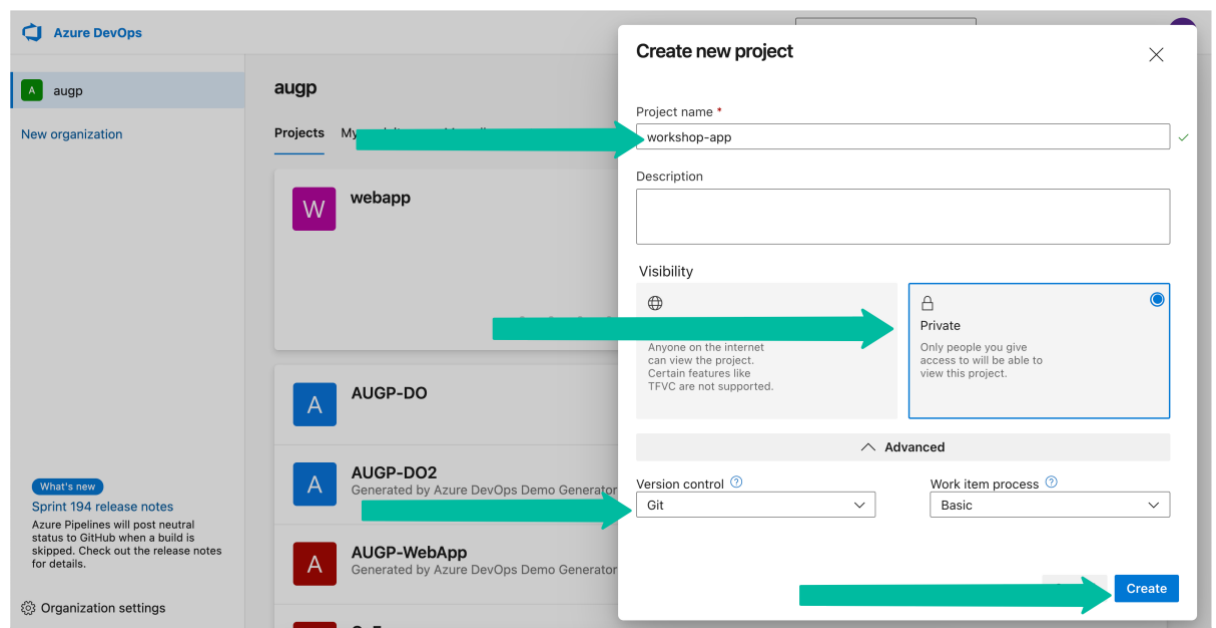
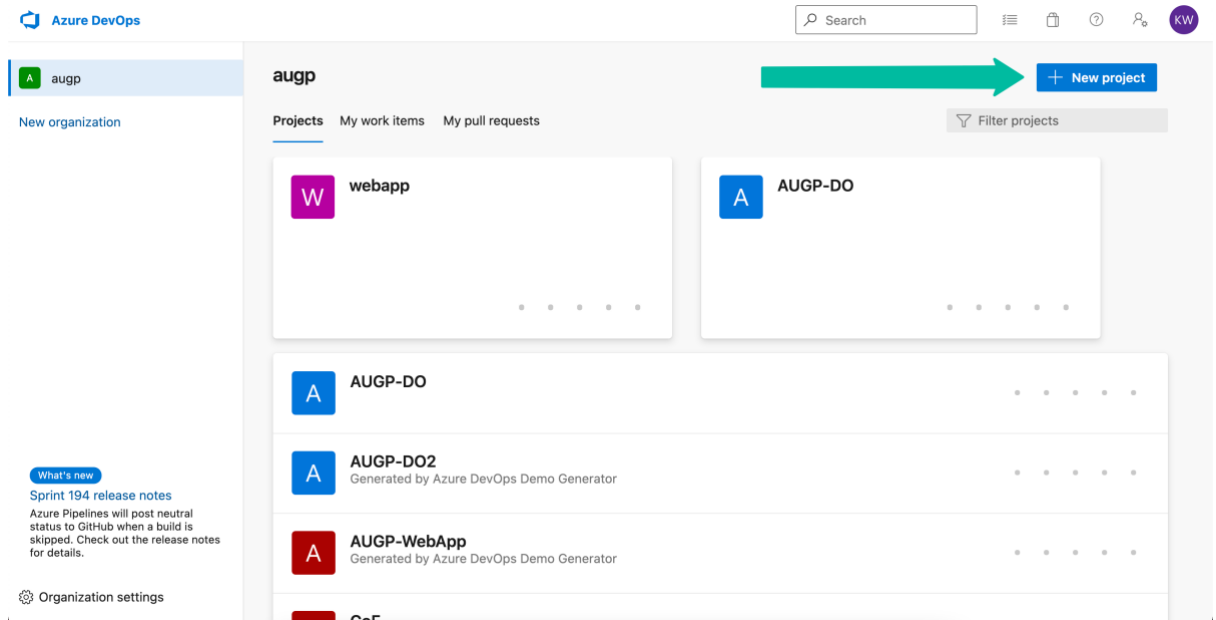
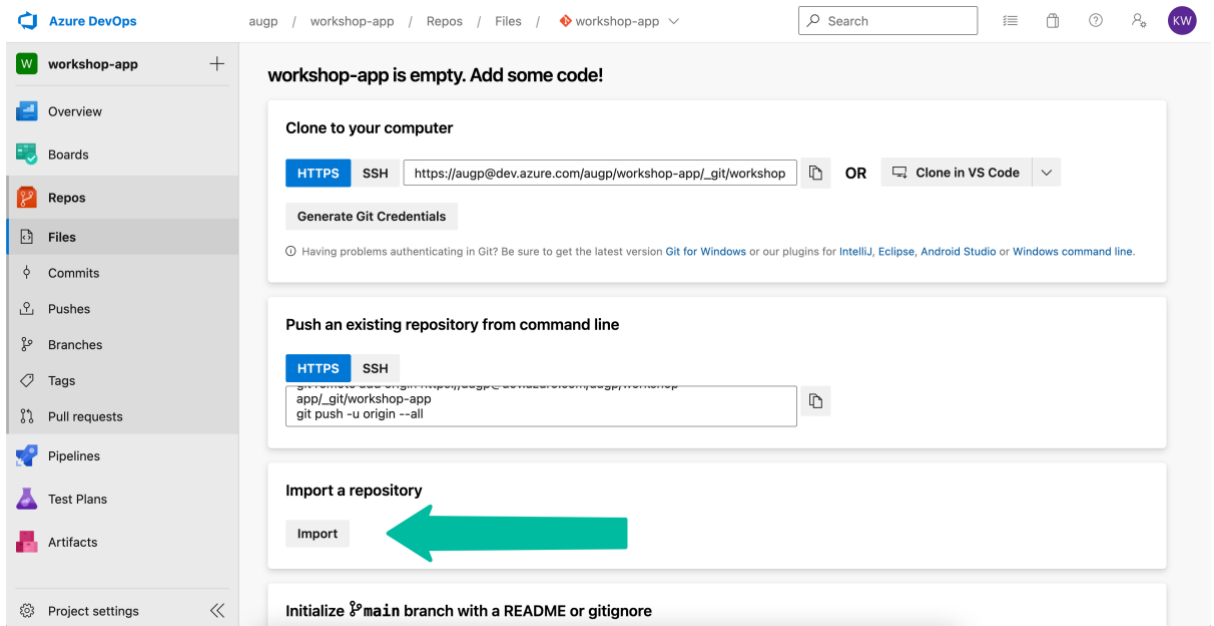
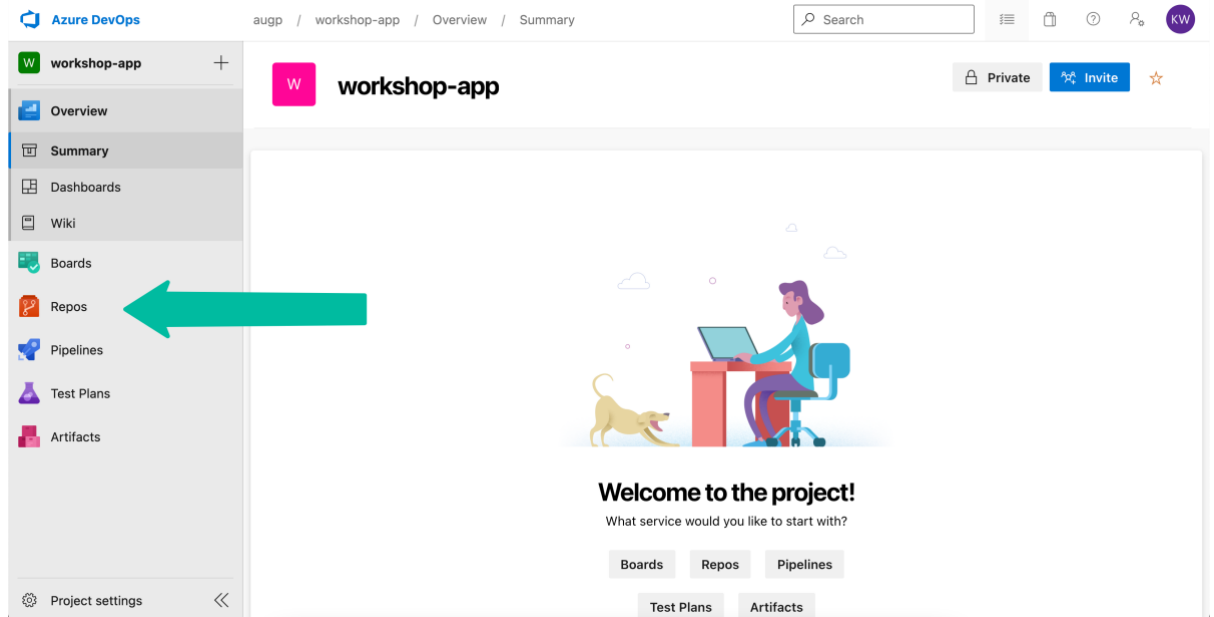


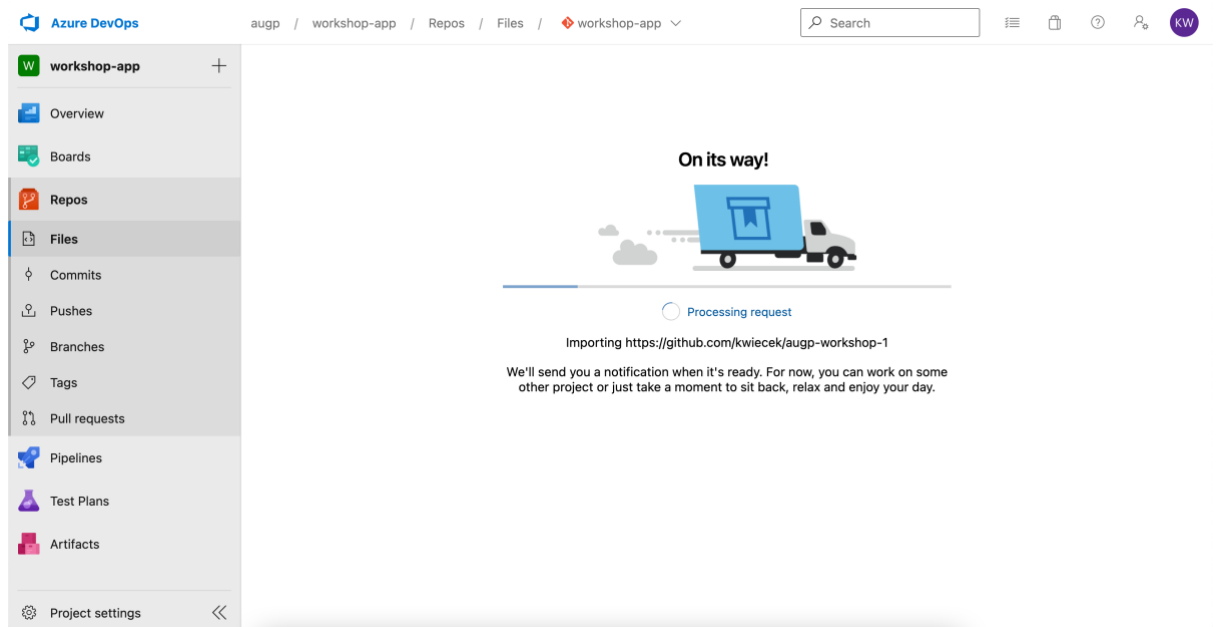
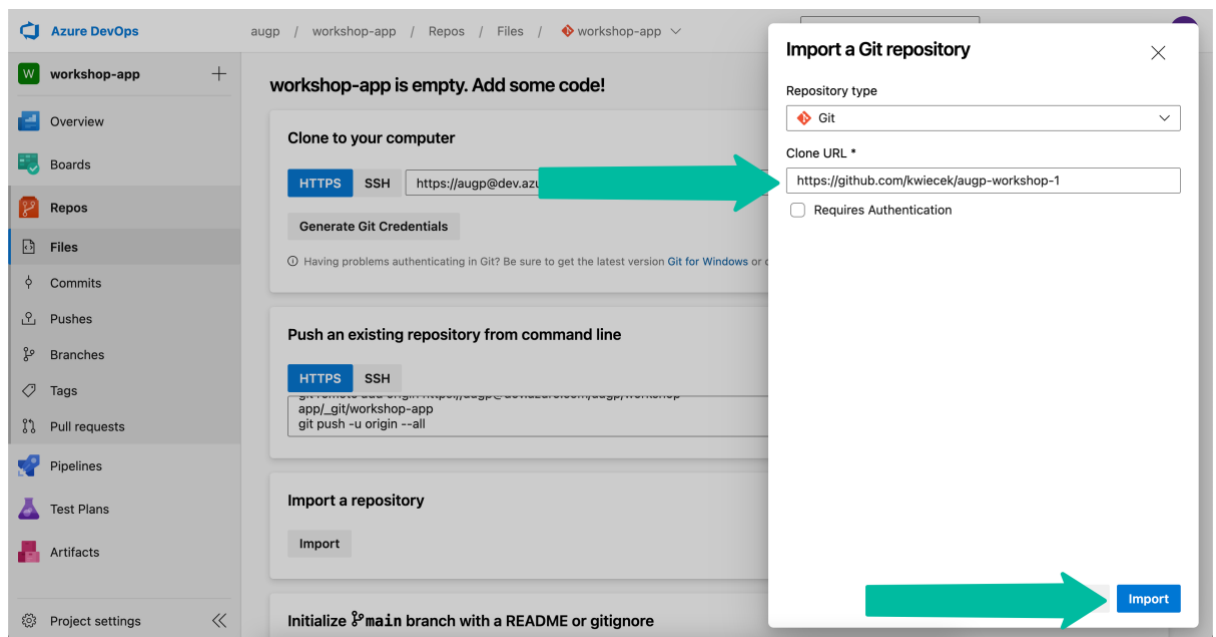
Ćwiczenie 1 – CI/CD w Azure DevOps

1. Zaloguj się do swojej organizacji Azure DevOps (np. <https://dev.azure.com/augp>).
2. Utwórz nowy projekt:

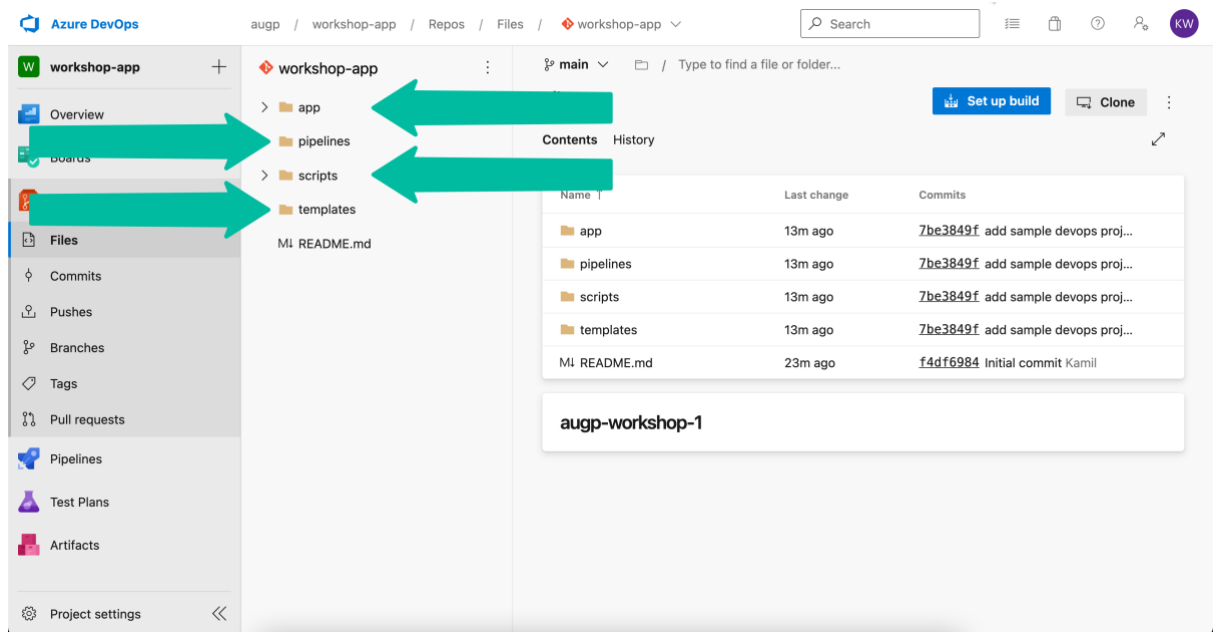


3. Otwórz projekt i utwórz repozytorium poprzez import <https://github.com/kwiecek/augp-workshop-1>

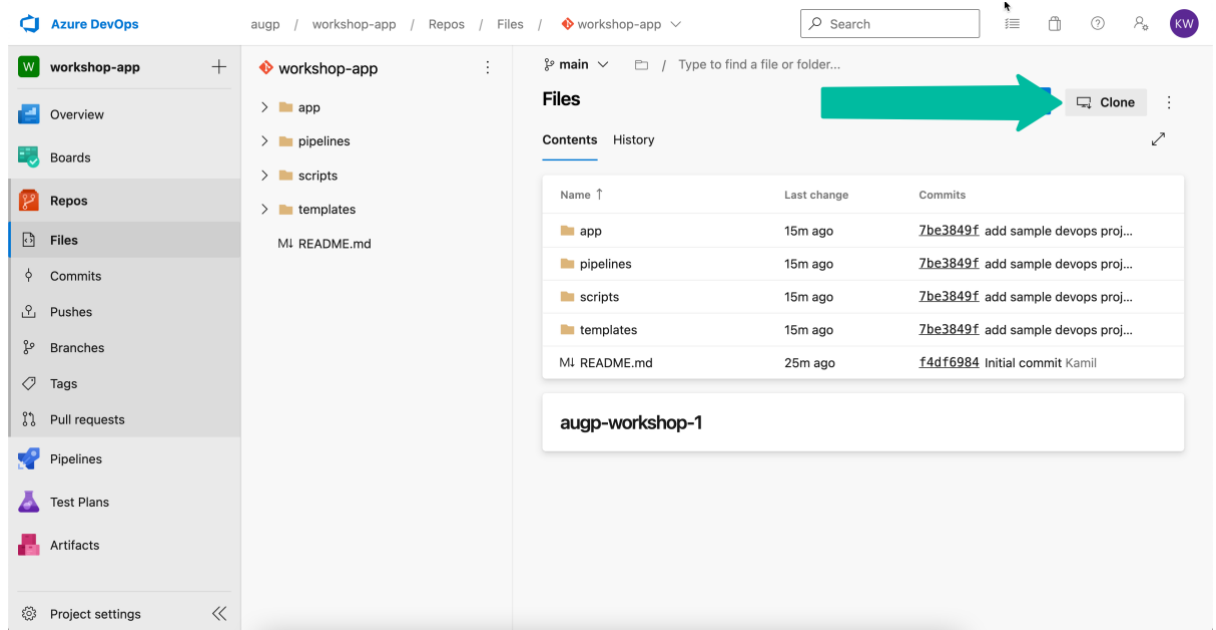


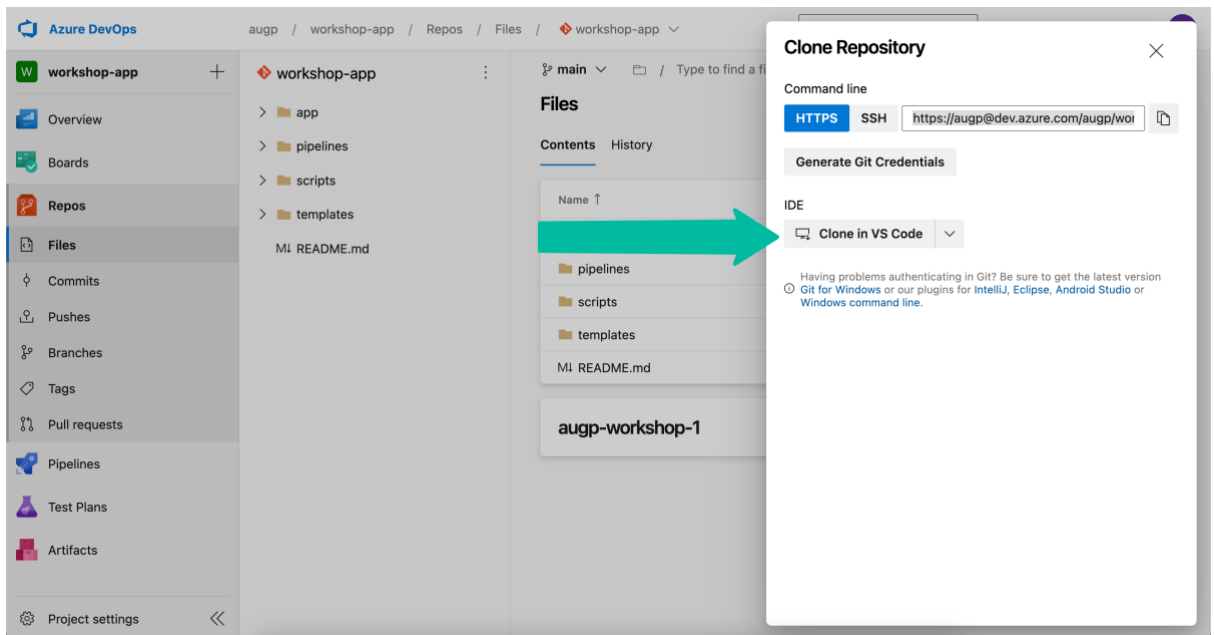


4. Zapoznaj się z zawartością poszczególnych folderów: app, pipelines, scripts oraz templates

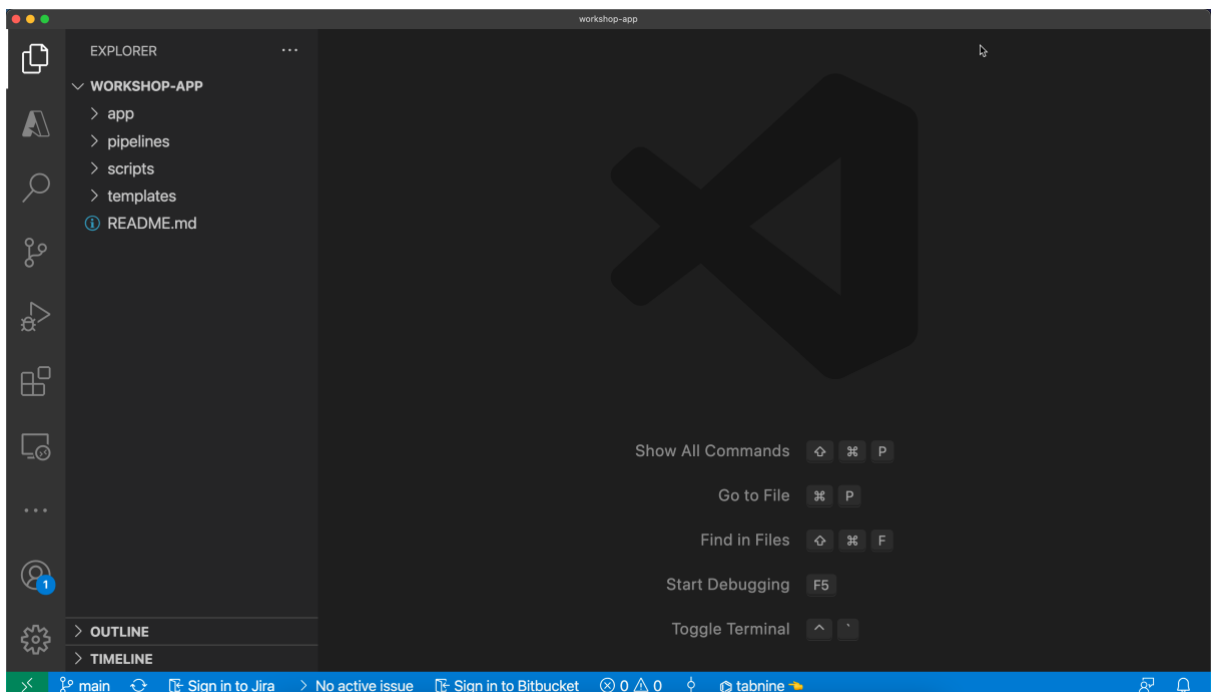


5. Sklonuj repozytorium

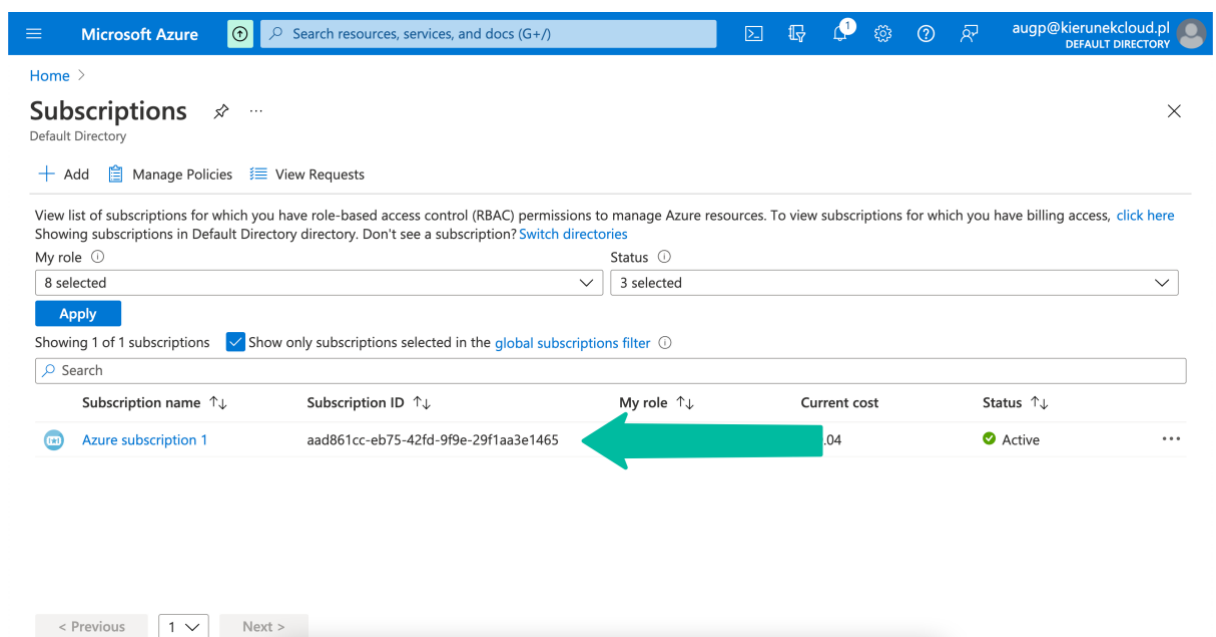
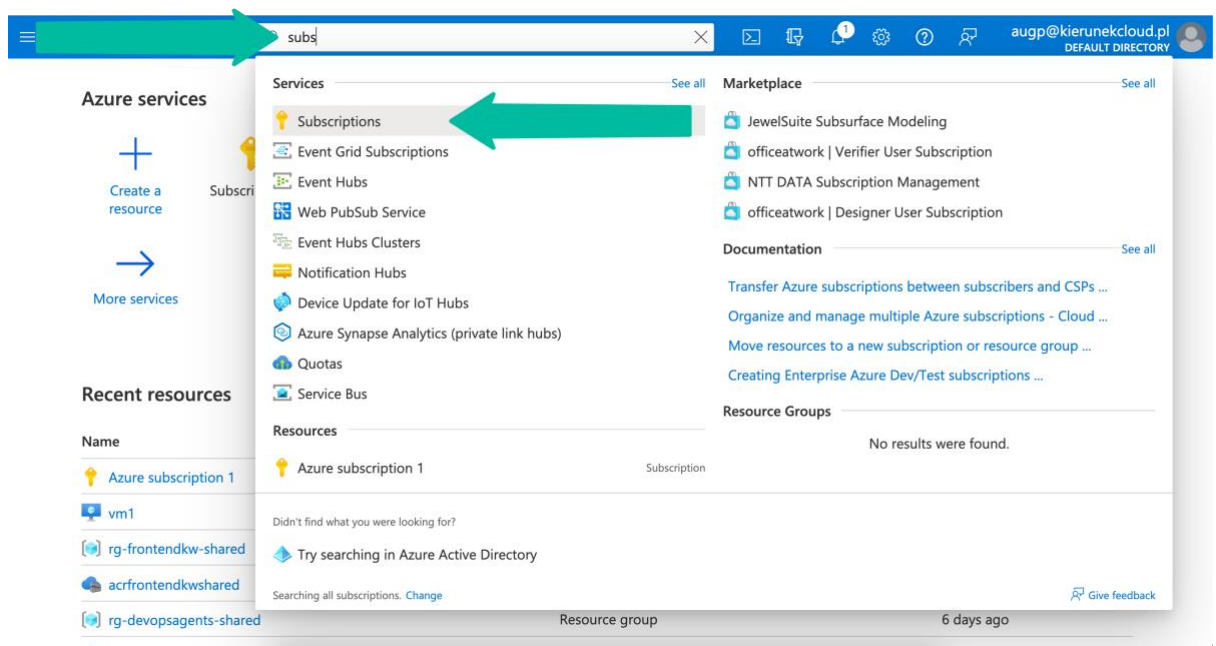




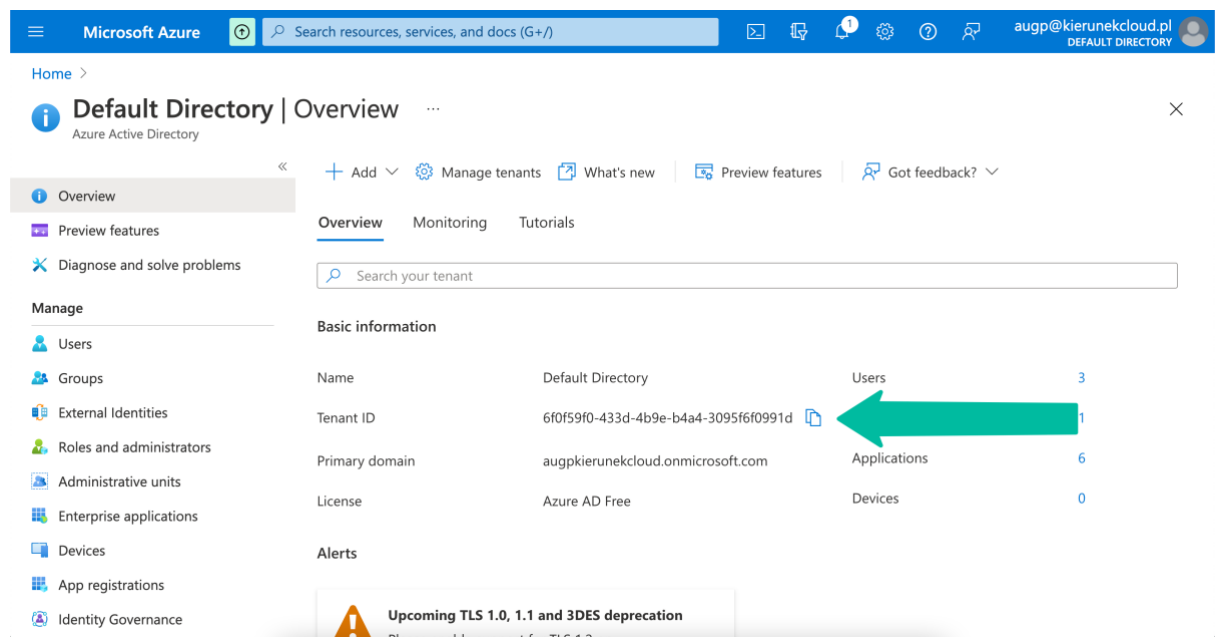
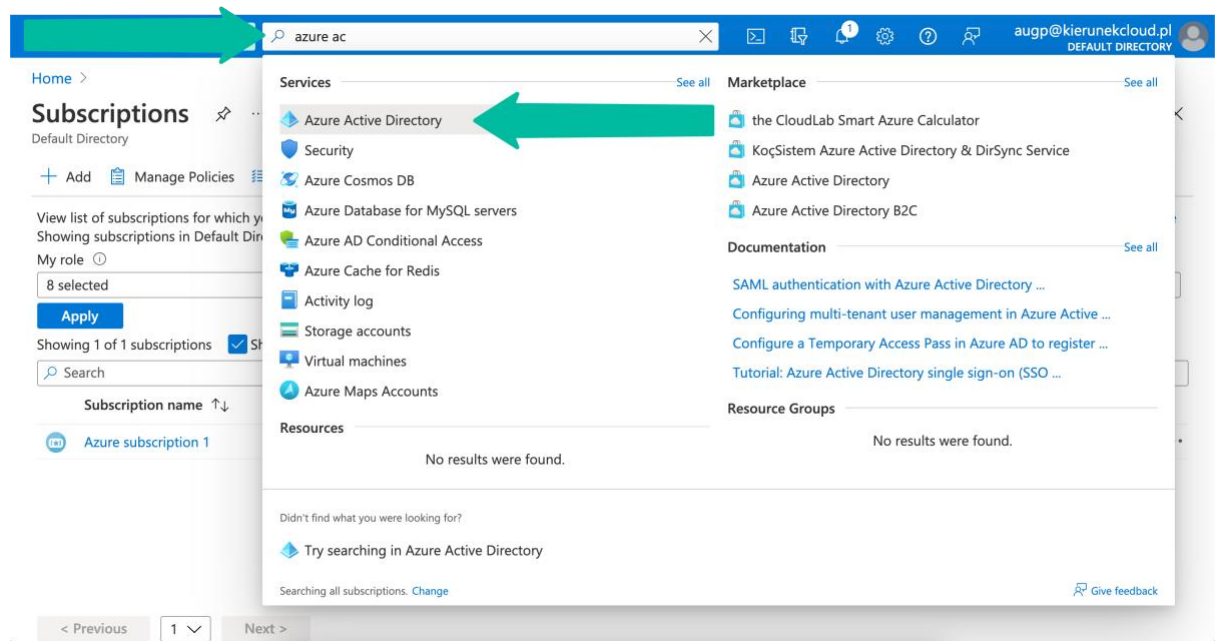
- Pozwól Visual Studio Code na sklonowanie.
- Wskaż lokalizację, w której zostanie umieszczona zawartość repozytorium.
- Otwórz folder w Visual Studio Code.



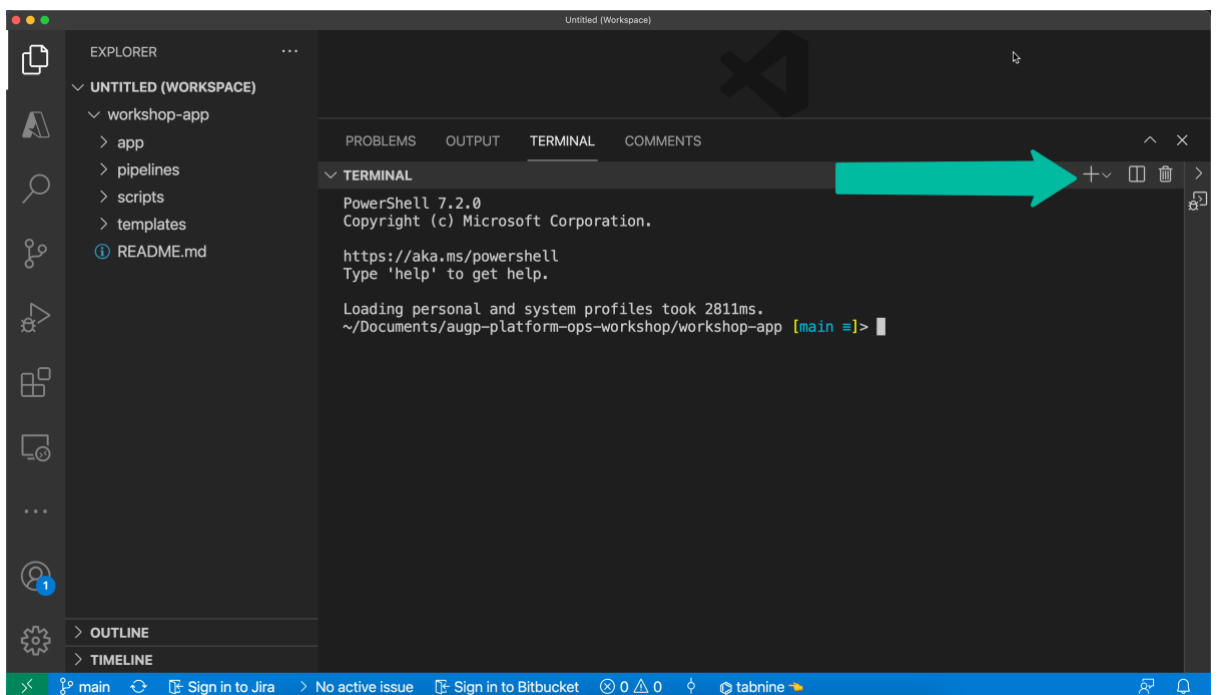
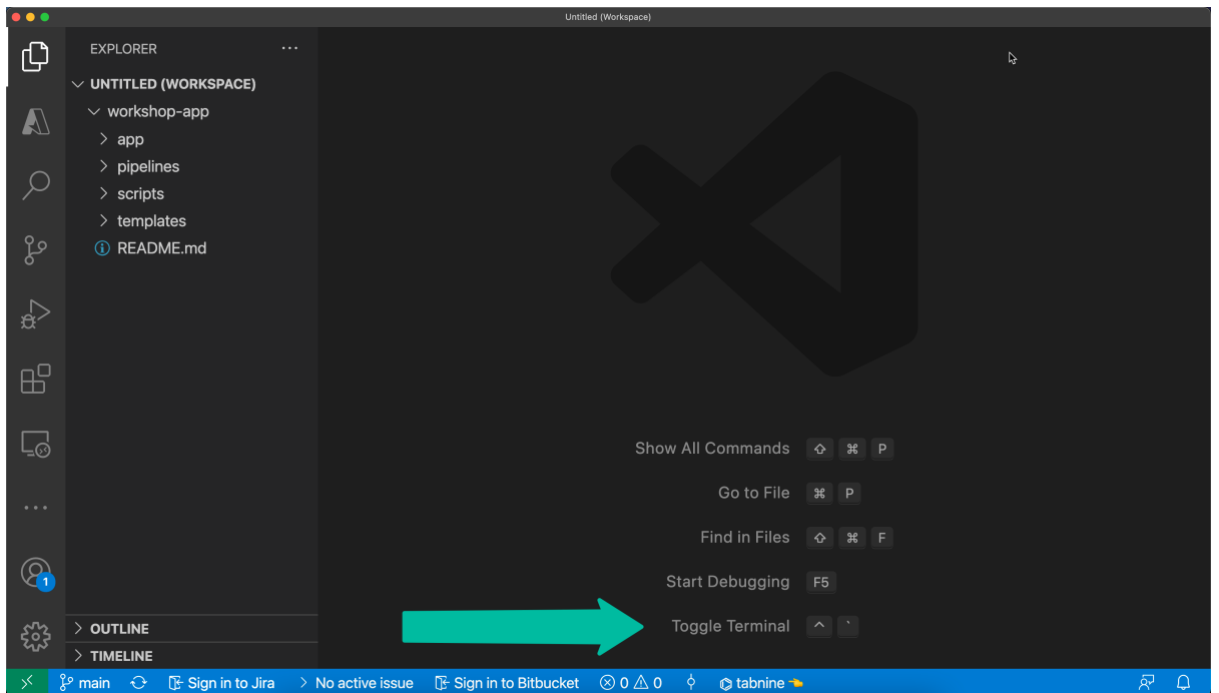
6. Zaloguj się do Azure. Znajdź ID subskrypcji.

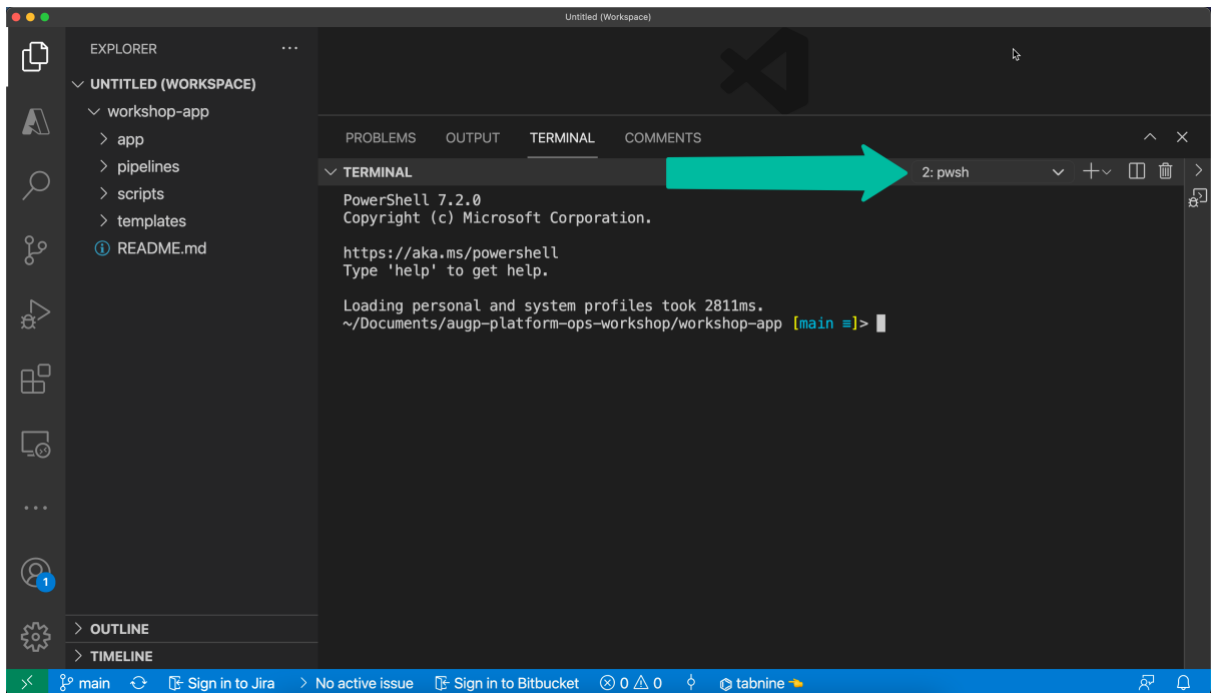


7. Otwórz nową kartę w przeglądarce i znajdź ID tenanta Azure AD.



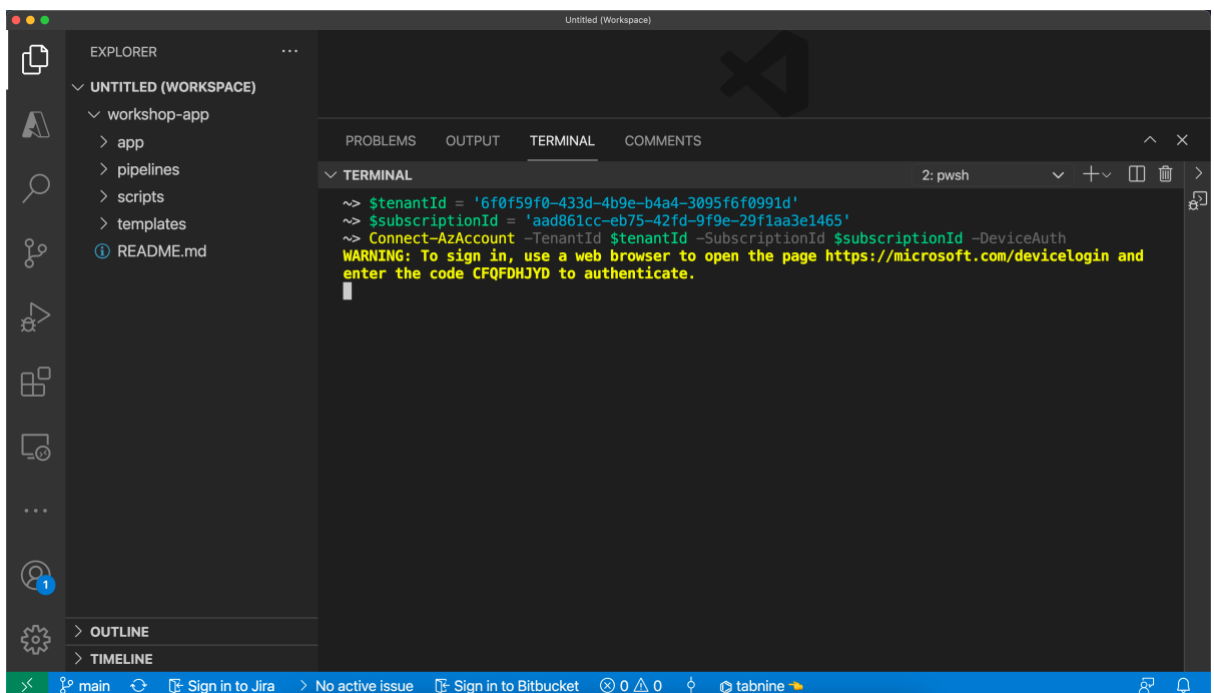
8. Uruchom terminal pwsh w Visual Studio Code.



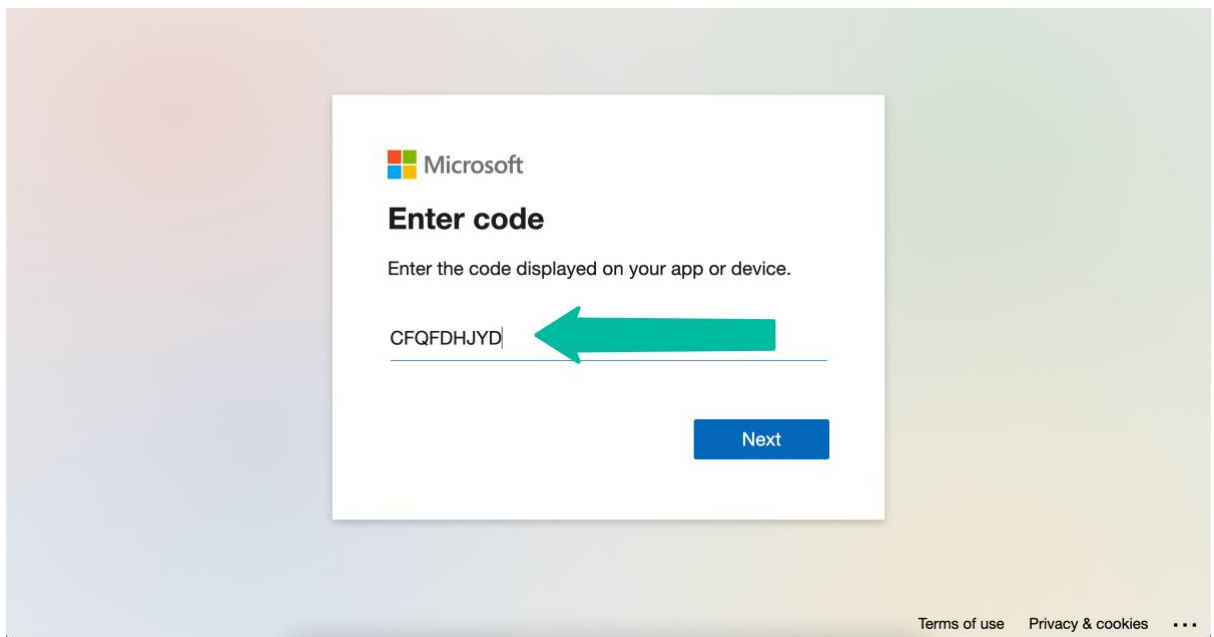


9. Zaloguj się do Azure w terminalu pwsh wykonując poniższy kod. Pamiętaj o wprowadzeniu ID tenanta i subskrypcji z poprzednich kroków.

```
$tenantId = '6f0f59f0-433d-4b9e-b4a4-3095f6f0991d'
$subscriptionId = 'aad861cc-eb75-42fd-9f9e-29f1aa3e1465'
Connect-AzAccount -TenantId $tenantId -SubscriptionId $subscriptionId -DeviceAuth
```

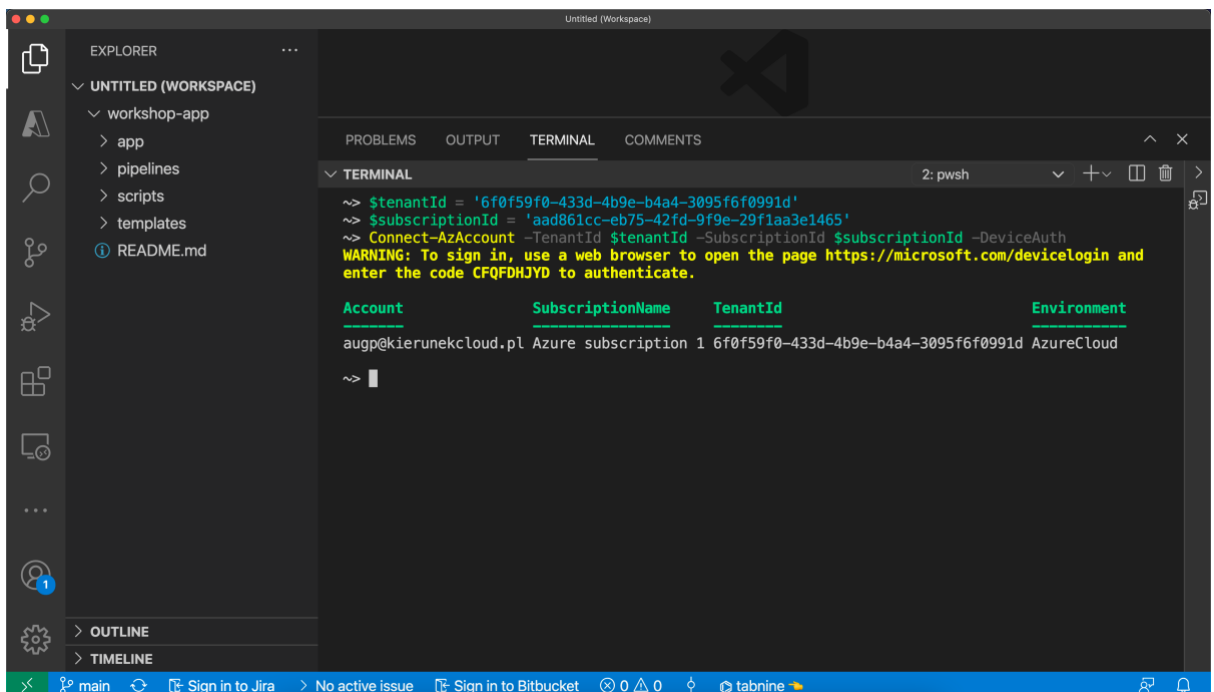


Otwórz stronę: <https://microsoft.com/devicelogin> i wprowadź kod.



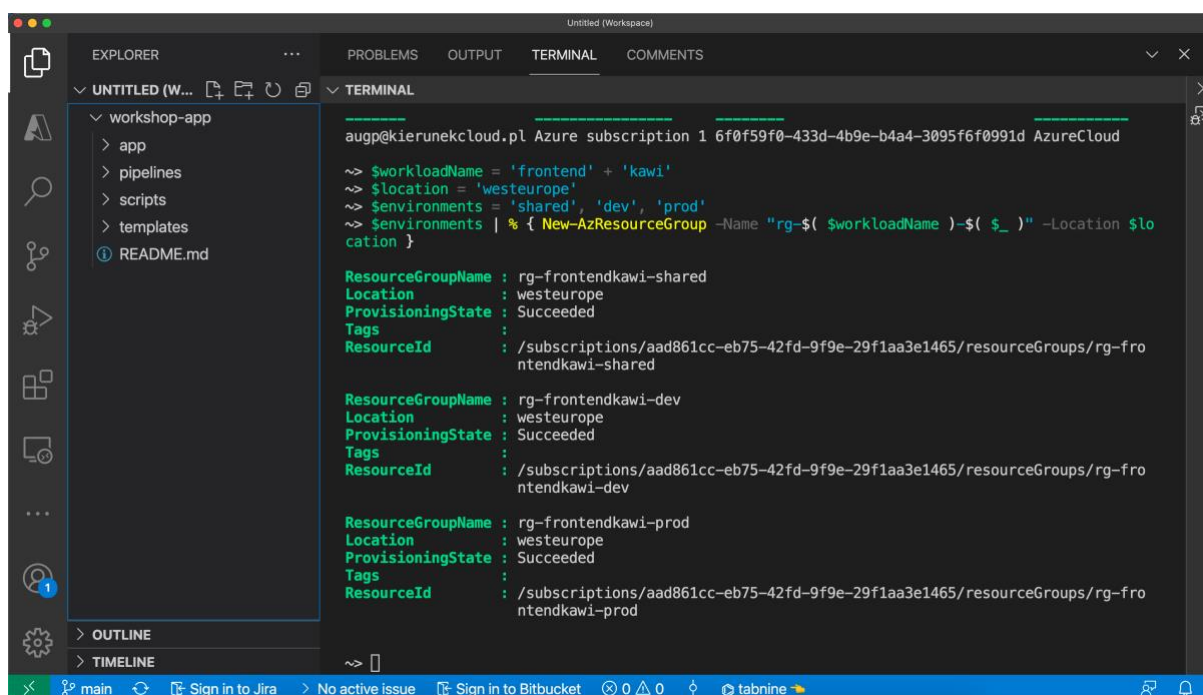
Wprowadź credentiale i wyraż zgodę.

Po zalogowaniu zobaczysz.



10. Podmień wartość YOURSUFFIX na jakąś swoją wartość pisaną małymi literami (ja użyłem dwóch pierwszych liter imienia i nazwiska), a następnie wykonaj:

```
$workloadName = 'frontend' + 'YOURSUFFIX'
$location = 'westeurope'
$environments = 'shared', 'dev', 'prod'
$environments | % { New-AzResourceGroup -Name "rg-${ $workloadName }-${ $_}" -Location $location }
```



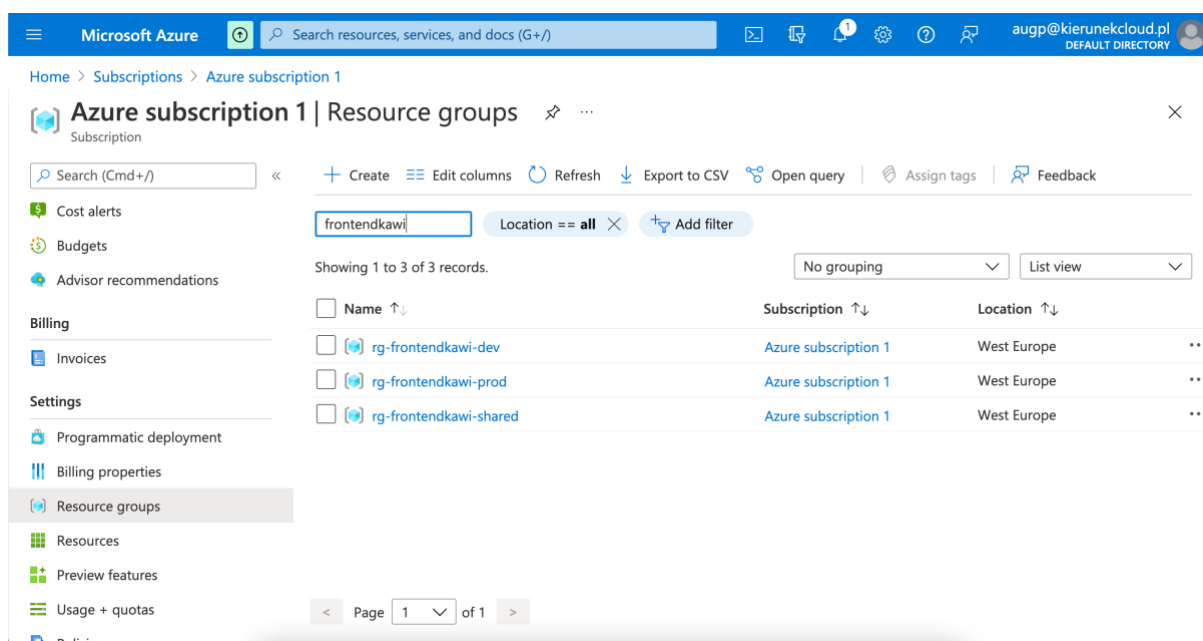
```
augp@kierunekcloud.pl Azure subscription 1 6f0f59f0-433d-4b9e-b4a4-3095f6f0991d AzureCloud
~> $workloadName = 'frontend' + 'kawi'
~> $location = 'westeurope'
~> $environments = 'shared', 'dev', 'prod'
~> $environments | % { New-AzResourceGroup -Name "rg-${ $workloadName }-${ $_}" -Location $location }

ResourceGroupName : rg-frontenkawi-shared
Location           : westeurope
ProvisioningState   : Succeeded
Tags               :
ResourceId          : /subscriptions/aad861cc-eb75-42fd-9f9e-29f1aa3e1465/resourceGroups/rg-frontenkawi-shared

ResourceGroupName : rg-frontenkawi-dev
Location           : westeurope
ProvisioningState   : Succeeded
Tags               :
ResourceId          : /subscriptions/aad861cc-eb75-42fd-9f9e-29f1aa3e1465/resourceGroups/rg-frontenkawi-dev

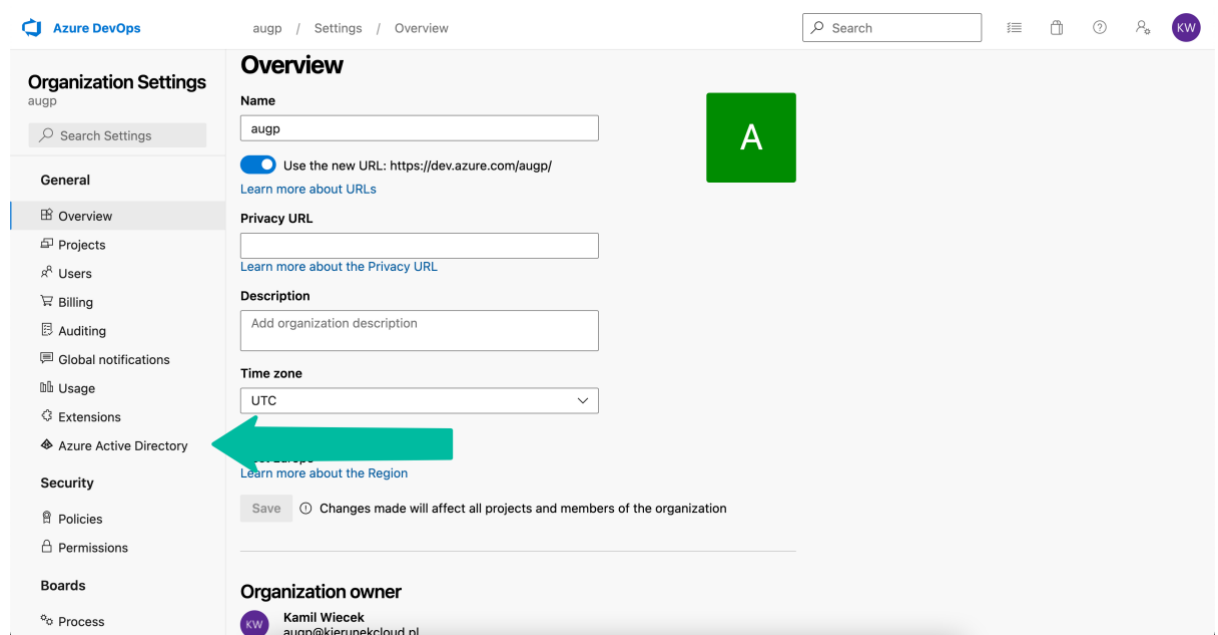
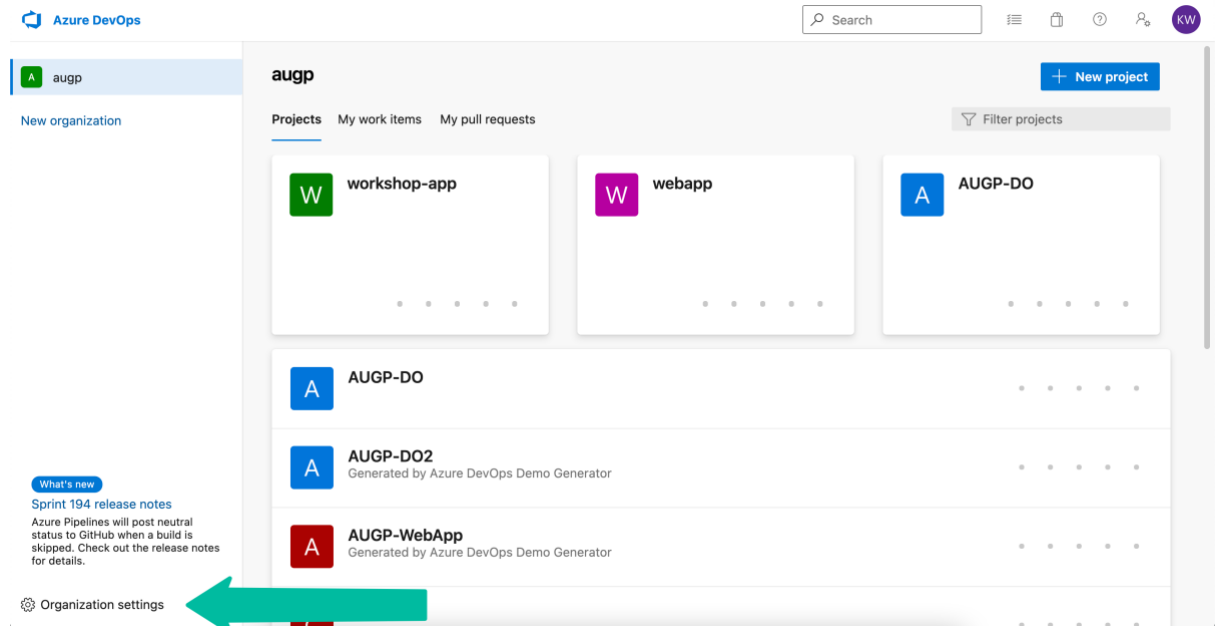
ResourceGroupName : rg-frontenkawi-prod
Location           : westeurope
ProvisioningState   : Succeeded
Tags               :
ResourceId          : /subscriptions/aad861cc-eb75-42fd-9f9e-29f1aa3e1465/resourceGroups/rg-frontenkawi-prod
```

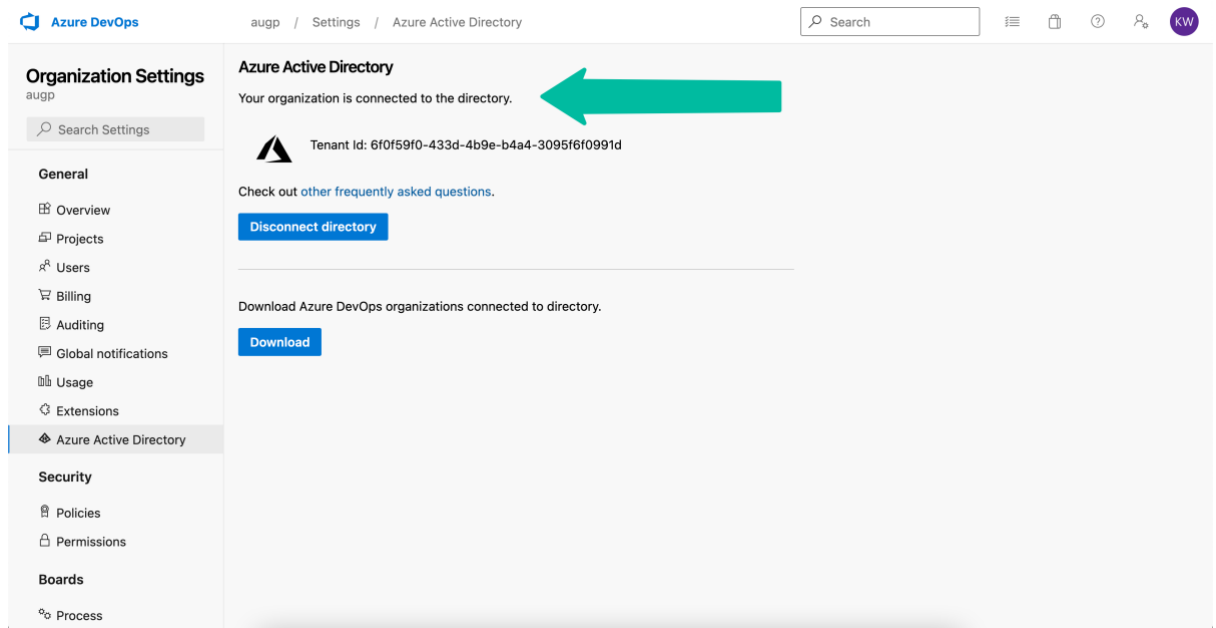
11. Potwierdź utworzenie Resource Groups w Azure Portal:



Name	Subscription	Location
rg-frontenkawi-dev	Azure subscription 1	West Europe
rg-frontenkawi-prod	Azure subscription 1	West Europe
rg-frontenkawi-shared	Azure subscription 1	West Europe

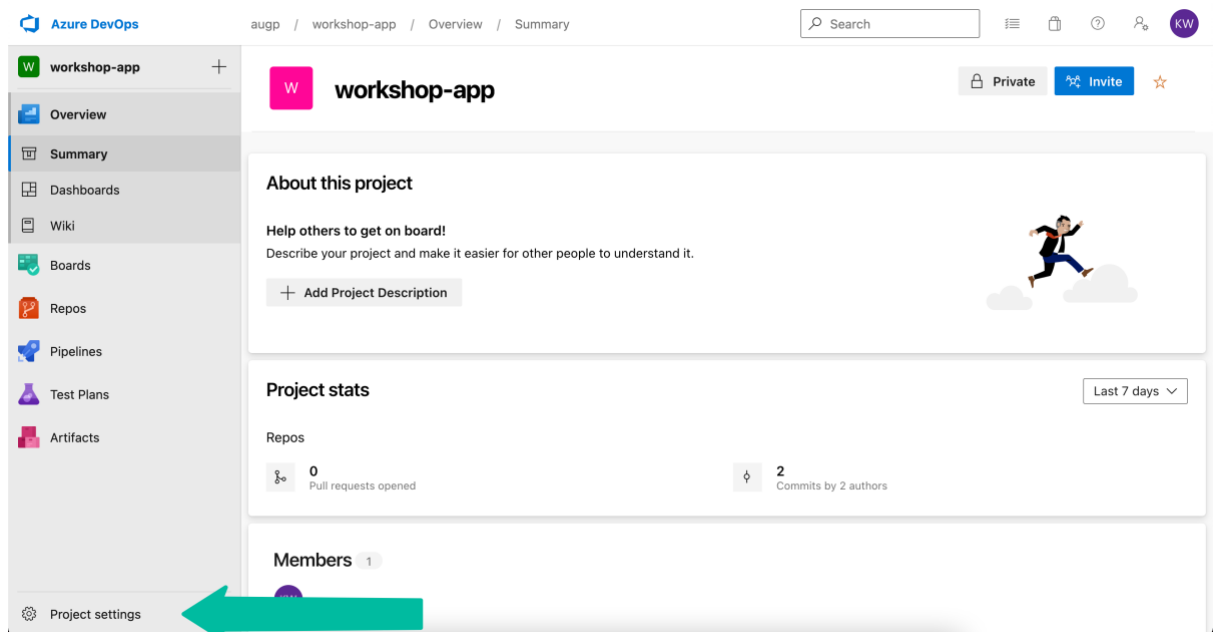
12. Upewnij się, że twoja organizacja Azure DevOps jest podłączona do tenanta Azure AD. Jeżeli nie – połącz ją.





13. Utwórz service connection w projekcie workshop-app zgodnie z poniższą tabelą:

Nazwa	Resource Group
sc-{WORKLOADNAME_Z_PKT_10}-shared	rg-{WORKLOADNAME_Z_PKT_10}-shared
sc-{WORKLOADNAME_Z_PKT_10}-dev	rg-{WORKLOADNAME_Z_PKT_10}-dev
sc-{WORKLOADNAME_Z_PKT_10}-prod	rg-{WORKLOADNAME_Z_PKT_10}-prod



augp / workshop-app / Settings / Overview

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- Service hooks
- Dashboards
- Boards**
 - Project configuration
 - Team configuration
 - GitHub connections
- Pipelines**
 - Agent pools
 - Parallel jobs
 - Settings
 - Test management
 - Release retention
 - Service connections
 - XAML build services
- Repos**
 - Repositories
- Artifacts**

Project details

Name
workshop-app


Description

Process
Basic

Visibility
Private
This determines who can view this project. [Learn more about project visibility.](#)

Project administrators

Kamil Wiecek
augp@kierunekcloud.pl



augp / workshop-app / Settings / Service connections

Search

Project Settings
workshop-app


General

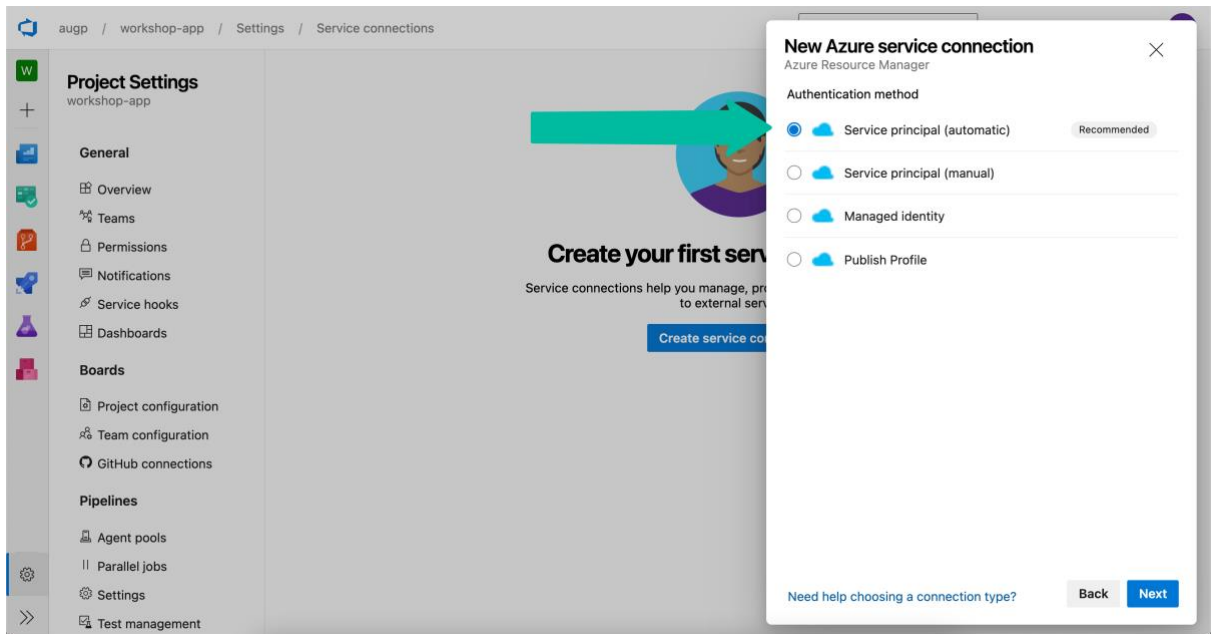
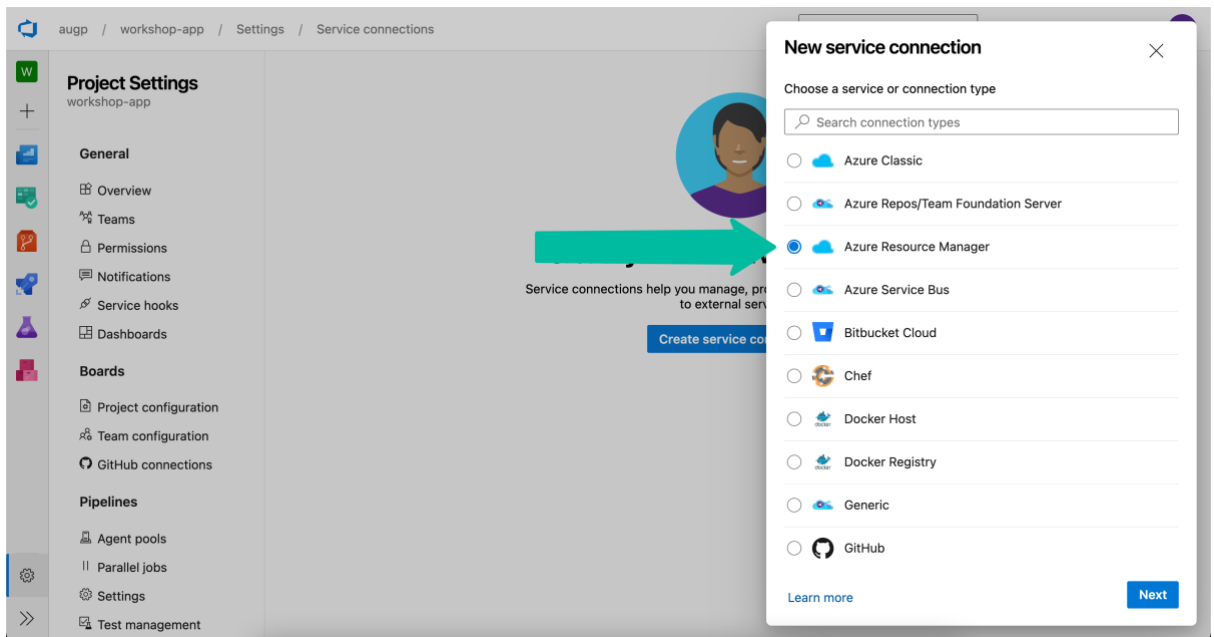
- Overview
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- Boards**
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 - Agent pools
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 - Settings
 - Test management

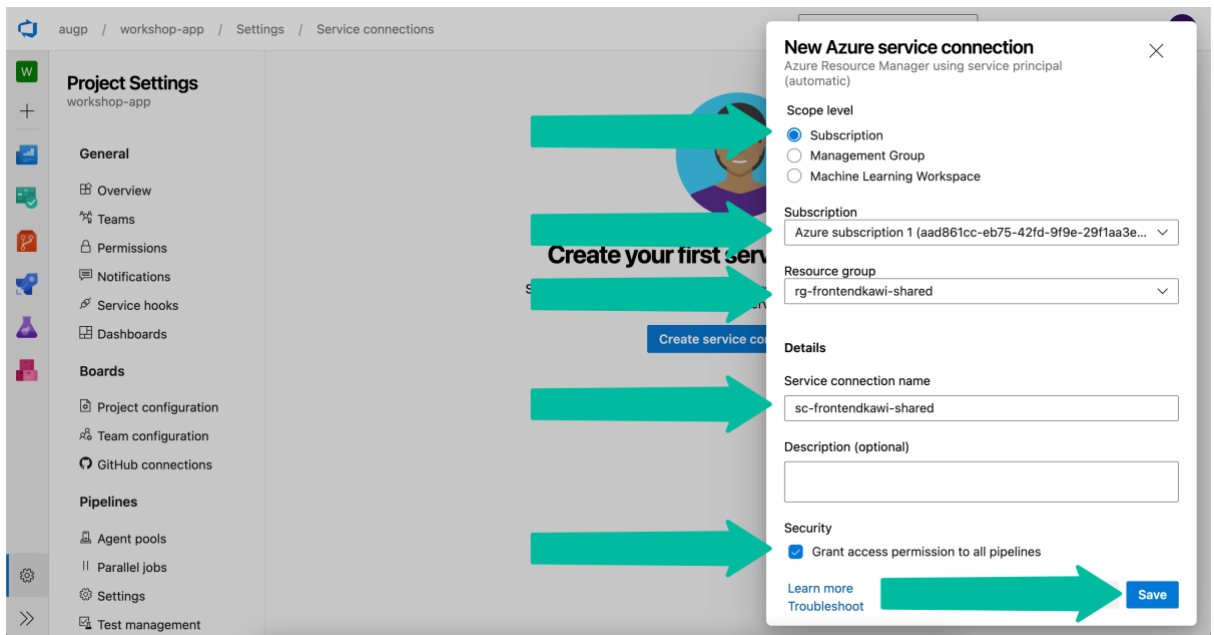
Create your first service connection

Service connections help you manage, protect, and reuse authentications to external services.

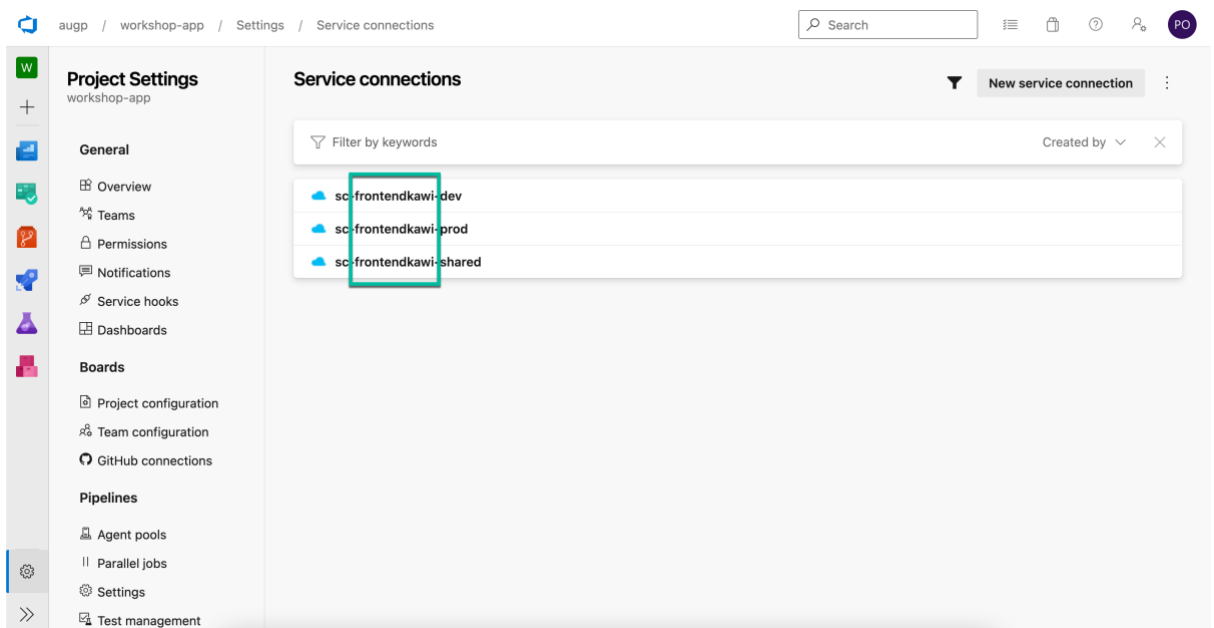
Create service connection







Powtórz powyższą czynność jeszcze dwa razy, żeby utworzyć pozostałe service connections. Końcowy efekt powinien wyglądać podobnie do tego poniżej i zawierać twoją unikatową nazwę:



14. Utwórz pipeline CI/CD.

Azure DevOps

augp / workshop-app / Overview / Summary

workshop-app

Overview

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workshop-app

About this project

Help others to get on board!
Describe your project and make it easier for other people to understand it.

+ Add Project Description

Project stats

Last 7 days

Repos

0 Pull requests opened

2 Commits by 2 authors

Members 1

Project settings

Azure DevOps

augp / workshop-app / Pipelines

workshop-app

Overview

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Pipelines

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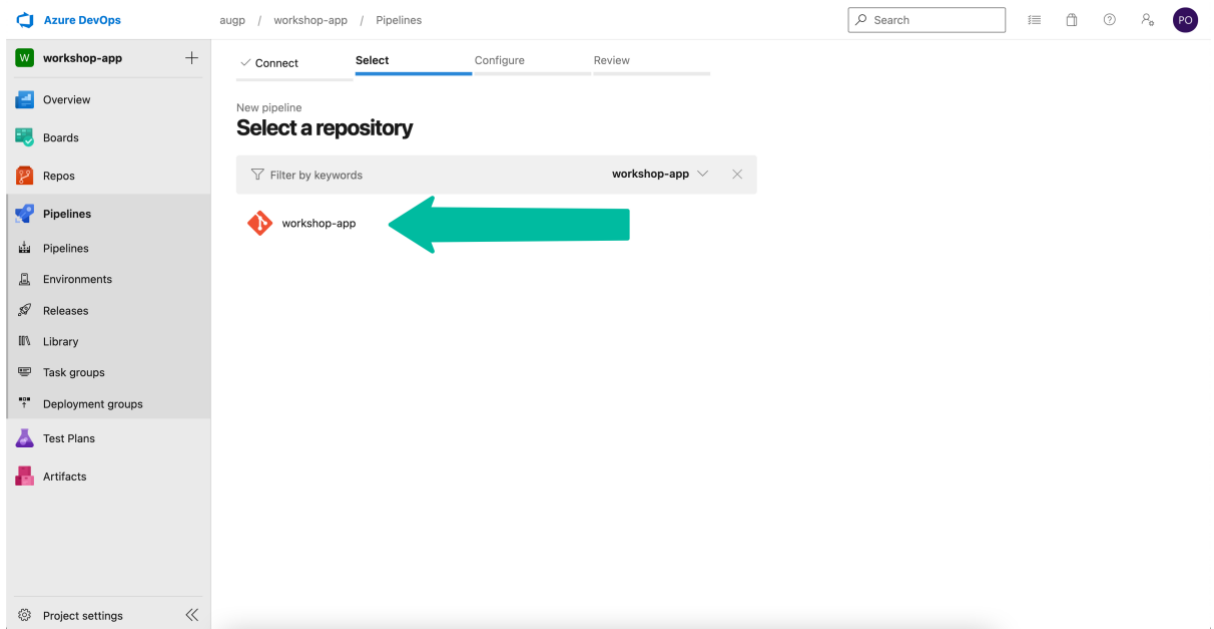
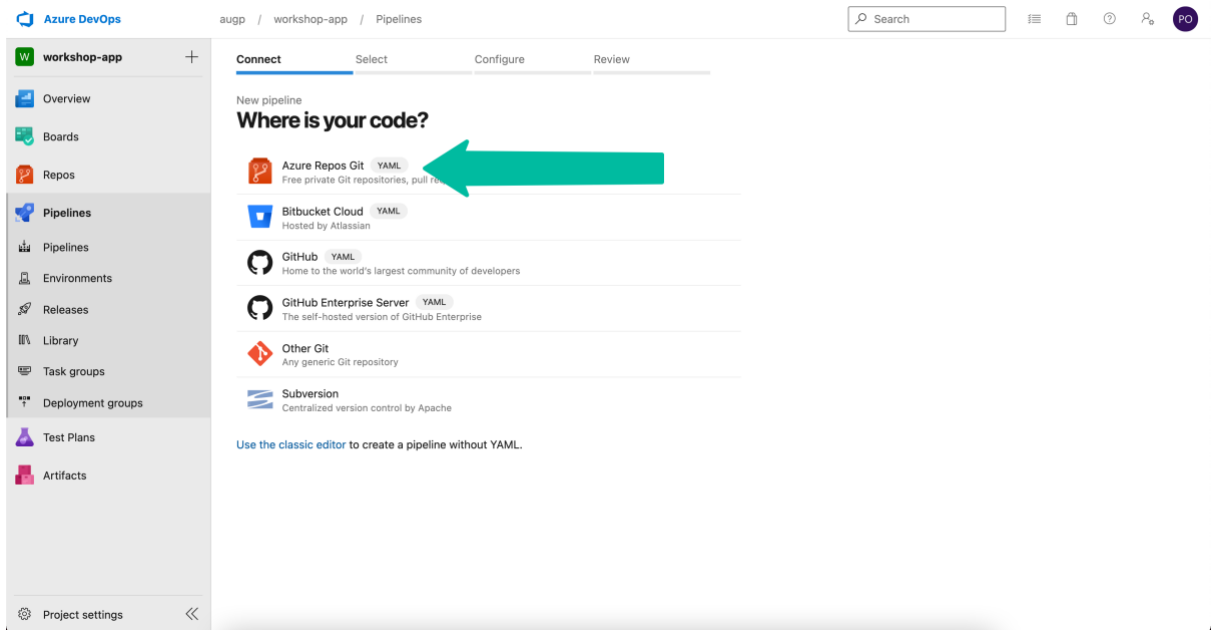
Artifacts

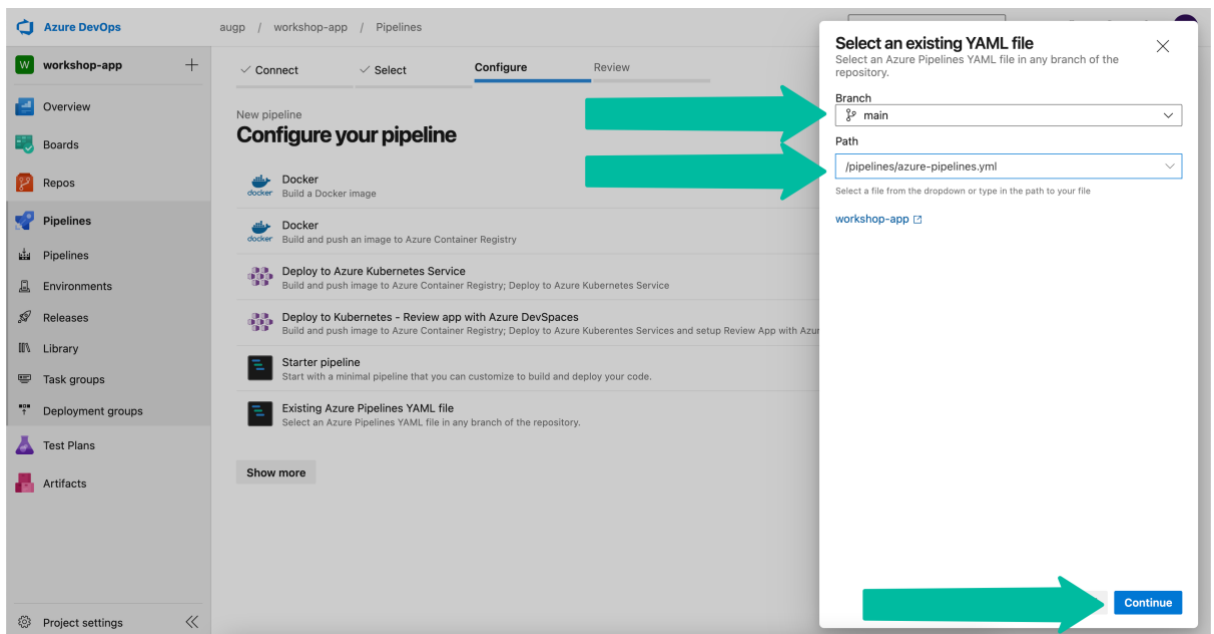
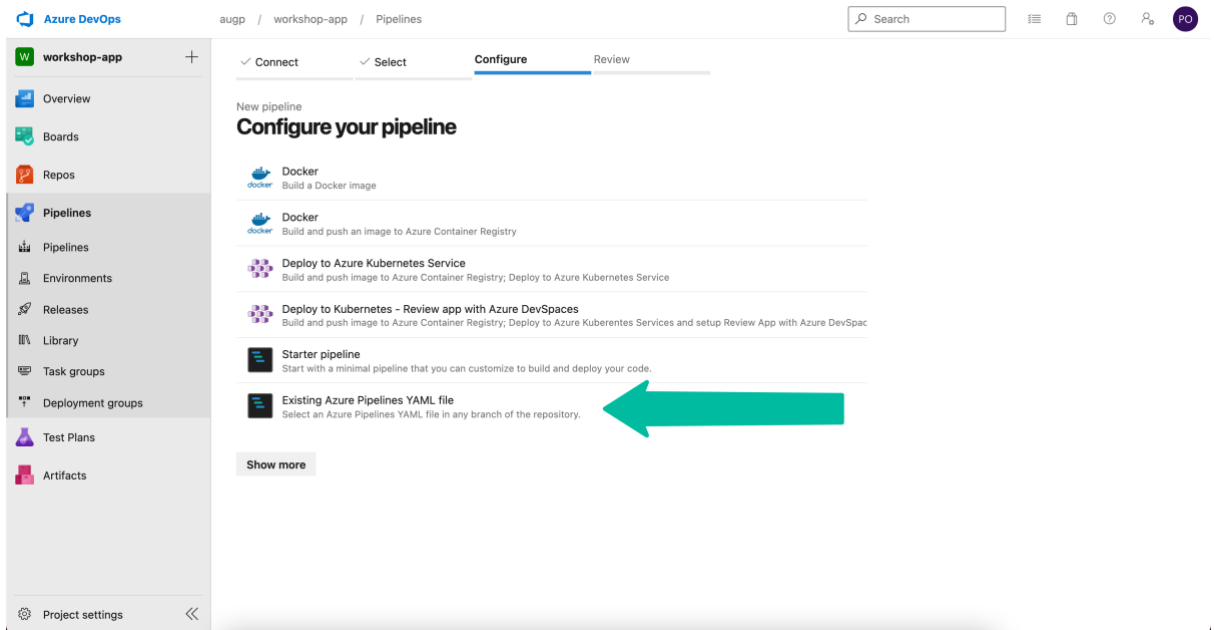
Project settings

Create your first Pipeline

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

Create Pipeline





Azure DevOps

augp / workshop-app / Pipelines

workshop-app

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Connect Select Configure **Review**

New pipeline
Review your pipeline YAML

workshop-app / pipelines/azure-pipelines.yml

```
1 trigger:
2   - main
3
4 pool:
5   vmImage: ubuntu-latest
6
7 variables:
8   - name: workloadName
9     value: frontendkw
10  - name: serviceConnectionShared
11    value: sc-${workloadName}-shared
12  - name: serviceConnectionDev
13    value: sc-${workloadName}-dev
14  - name: serviceConnectionProd
15    value: sc-${workloadName}-prod
16  - name: containerRegistryName
17    value: acr${workloadName}shared
18
19 stages:
20   - stage: SharedInfra
21     displayName: SHARED INFRA
22     jobs:
23       - job: DeployAcr
24         displayName: 'Deploy ACR'
25       steps:
```

Variables Run Save Show assistant

15. Skonfiguruj branch policy w repozytorium.

Azure DevOps

augp / workshop-app / Repos / Branches / workshop-app

workshop-app

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Branches

Mine All Stale

Search branch name

Branch	Com...	Aut...	Aut...	Behind Ahead	Status	Pull ...
main	Default	Compare	7be384f	Aut... K. 3h ...		★

Aug 10 / workshop-app / Repos / Branches / workshop-app

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Branches

Mine All Stale

Search branch name

Branch	Com...	Aut...	Aut...	Behind Ahead	Status	Pull ...
main	Default	Compare	7be384f	W K.	3h ...	

- New branch
- New pull request
- Delete branch
- View files
- View history
- Compare branches
- Set as compare branch
- Set as default branch
- Lock
- Branch policies
- Branch security

Aug 10 / workshop-app / Settings / Repositories

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workshop-app

Filter by keywords

main

main

Branch Policies

Note: If any required policy is enabled, this branch cannot be deleted and changes must be made via pull request.

- ☒ **Require a minimum number of reviewers**
Require approval from a specified number of reviewers on pull requests.
Minimum number of reviewers: 1
 - ☐ Allow requestors to approve their own changes
 - ☐ Prohibit the most recent pusher from approving their own changes
 - ☐ Allow completion even if some reviewers vote to wait or reject
 - ☐ When new changes are pushed:
- ☐ **Check for linked work items**
Encourage traceability by checking for linked work items on pull requests.
- ☒ **Check for comment resolution**
Check to see that all comments have been resolved on pull requests.
 - ☒ **Required**
Block pull requests from being completed while any comments are active.
 - ☐ **Optional**
Warn if any comments are active, but allow pull requests to be completed.
- ☐ **Limit merge types**
Control branch history by limiting the available types of merge when pull requests are completed.

