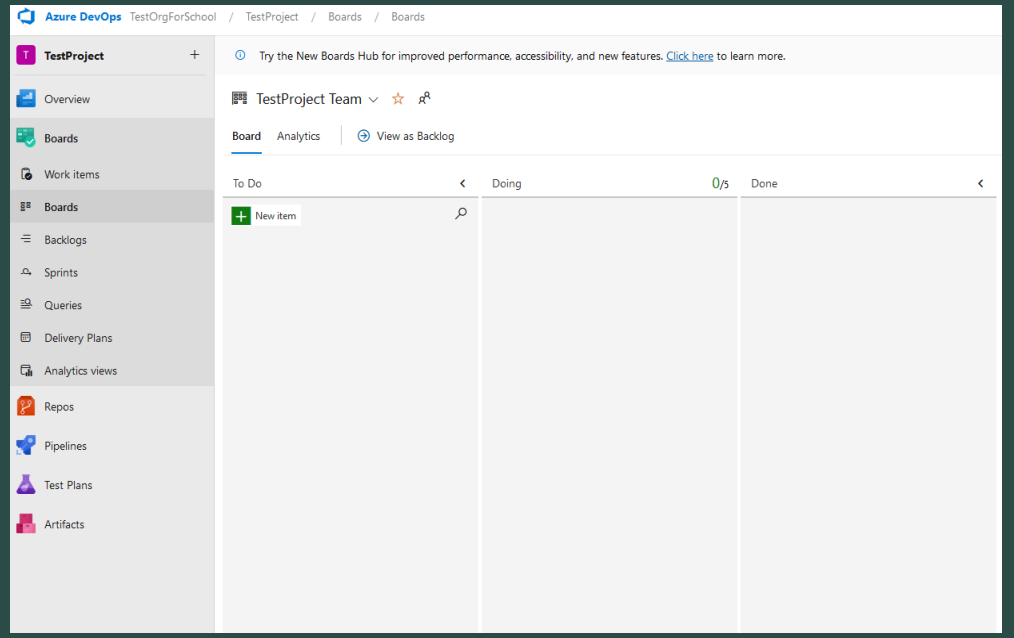
How to use Azure DevOps Organizations

By Evan Vicidomini

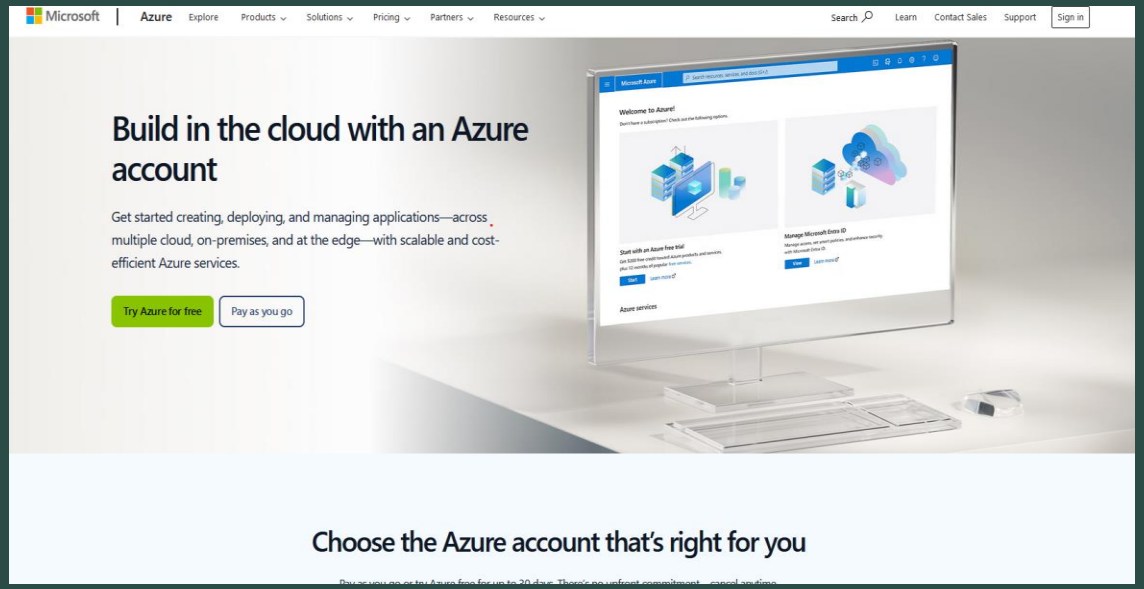
What is Azure DevOps?

- Azure DevOps is a tool used for organizations to collaborate on software projects.
- Projects are created on the DevOps home page that can be accessed by anyone that works at an organization.
- Tools include storage for repositories, user stories on organization boards, and pipeline tools.



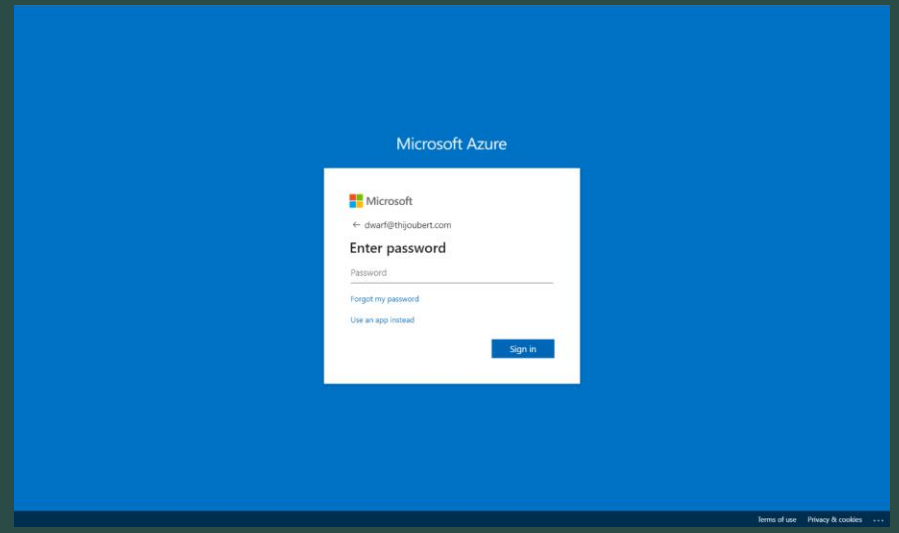
How to Access Azure

- To access Azure DevOps, you need to be authorized by an organization to use it. Azure requires a paid subscription to use.
- Most companies required you to have a Microsoft 365 Account. This account is used to access Azure.
- Azure is a great way for software developers and engineers to complete their work in a hybrid or remote setting.
- Azure has many other tools beside DevOps that are great skills required for a lot of developer jobs.



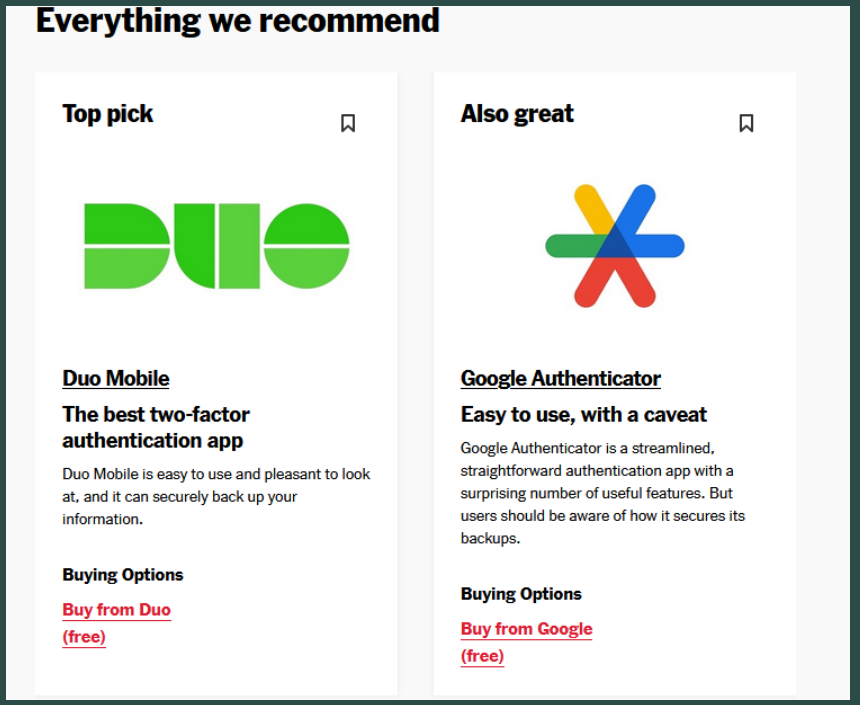
Logging Into Azure

- Go to portal.azure.com to access Azure
- To access it, use an email from an organization that you work for (this will usually be a Microsoft Account Email.
- Make sure that you have Two-Factor Authentication set up for future use. If already created, use an authenticator application on your smartphone.



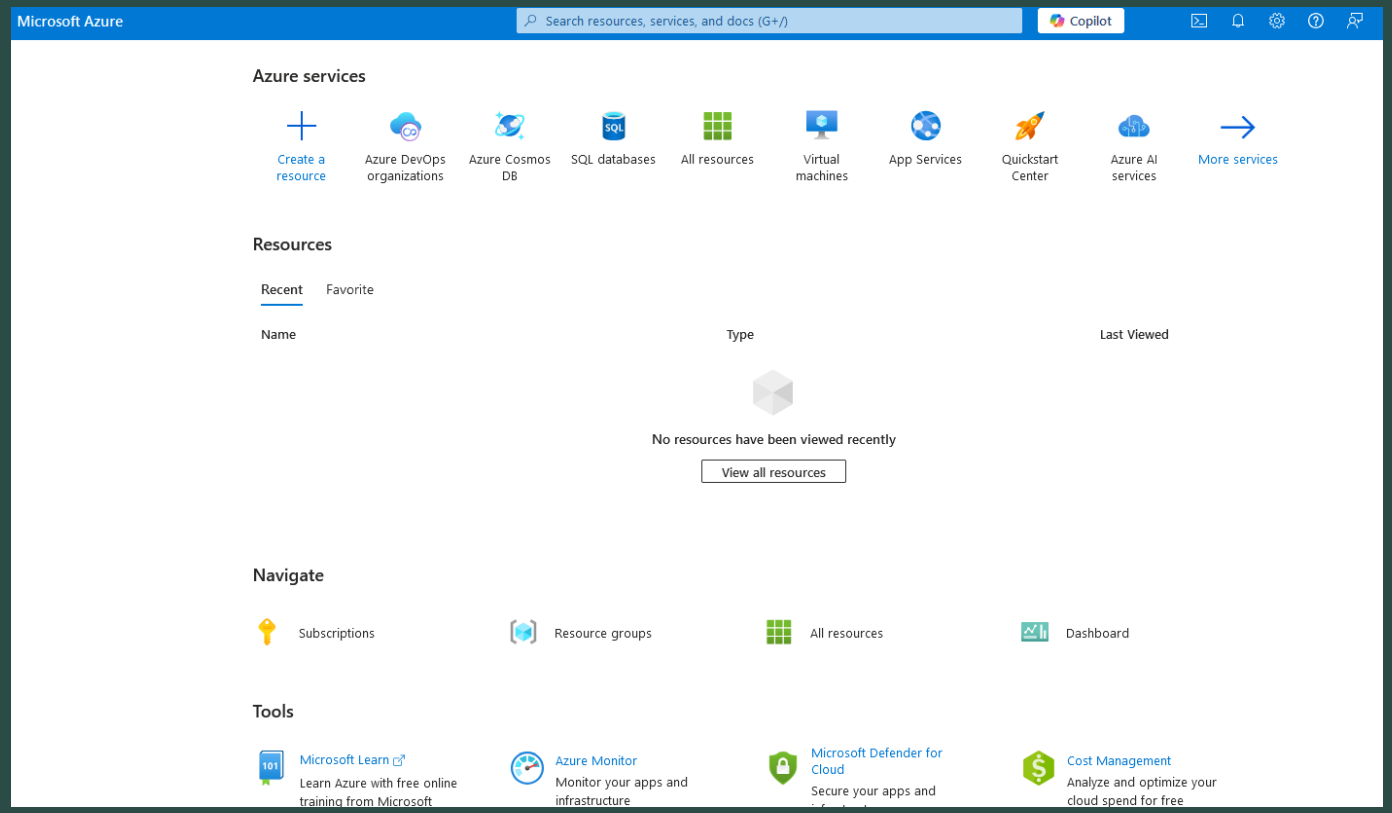
Multi-Factor Authentication

- MFA is important for using Azure because many organizations use this platform for storing sensitive information and for their project organization.
- MFA protects your account by using both a password and some verification from a device.
- It can ask for your email, phone number, or code from authenticator application.
- Authenticator applications include Google Authenticator, Duo Mobile, Microsoft Authenticator, etc.



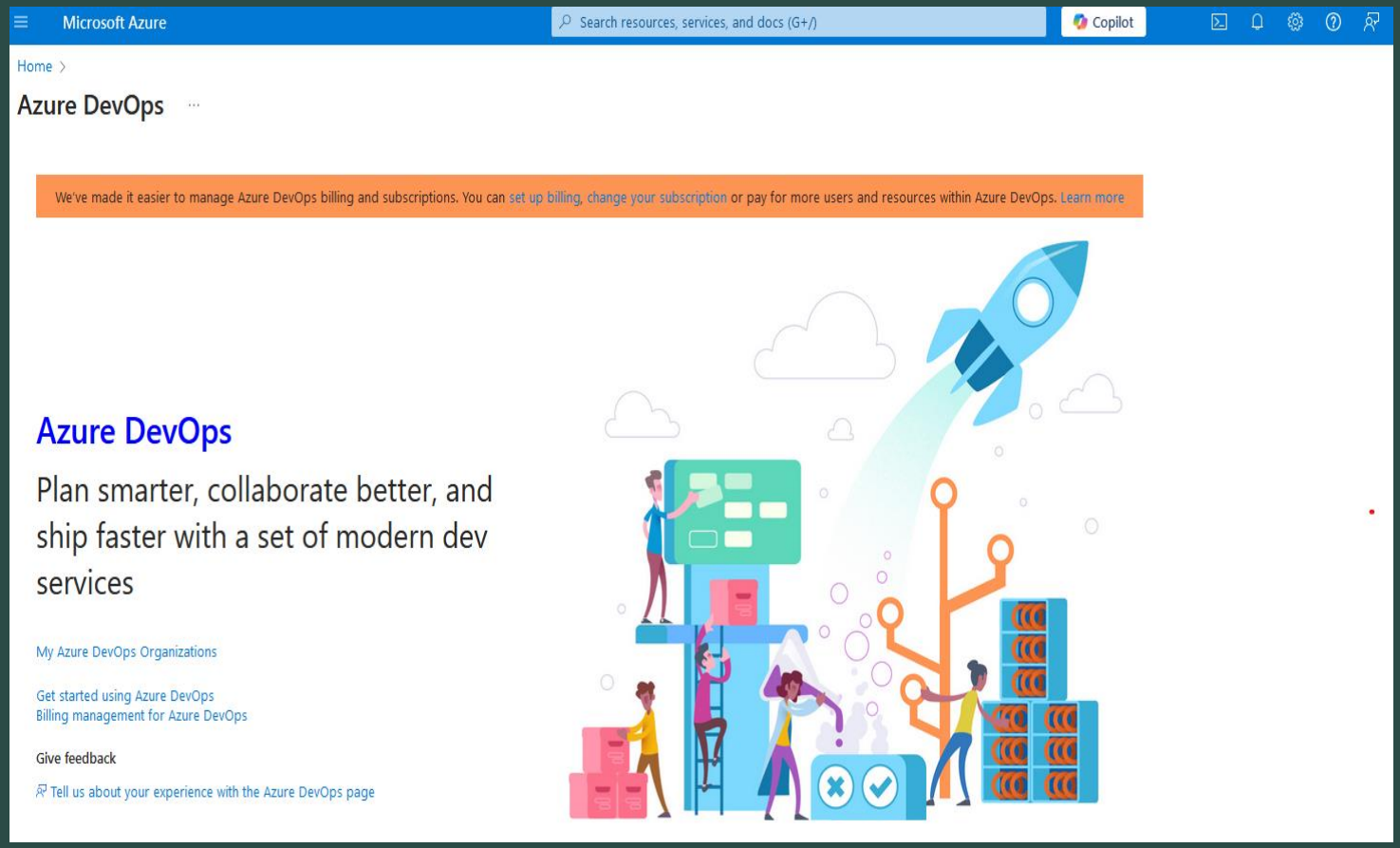
Azure Home Page

- The Azure Home Page has many tools that are used in organizations, including Cosmos DB, a database service from Microsoft similar to MySQL Workbench.
- Look for "Azure DevOps Organizations" in Azure Services. It can be searched for in the search bar on the top of the page.
- Organizations is where DevOps is located, and it is where projects are organized.



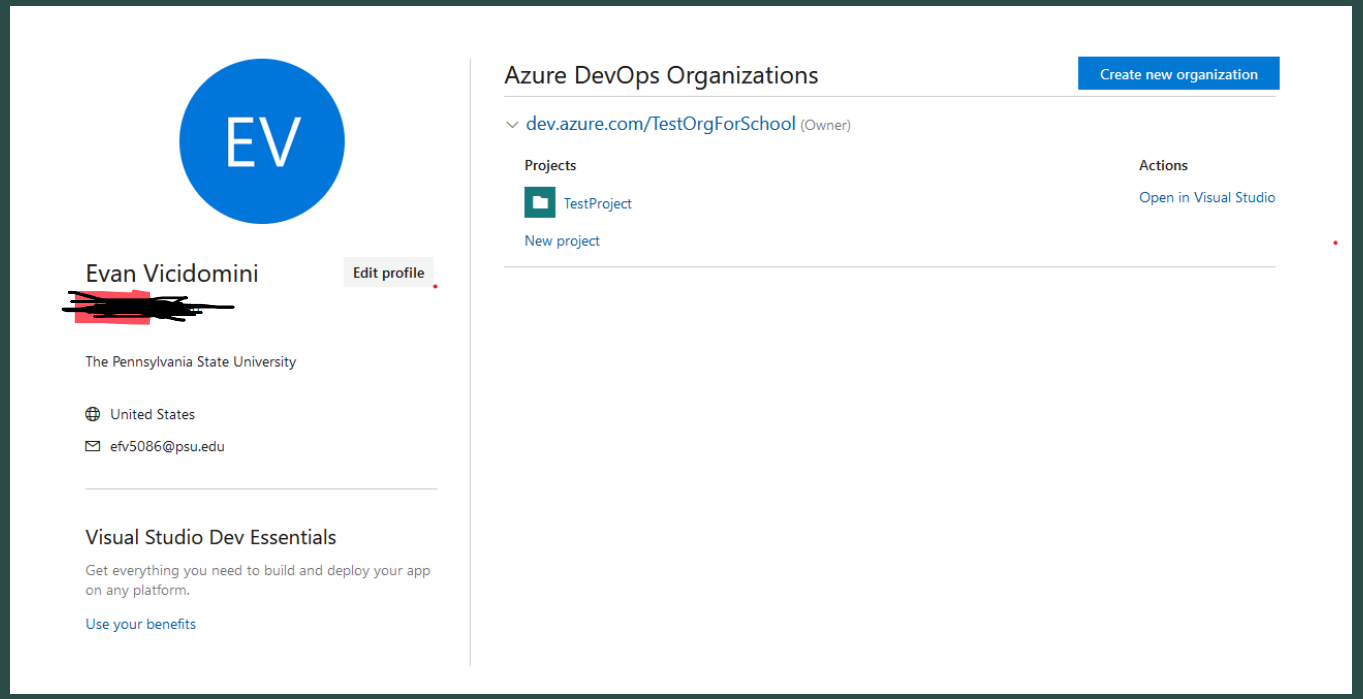
Organizations in Azure

- Once the Azure DevOps page is visible on Azure, make sure to click on the link that says "My Azure DevOps Organizations" to begin.
- The page will also show options for billing and getting started, but these are not important if you are already working for an organization that has Azure DevOps setup.



Access My Organizations in Azure DevOps

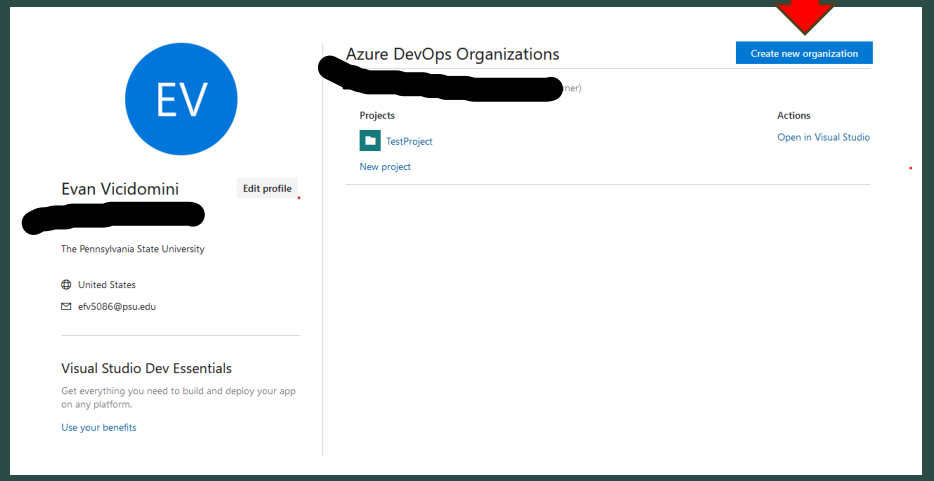
- The link will display this page. It shows the name of the Microsoft Account that is registered on Azure.
- It shows the organizations available and the projects that are in the organizations.
- Clicking on the link below "Azure DevOps Organizations" will go to Azure DevOps.
- It shows projects and organizations in more detail.

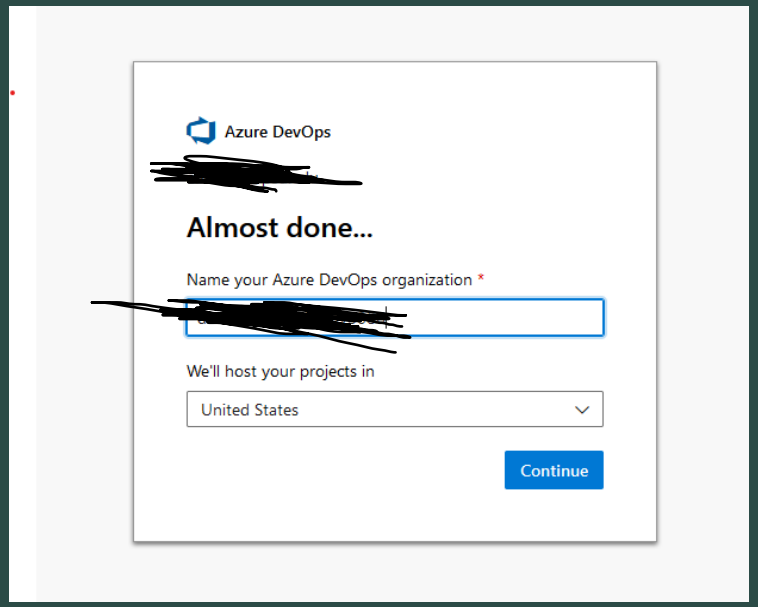


Basics of Creating an Organization

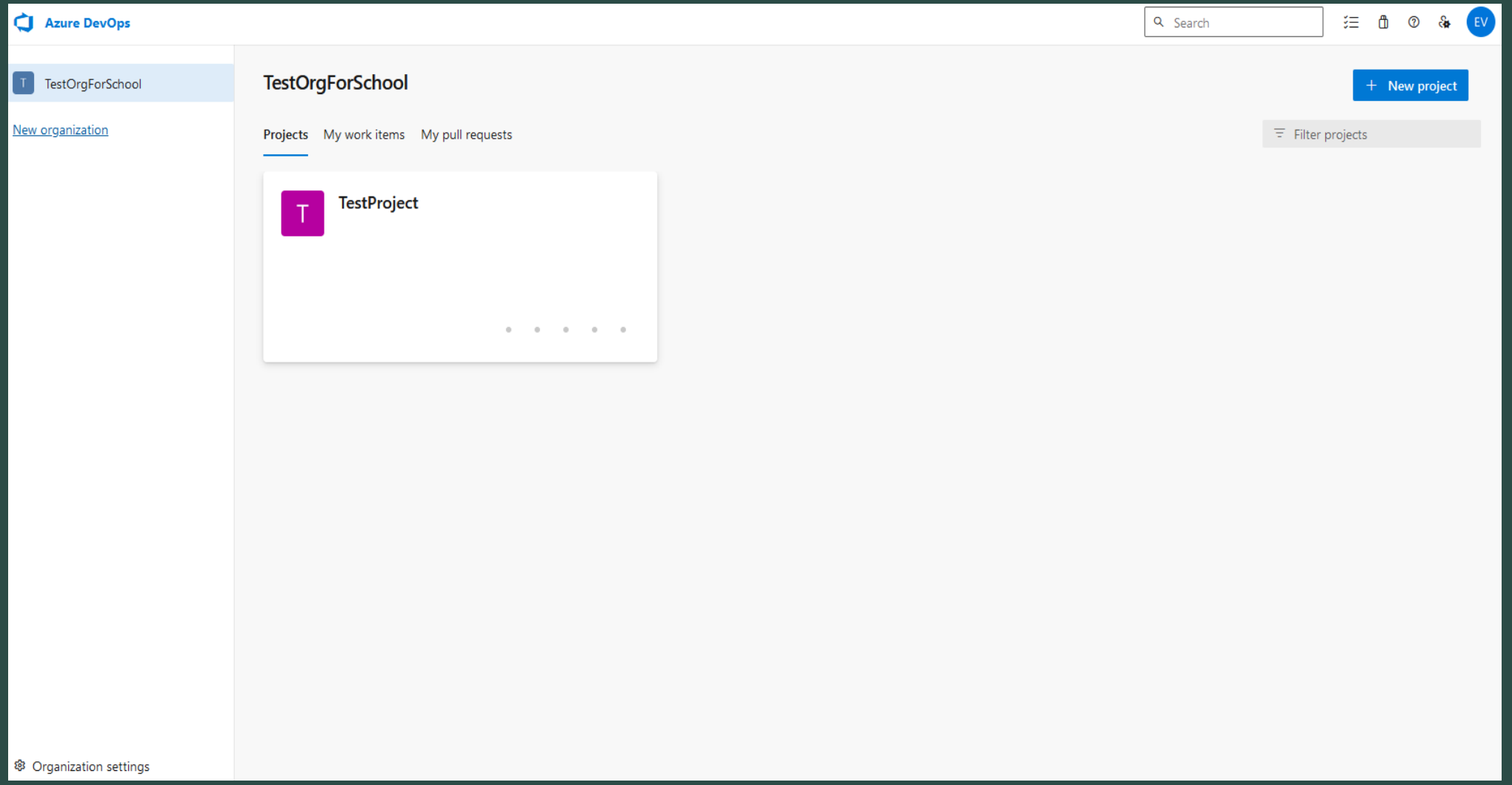
- Depending on how you access Azure DevOps, you can create organizations of you own.
- If you work for an organization already, do not create one, as it should already be set up for you.
- To create an organization, click "Create new organization" and follow the instructions on the screen.
- This is an uncommon, and may not every be used, but it is still important to know.

Create new Organization Button



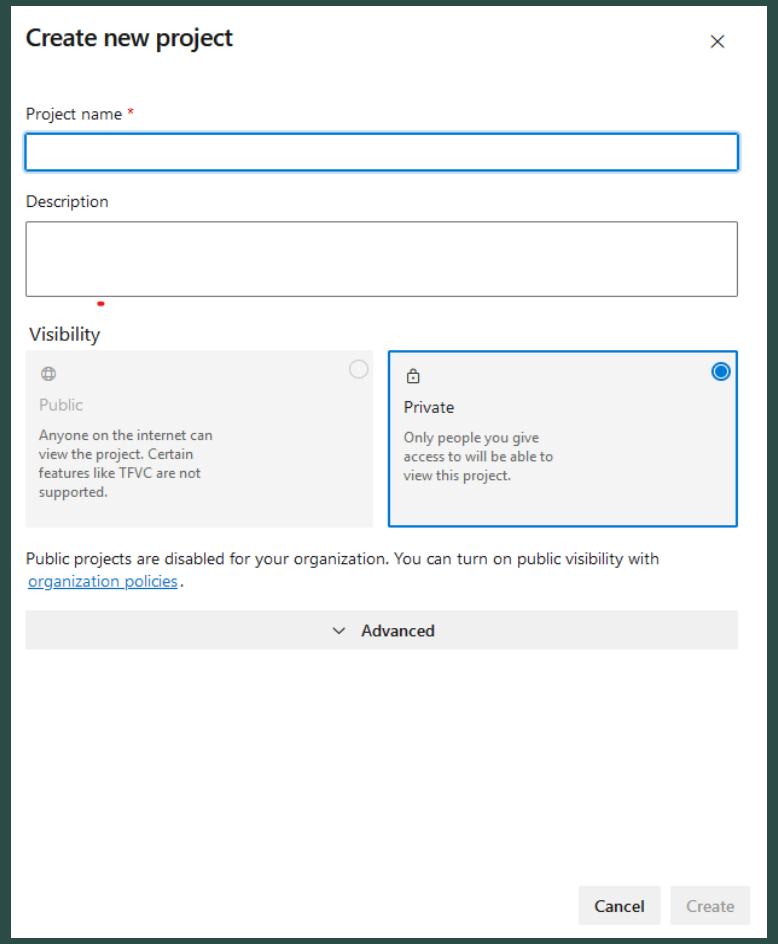


Azure DevOps Home Page



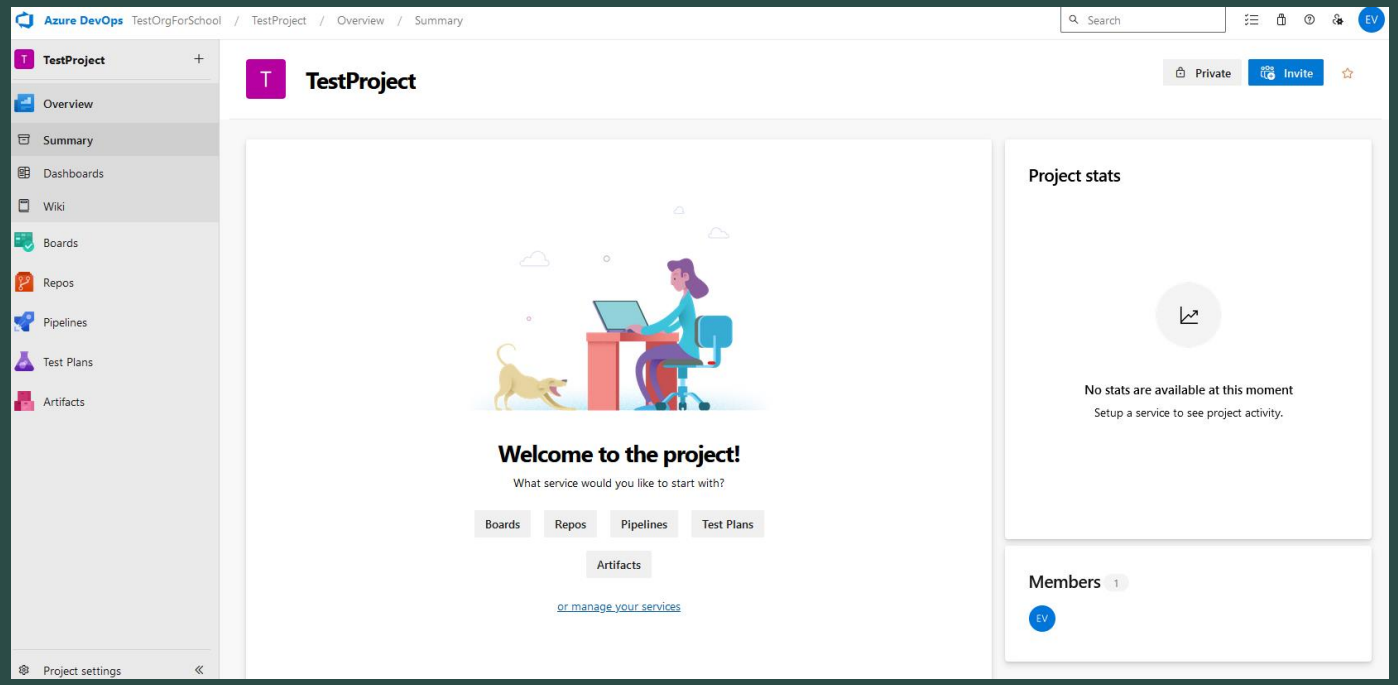
Projects in Azure DevOps

- This is the main page for Azure DevOps. Click on a project that is already created to get started.
- To create a project, find the blue button that says, "New Project" and follow the steps on the screen.
- This is also uncommon when working for a major organization, as they will have projects already created.



Project Page

- This is the start of a project that an organization can be working on. This depends on the platforms that they use.
- Organizations use many SaaS solutions like Salesforce, Oracle Cloud, etc.
- These platforms can be customized for the needs of an organization.
- Azure DevOps is used to keep track of new features of a software product.

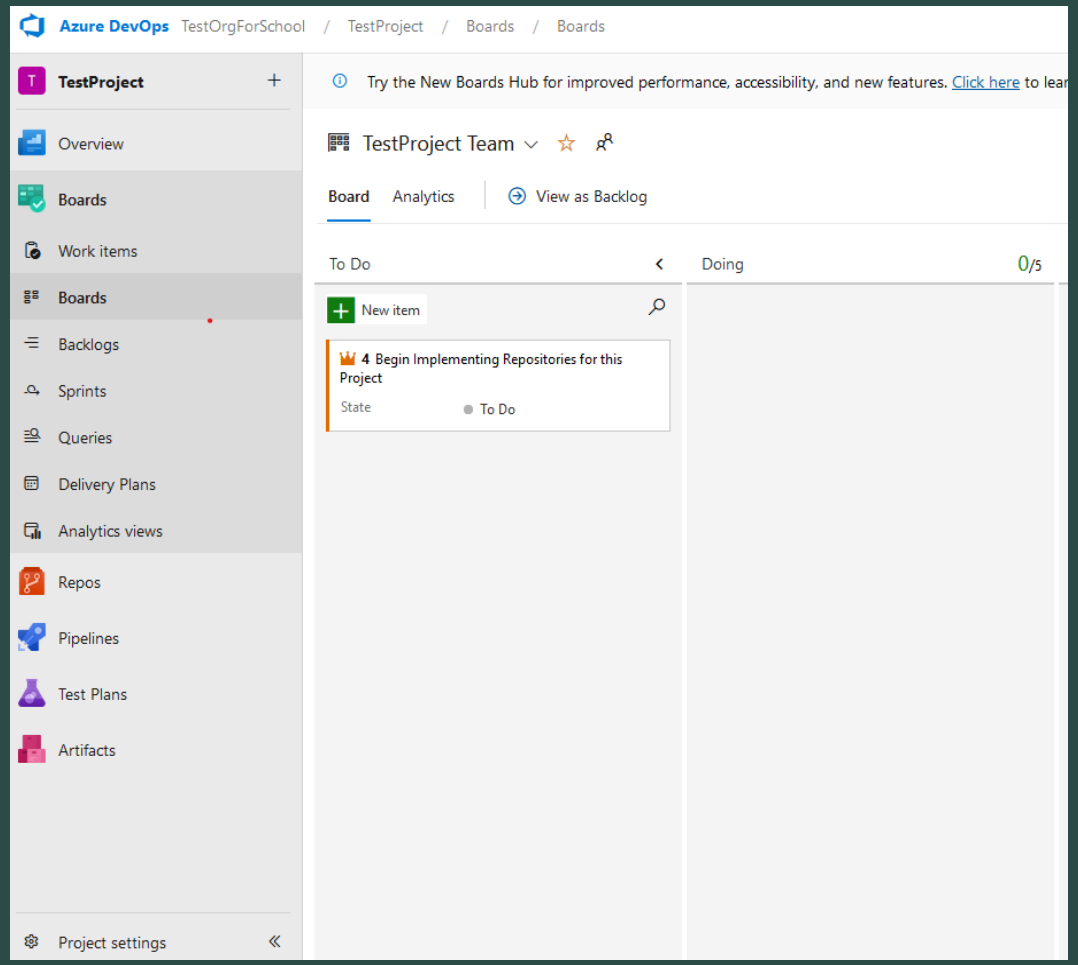


Overview

- The overview page describes what a project is about. It has the summary section, dashboards, and a wiki.
- The summary is an overview of the project, the dashboards show parts of a project and the development process, and the wiki is general info on how to complete certain parts of a project.
- This is not the most important part of the page on DevOps organizations, but it can help for new hires or interns.

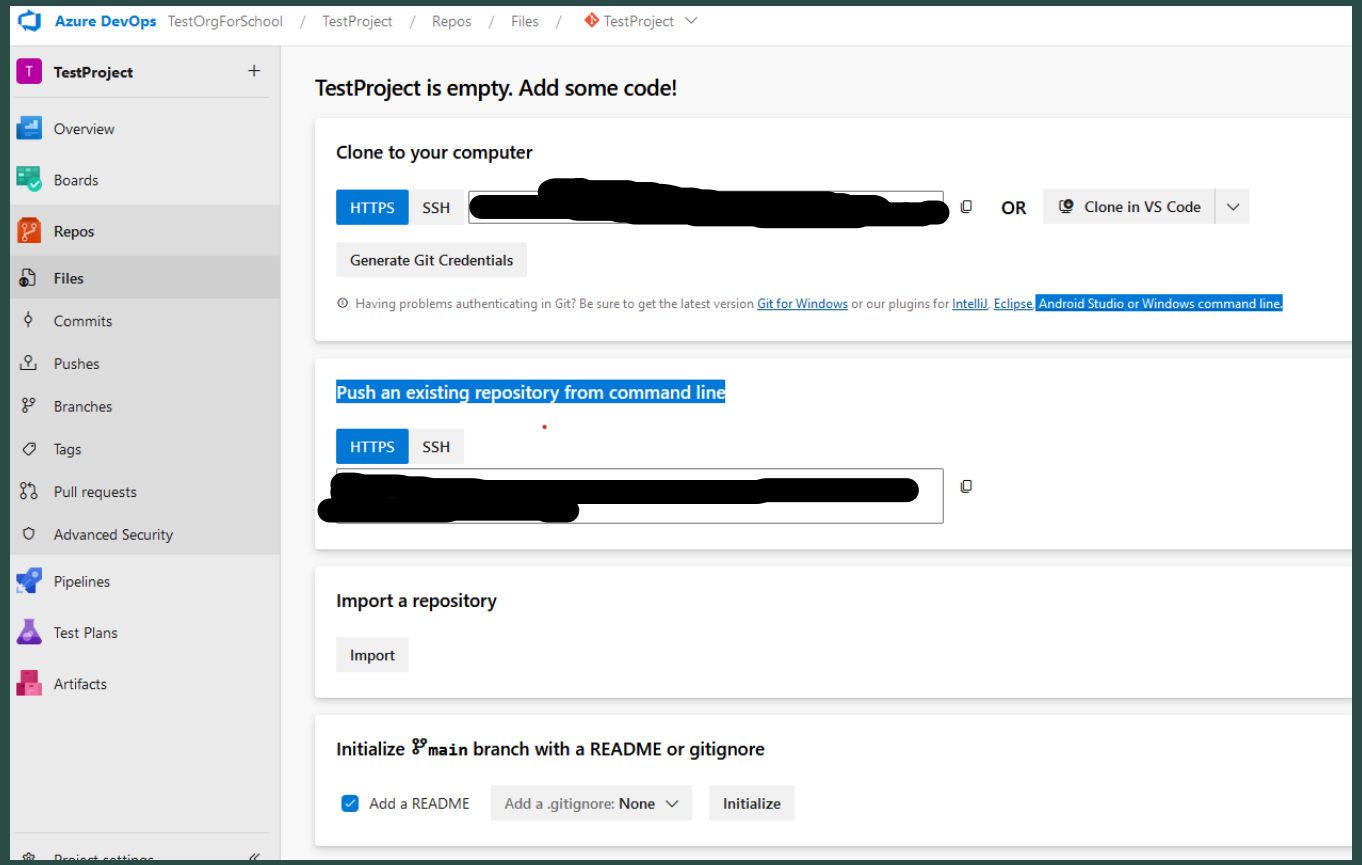
Boards

- This is the main area to see work items for a project.
- Main companies use Agile Scrum Methodologies for their software development process. The picture here is where use stories are created for new features.
- This section can also include bugs, issues, etc.
- Organizations are also responsible for creating product backlogs for new features. This is completed here.



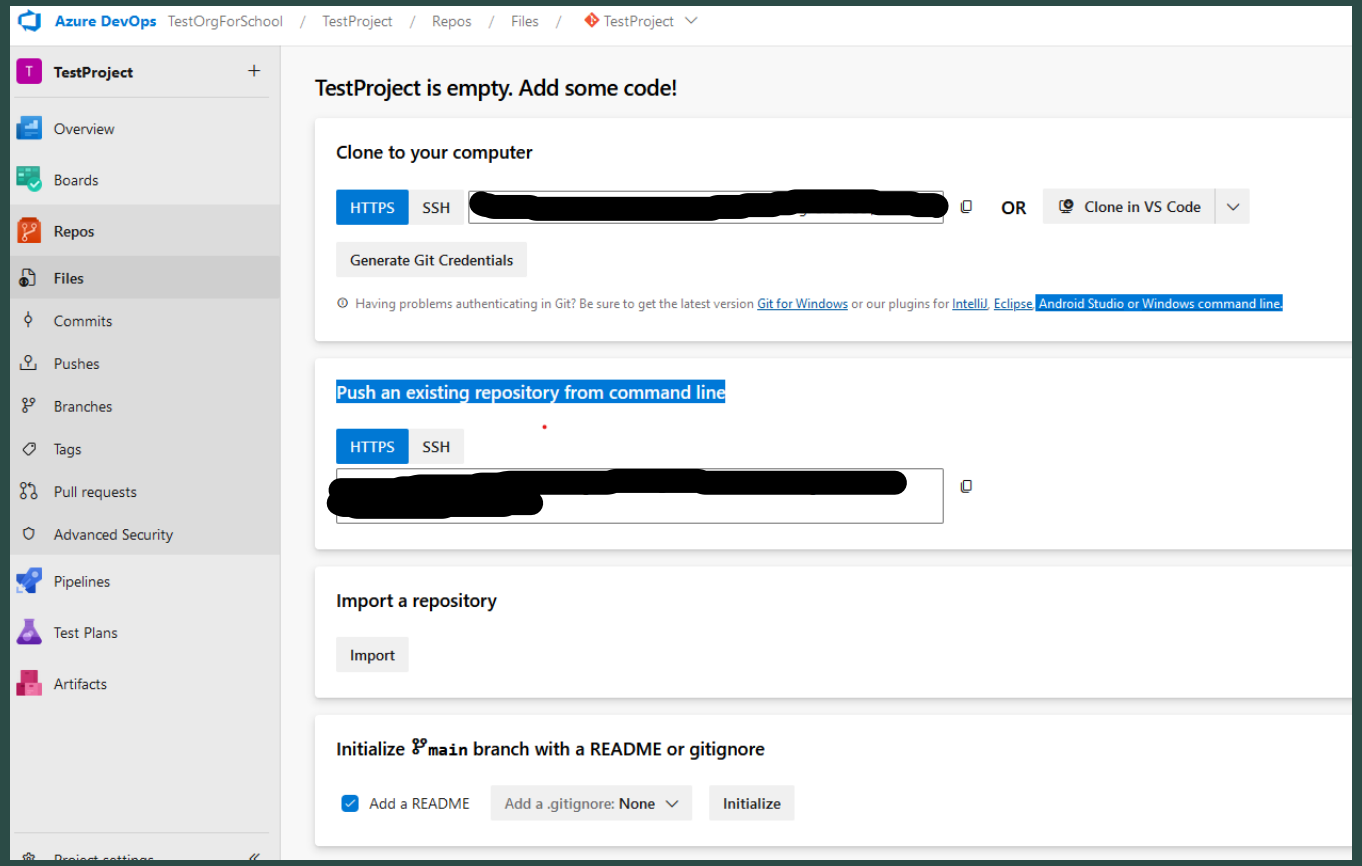
Repos

- Repos (also known as programming repositories) is for the storage of software projects that an organization is working on.
- Git is a version control system used for keeping track of changes made to repos.
- Software developers and engineers can clone repositories to an integrated development environment (IDE) and make changes to code. These changes can be created in branches.



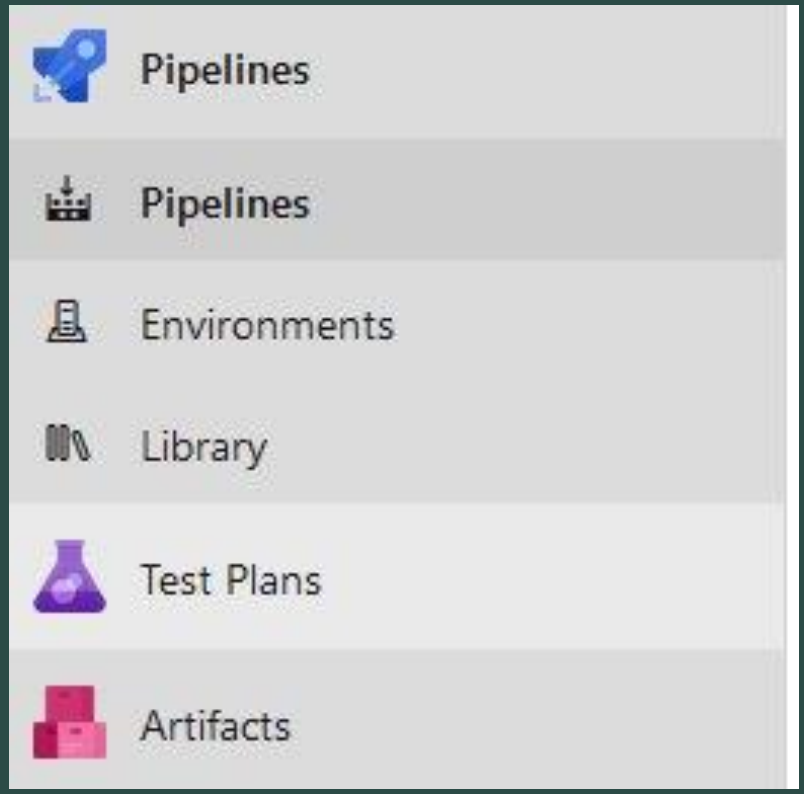
Repos (Continued)

- Commits show comments made to a change in a repo.
- Pushes show the changes pushed to DevOps.
- Branches are copies of the repository that developers make changes to before pushed to the final main branch.
- Other sections are tags, pull requests, and advances security.



Other Tools

- Pipelines are cloud-based tools for automatically building, testing, and deploying programming projects.
- Test plans are for managing test of software products outside of the software development life cycle
- Artifacts are miscellaneous tools and files when developing software products.



Summary

- Azure DevOps is one of the best tools for software project management.
- It is very common and important to know for many software engineering jobs.
- It is one of the most common used SaaS solutions for the workplace.

Works Cited

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