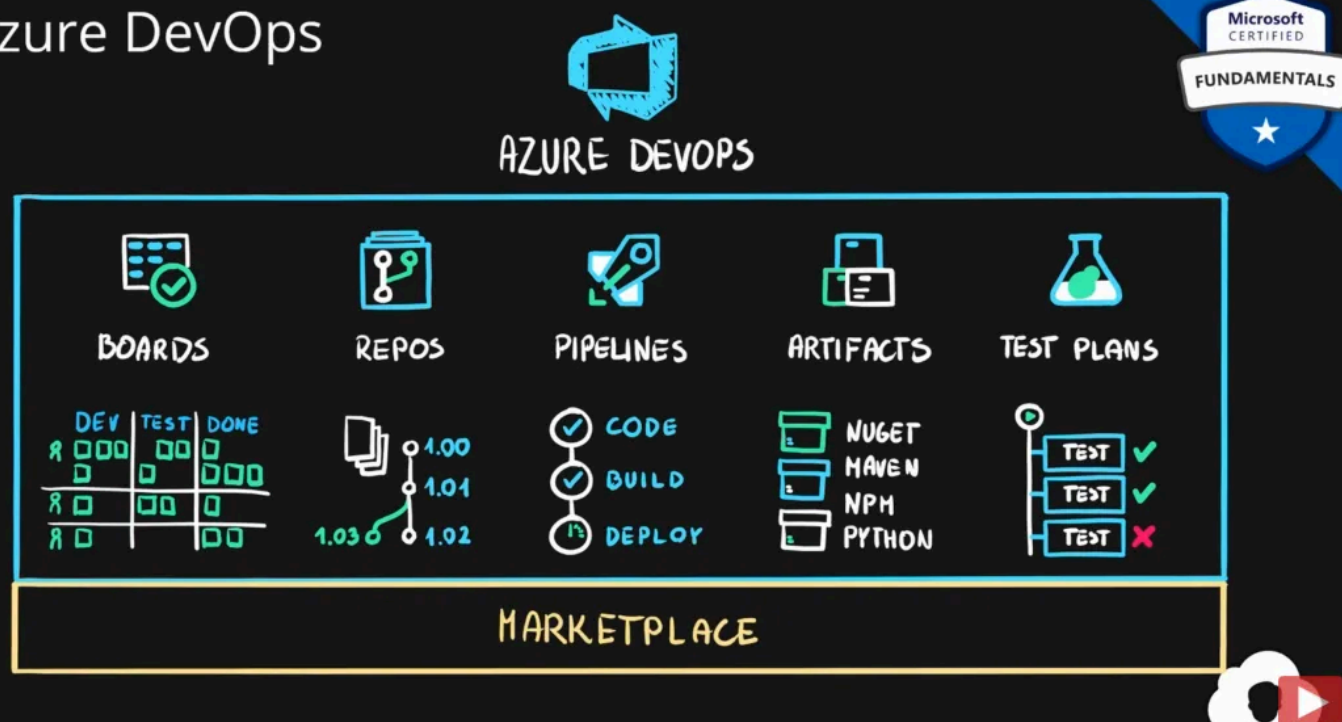# Azure DevOps services

Skills Learned

- Describe DevOps solutions available on Azure such as
  - Azure DevOps and
  - Azure DevTest Labs

DevOps is a set of practices that combine both development (Dev) and operations (Ops).

DevOps aims to shorten the development life cycle by providing continuous integration and delivery (CI/CD) capabilities while ensuring high quality of deliverables.

Key Characteristics

- Collection of services for building solutions using DevOps practices

- Services included
  - Boards – tracking work
  - Pipelines – building CI/CD workflows (build, test and deploy apps)
  - Repos – code collaboration and versioning with Git
  - Test Plans – manual and exploratory testing
  - Artifacts – manage project deliverables

- Extensible with Marketplace – over 1000 of available apps

- Evolved from TFS (Team Foundation Server), through VSTS (Visual Studio Team Services)

Azure DevTest Labs

Azure DevTest Labs

Choose a base

Visual Studio Community 2017 on Windows 10 Enterprise N (x64)	Microsoft	Windows
Visual Studio Enterprise 2015 Update 3 with Universal Windows Tools and Azure S...	Microsoft	Windows
Visual Studio Enterprise 2017 (latest release) on Windows 10 Enterprise N (x64)	Microsoft	Windows
Visual Studio Enterprise 2017 on Windows 10 Enterprise N (x64)	Microsoft	Windows
Windows 10 Enterprise, Version 1903	Microsoft	Windows
Windows 10 Enterprise N, Version 1903	Microsoft	Windows
Windows 10 Enterprise multi-session, Version 1903	Microsoft	Windows
Windows 10 Pro, Version 1903	Microsoft	Windows
Windows 10 Pro ZH-CN, Version 1903	Microsoft	Windows
Windows 10 Pro N, Version 1903	Microsoft	Windows
Windows 10 Enterprise, Version 1909	Microsoft	Windows
Windows 10 Enterprise N, Version 1909	Microsoft	Windows
Windows 10 Enterprise multi-session, Version 1909	Microsoft	Windows

♡ Feedback

⚠ Applying artifacts on small sized (1 core) Windows VMs may take a longer time or fail in certain cases

1 artifact(s) selected

🔍 visua |

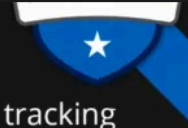| Name	Description	Publisher
Service Fabric SDK and Tools	Installs the latest available version of the Microsoft Azure Service Fa...	Microsoft
Visual Studio	Installs Visual Studio	Microsoft
Visual Studio Code	Installs the latest stable version of Visual Studio Code.	rchaganti

OK

Key Characteristics

- Service sandbox environment for developers/testers (PaaS)
- Quick setup of self-managed virtual machines
- Preconfigured templates for VMs
- Plenty of additional artifacts (tools, apps, custom actions)
- Lab policies (quotas, sizes, auto-shutdowns)
- Share and automate labs via custom images
- Premade plugins/API/tools for CI/CD pipeline automation

Summary

- Azure DevOps – end to end platform for building CI/CD pipelines, code versioning, tracking work and managing project deliverables
- Azure DevTest Labs – cloud-based environments for developers and testers with self-serve environments, reusable templates, cost management and multiple integrations