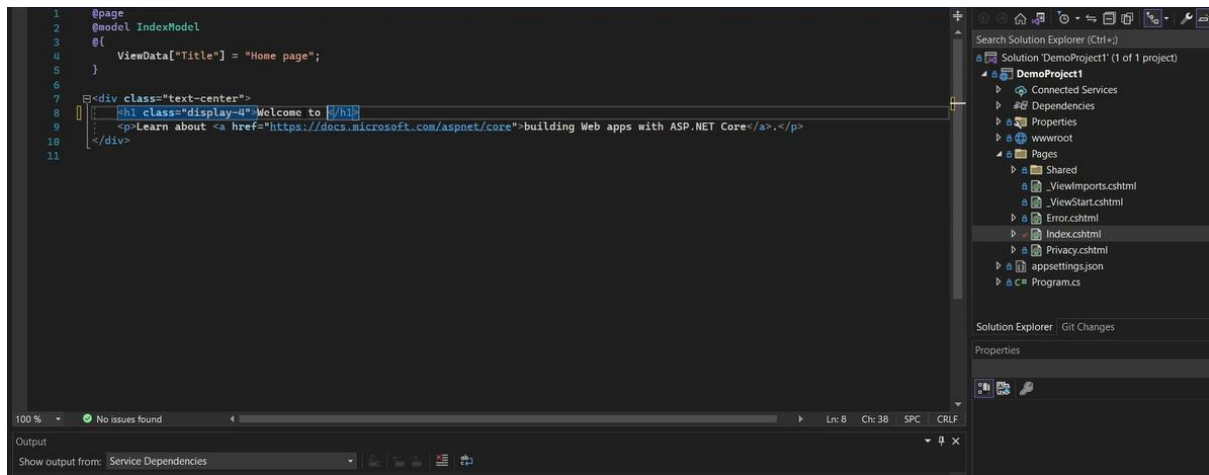
DemoProject1 / azure-pipelines.yml * Show assistant

```
17 steps:
18   - task: NuGetToolInstaller@1
19
20   - task: NuGetCommand@2
21     inputs:
22       restoreSolution: '$(solution)'
23
24   - task: VSBuild@1
25     inputs:
26       solution: '$(solution)'
27       msbuildargs: '/p:DeployOnBuild=true /p:WebPublishMethod=Package /p:PackageAsSingleFile=true /p:SkipInvalidConfigurations=true /p:DesktopBuildPackageLocation="$(buildPlatform)$(buildConfiguration)'
28       platform: '$(buildPlatform)'
29       configuration: '$(buildConfiguration)'
30
31   - task: VSTest@2
32     inputs:
33       platform: '$(buildPlatform)'
34       configuration: '$(buildConfiguration)'
35
```

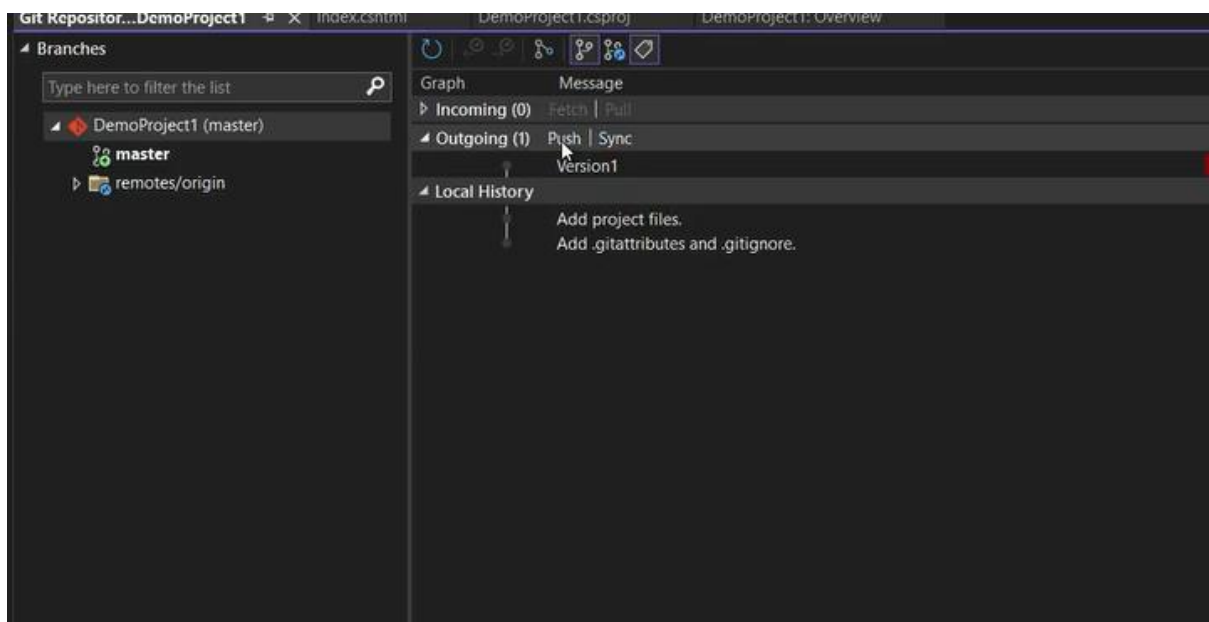


Automatic Trigger for Azure Build Pipeline

Make some changes to default index.html page [Welcome to AZ-400 Training] in local Repo and then commit changes.



Navigate to Git Repository and click Push.



Automatic Pipeline has been triggered after commit.

DemoProject1

Overview

Boards

Repos

Pipelines

Pipelines

Environments

Releases

Library

Task groups

Deployment groups

Test Plans

Artifacts

Pipelines

RecentAllRuns

All pipeline runs

Description	Stages	
Merge branch 'master' of https://dev.azure.com/ProjectAlphaApp/DemoProject1...		Just now 59s
Set up CI with Azure Pipelines		Yesterday 54s

DemoProject1

Overview

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Jobs in run #20220713.1

DemoProject1

Jobs

Job	55s
Initialize job	8s
Checkout DemoProject...	4s
NuGetToolInstaller	4s
NuGetCommand	11s
VSBuild	25s
Post-job: Checkout D...	<1s
Finalize Job	<1s
Report build status	<1s

Job

1 Pool: Azure_Pipelines
2 Image: windows-latest
3 Agent: Hosted Agent
4 Started: Just now
5 Duration: 55s
6
7 Job preparation parameters