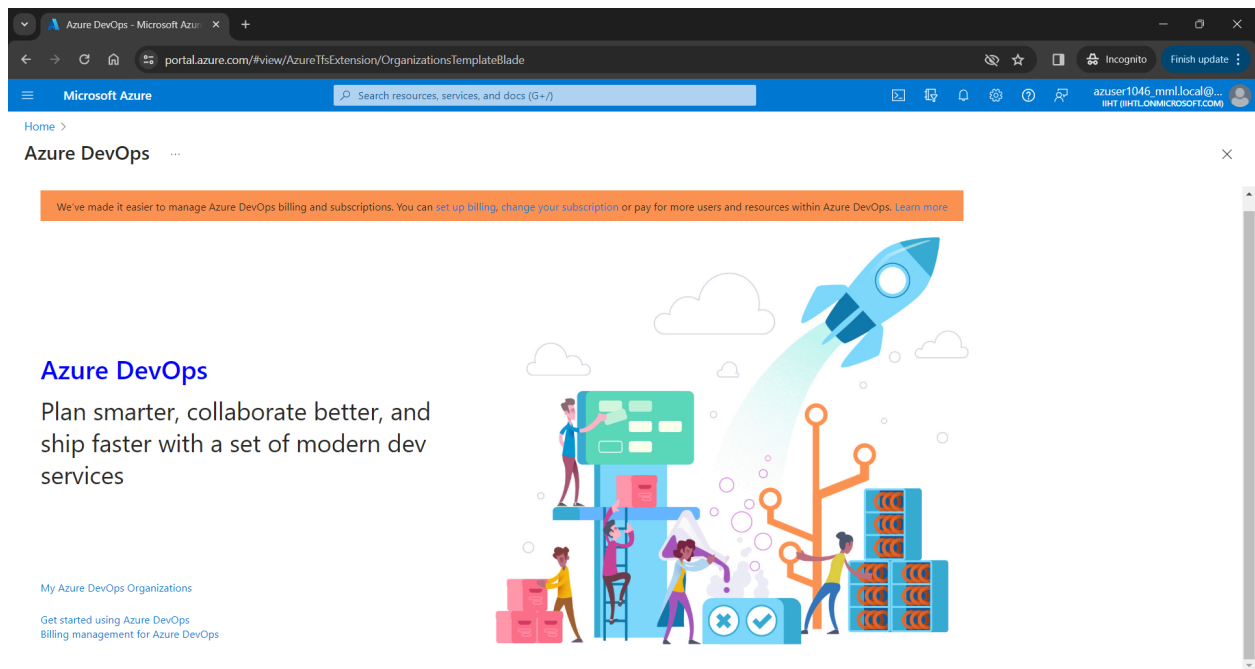# Create Azure Devops Environment and configure Azure Devops Git Repository , configure on your local git to implement this upload few test files on the same.
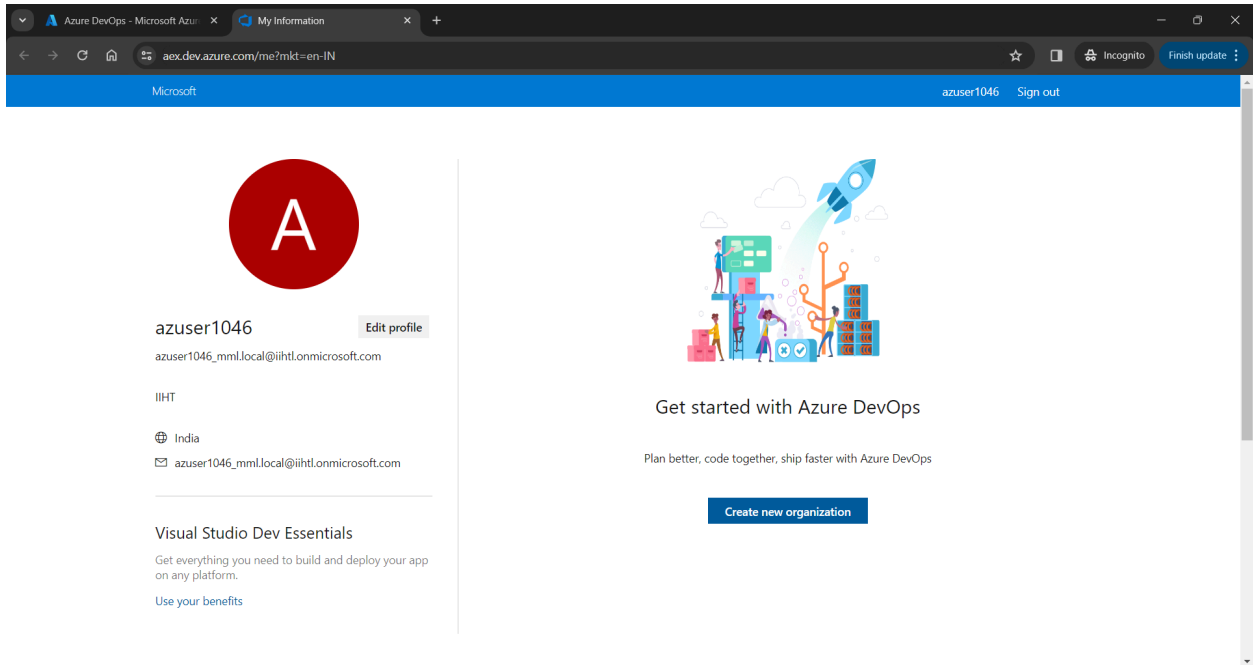
To create an Azure DevOps environment and configure a Git repository, follow these steps:
- Create an Azure DevOps Organization
- Create a Project
- Set Up Git Repository
- Clone Repository Locally
- Configure Local Git
- Add and Push Files

Search Azure DevOps Organization in Microsoft Azure portal and click on My Azure DevOps Organization

Click on create new Organization

Name your Organization

Create a project
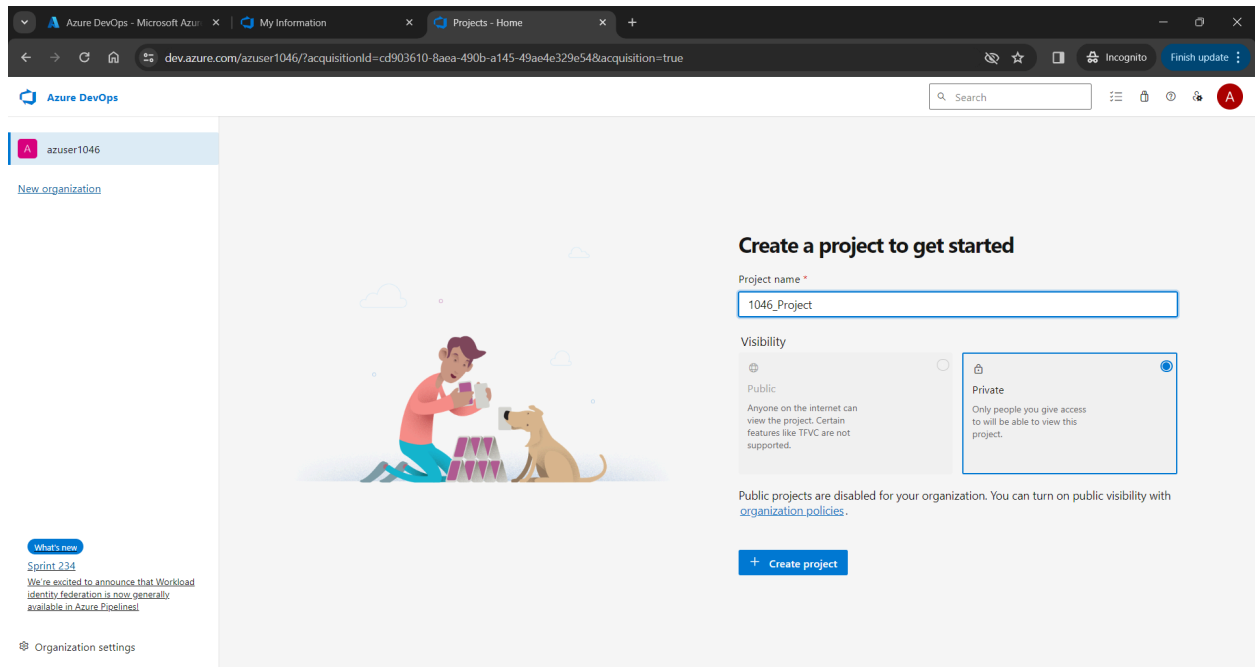
Project Azure DevOps Dashboard
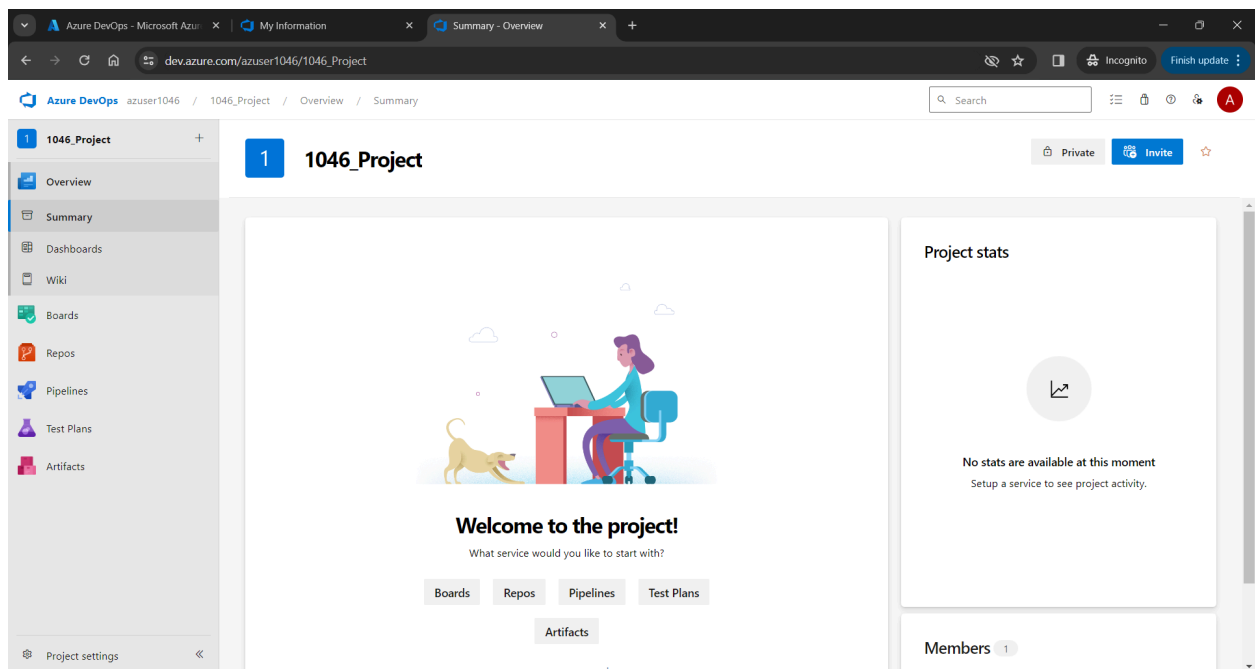
Go to Repos in the sidebar
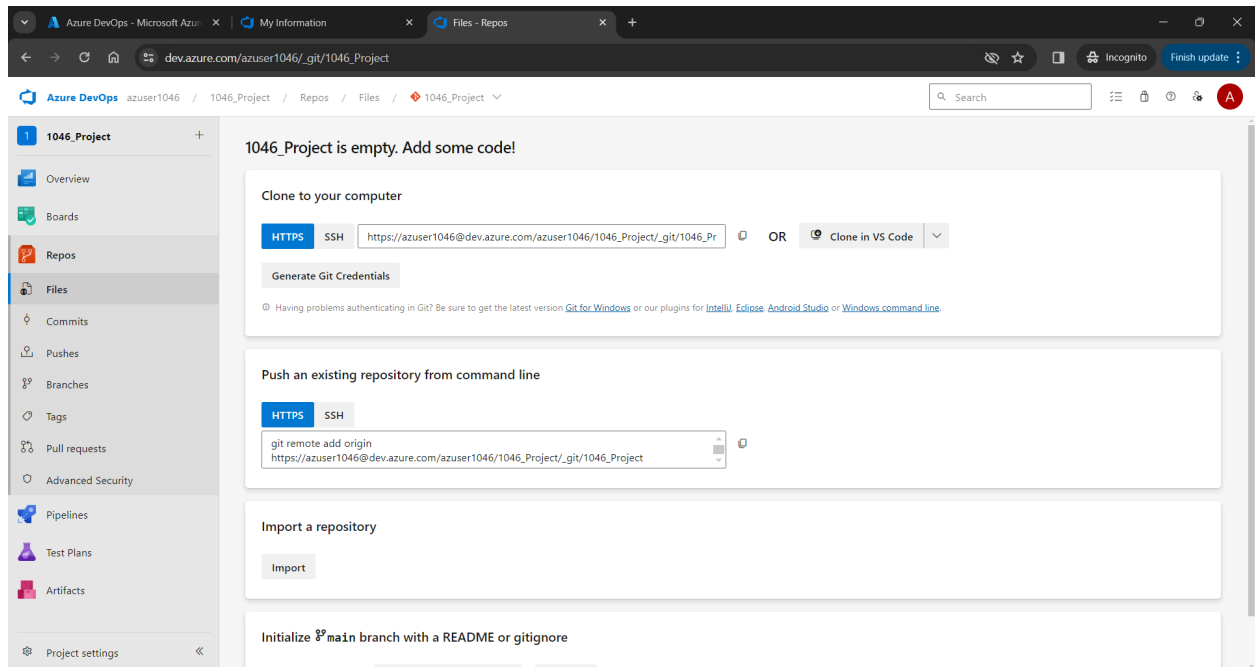
Go to Manage Repositories and configure the settings as required

Changes in policies and security can be made as required

Initialized the repository by adding README.md file :
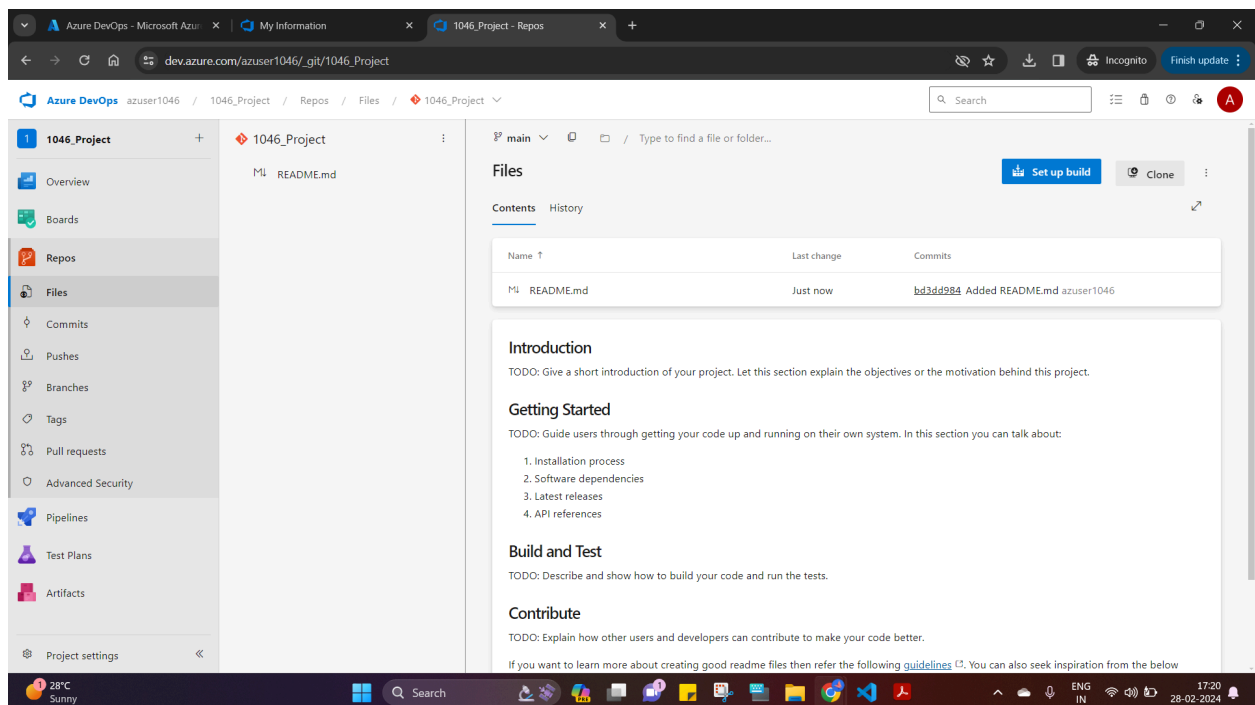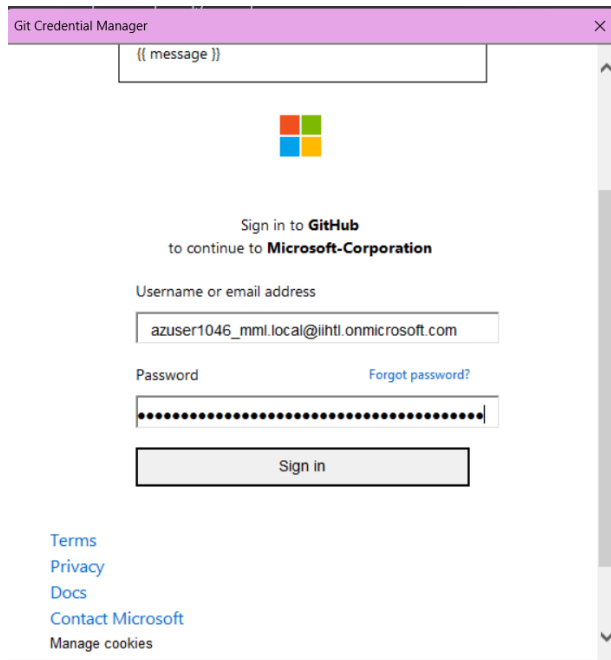
Go to clone and copy the URL to clone the project repository in local
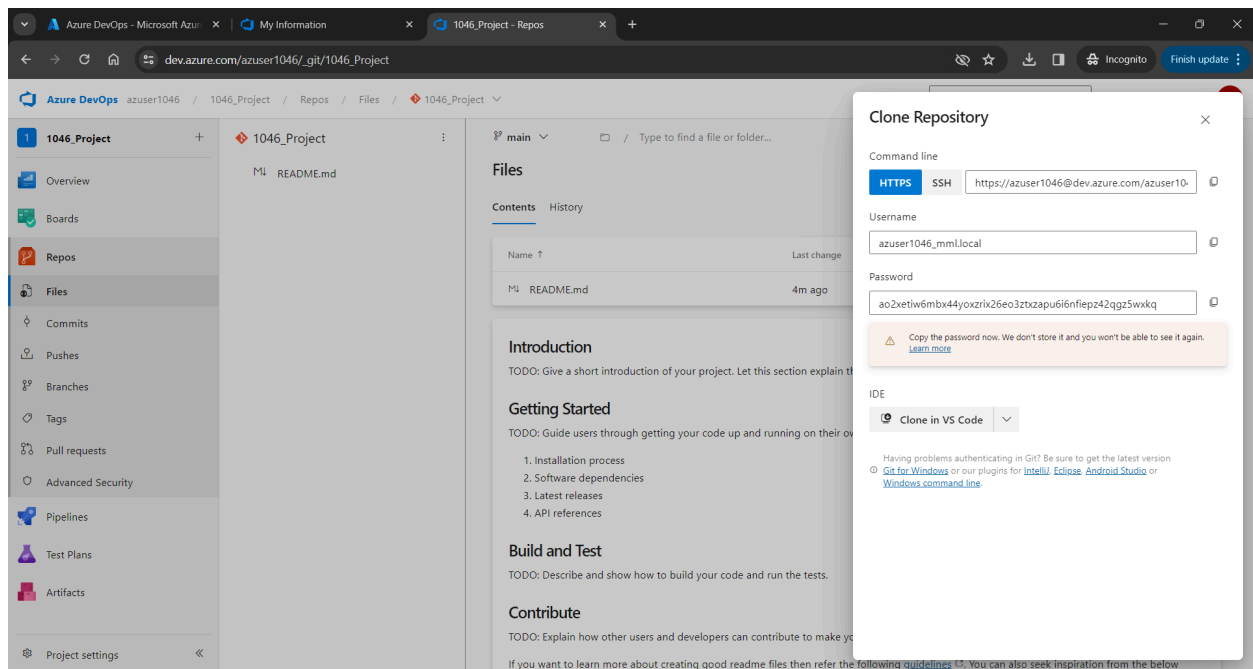
Open Git Bash and navigate to desired directory and paste the URL with git clone command

This opens a Git Credential Manager. Copy the username and password and sign in.
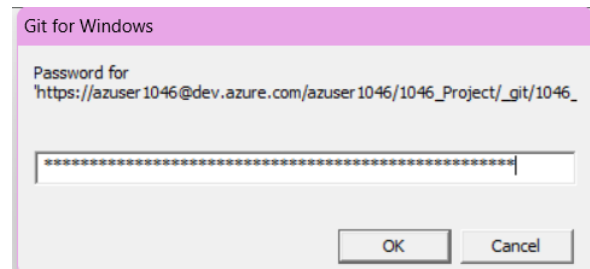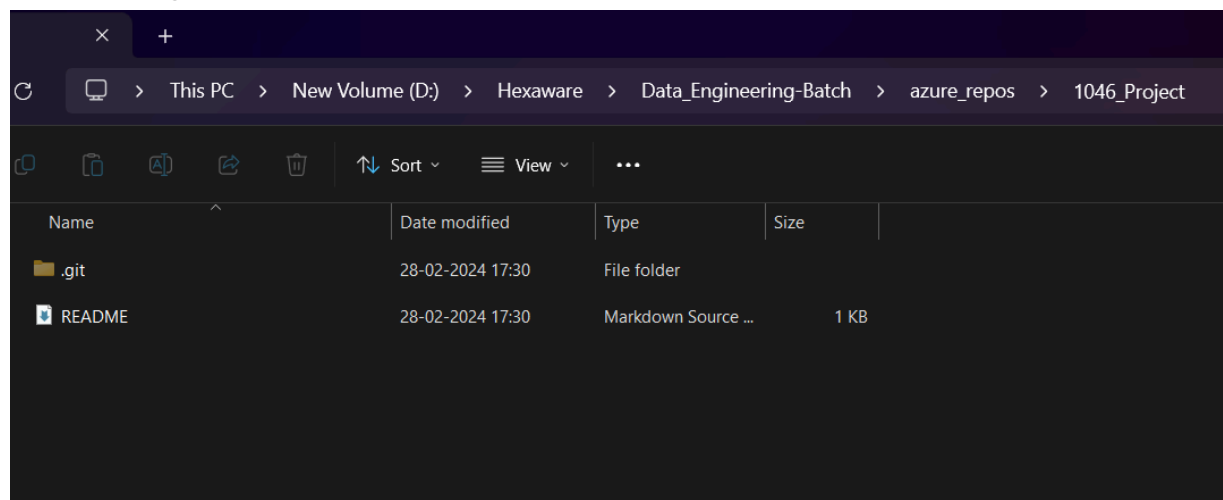

```
Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos
$ git clone https://azuser1046@dev.azure.com/azuser1046/1046_Project/_git/1046_P
roject
Cloning into '1046_Project'...
fatal: User canceled authentication.
remote: Azure Repos
remote: Found 3 objects to send. (21 ms)
Unpacking objects: 100% (3/3), 748 bytes | 53.00 KiB/s, done.
```
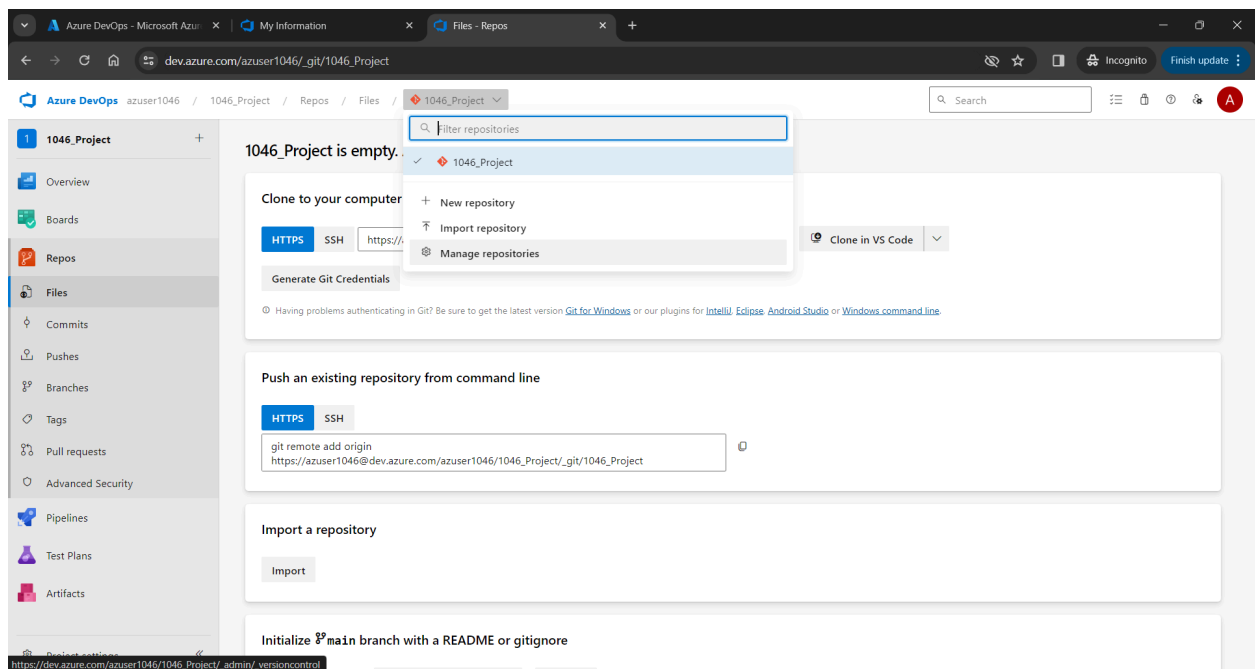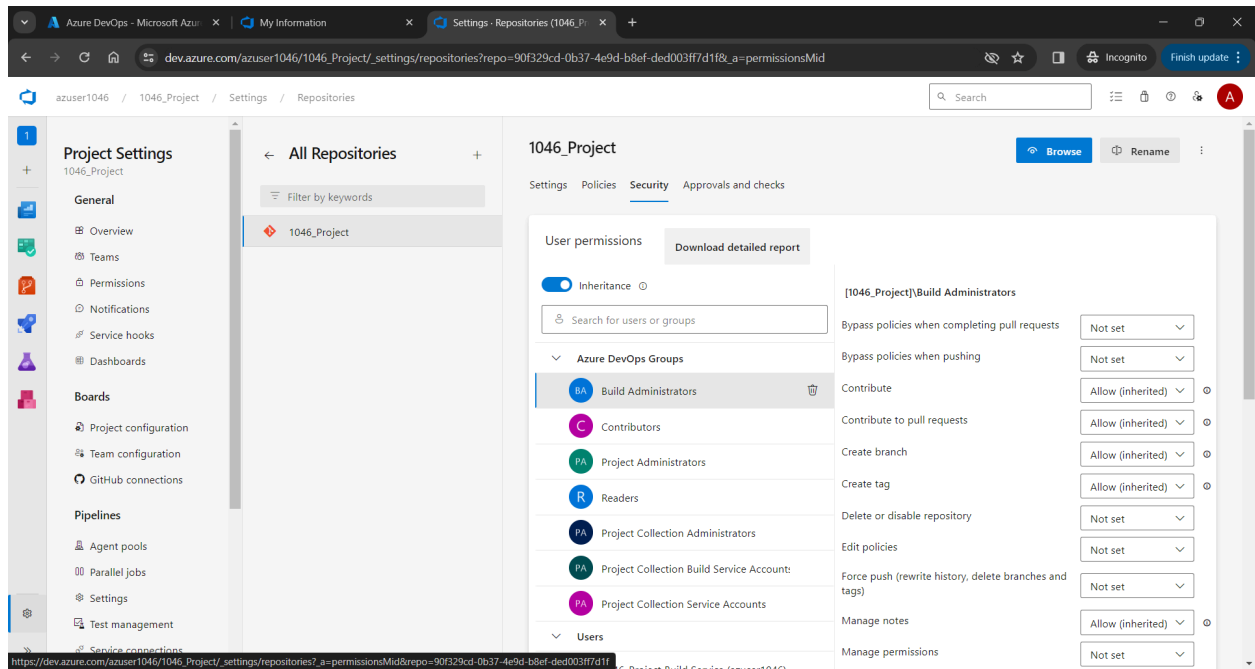
Repository cloned in local :
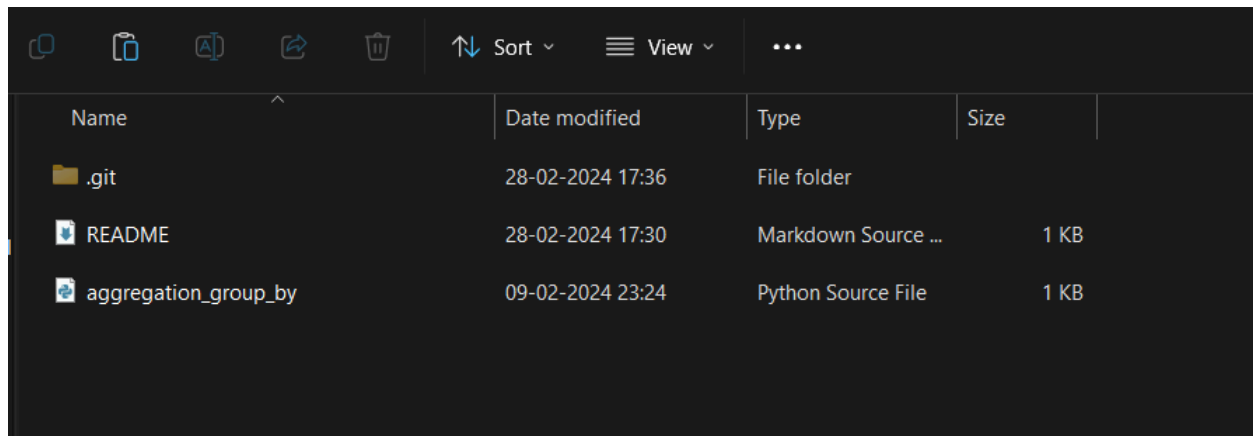
Git status command

```
Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Proj
ect (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

Adding file in local

Name	Date modified	Type	Size
.git	28-02-2024 17:36	File folder	
README	28-02-2024 17:30	Markdown Source ...	1 KB
aggregation_group_by	09-02-2024 23:24	Python Source File	1 KB

Git status shows unstaged changes.

```
Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        aggregation_group_by.py

nothing added to commit but untracked files present (use "git add" to track)
```

Git add command to stage the changes

```
Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (main)
$ git add .

Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   aggregation_group_by.py
```

Git commit and push

```
Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (main)
$ git commit -m "first commit"
[main ed07eba] first commit
 1 file changed, 15 insertions(+)
 create mode 100644 aggregation_group_by.py

Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (main)
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 16 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 585 bytes | 585.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote: Analyzing objects... (3/3) (6 ms)
remote: Validating commits... (1/1) done (0 ms)
remote: Storing packfile... done (51 ms)
remote: Storing index... done (87 ms)
To https://dev.azure.com/azuser1046/1046_Project/_git/1046_Project
   bd3dd98..ed07eba  main -> main
```
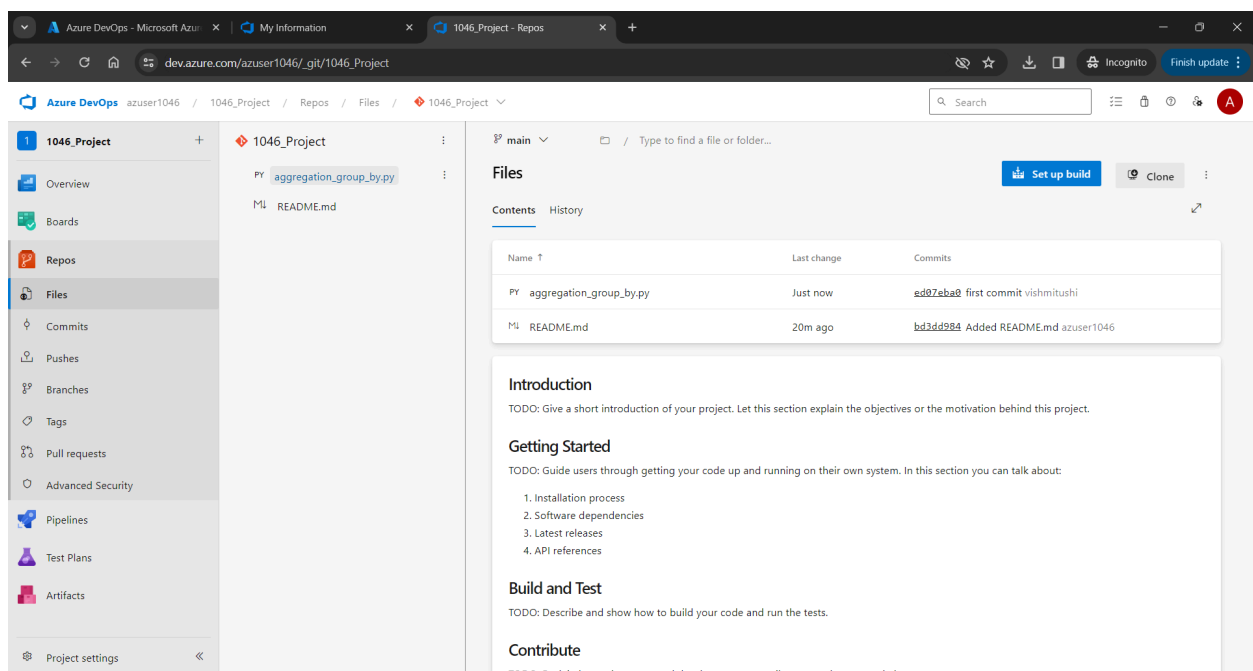
File got pushed on to the Azure DevOps Repository

Creating new branch named working
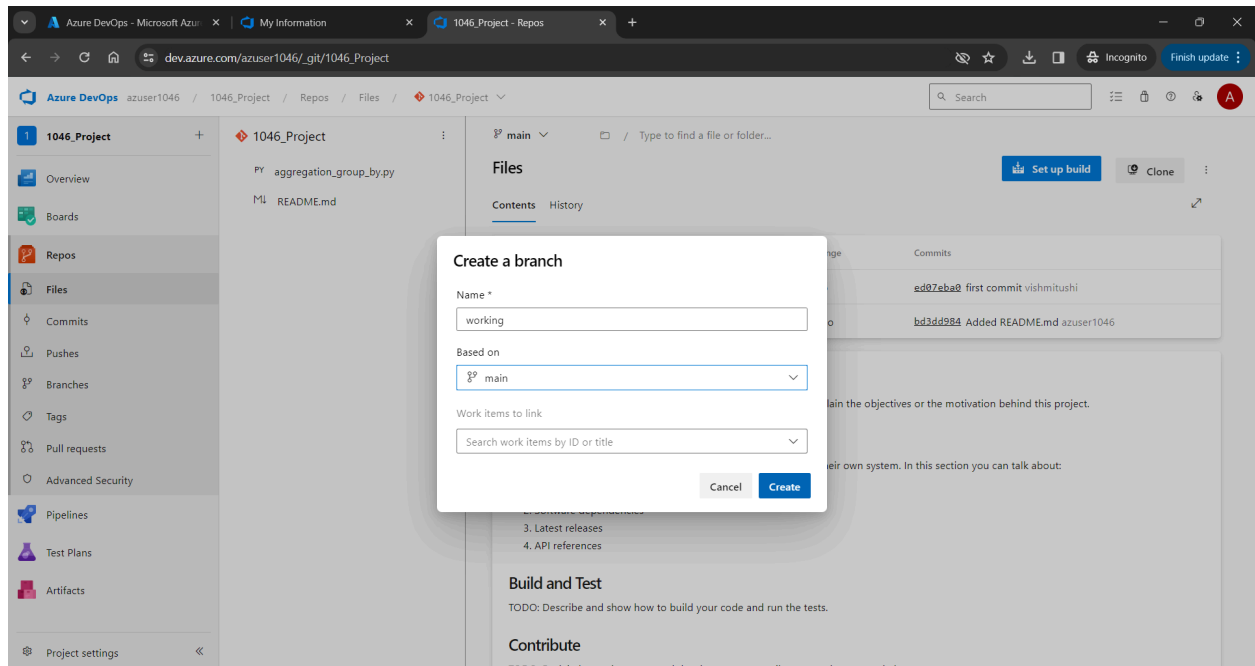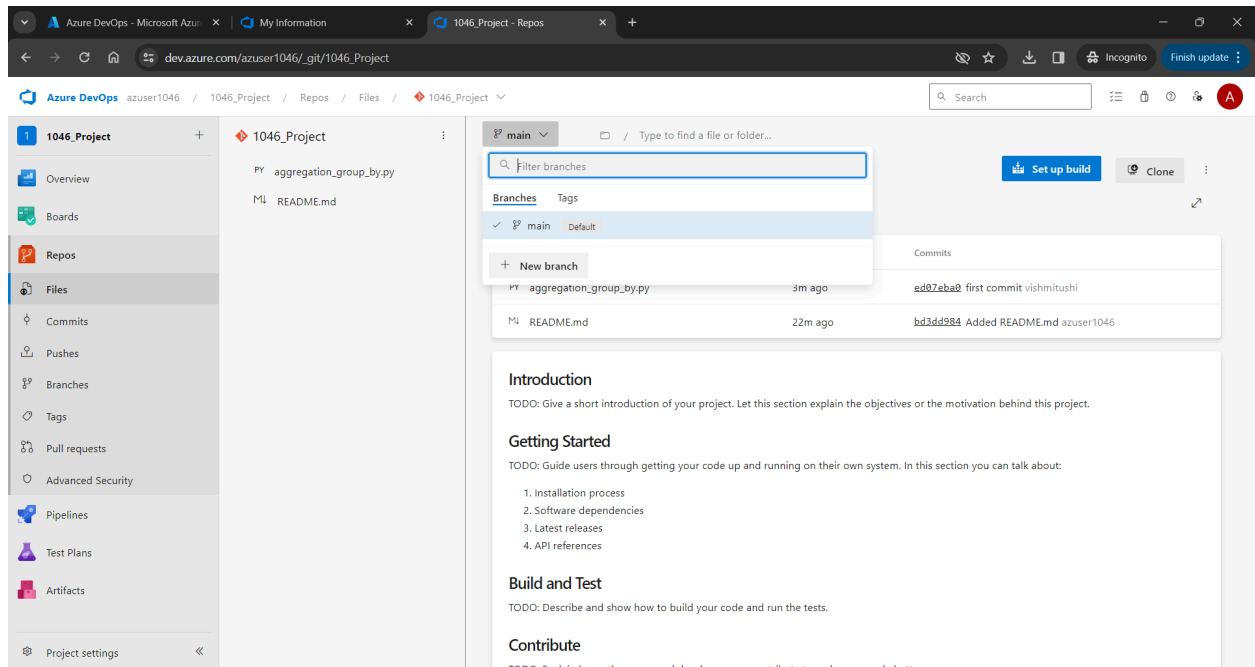
Git pull to clone new branch on local

```
Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (main)
$ git pull
From https://dev.azure.com/azuser1046/1046_Project/_git/1046_Project
 * [new branch]      working    -> origin/working
Already up to date.
```

Git checkout new_branch_name will switch to new branch

```
Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (main)
$ git checkout working
Switched to a new branch 'working'
branch 'working' set up to track 'origin/working'.

Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (working)
$ |
```

Add file locally to working branch

Name	Date modified	Type	Size
.git	28-02-2024 17:44	File folder	
README	28-02-2024 17:30	Markdown Source ...	1 KB
aggregation_group_by	09-02-2024 23:24	Python Source File	1 KB
csv_reader	09-02-2024 23:24	Python Source File	1 KB

Git add, commit and push in working branch

```
Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (working)
$ git status
On branch working
Your branch is up to date with 'origin/working'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        csv_reader.py

nothing added to commit but untracked files present (use "git add" to track)

Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (working)
$ git add csv_reader.py

Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (working)
$ git commit -m "working_branch_commit"
[working f815c7f] working_branch_commit
 1 file changed, 19 insertions(+)
 create mode 100644 csv_reader.py

Mitushi@Mitushi MINGW64 /d/Hexaware/Data_Engineering-Batch/azure_repos/1046_Project (working)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 16 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 576 bytes | 576.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote: Analyzing objects... (3/3) (4 ms)
remote: Validating commits... (1/1) done (0 ms)
remote: Storing packfile... done (57 ms)
remote: Storing index... done (72 ms)
To https://dev.azure.com/azuser1046/1046_Project/_git/1046_Project
   ed07eba..f815c7f  working -> working
```

File pushed to working branch

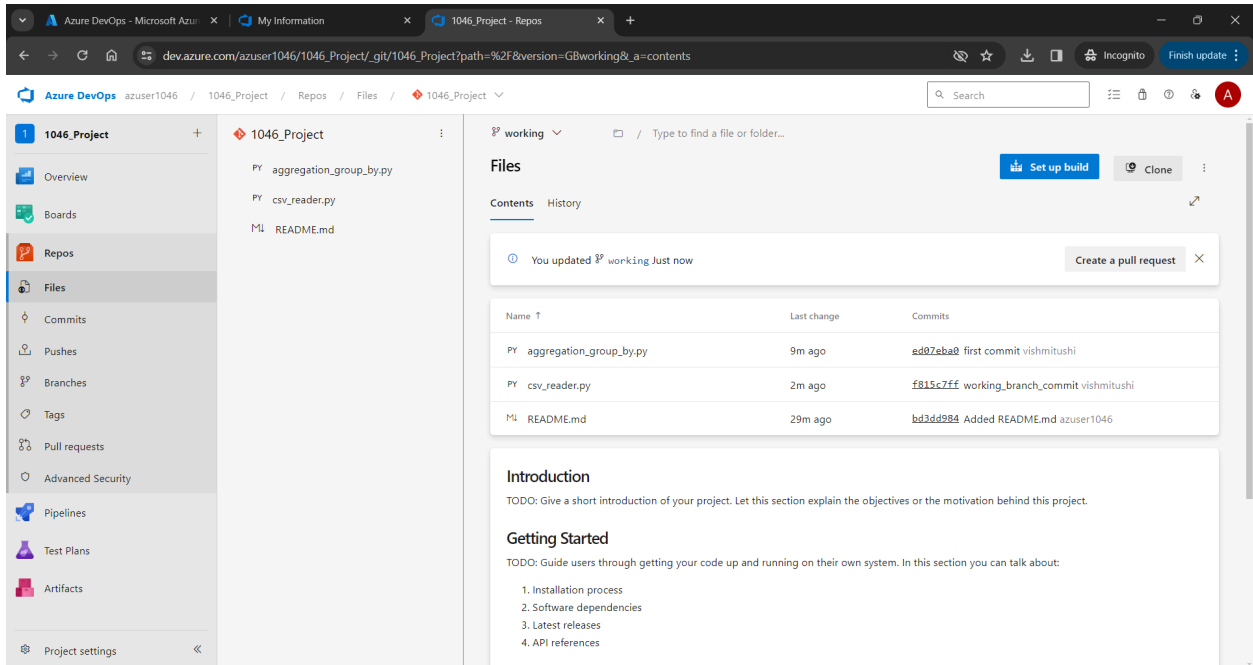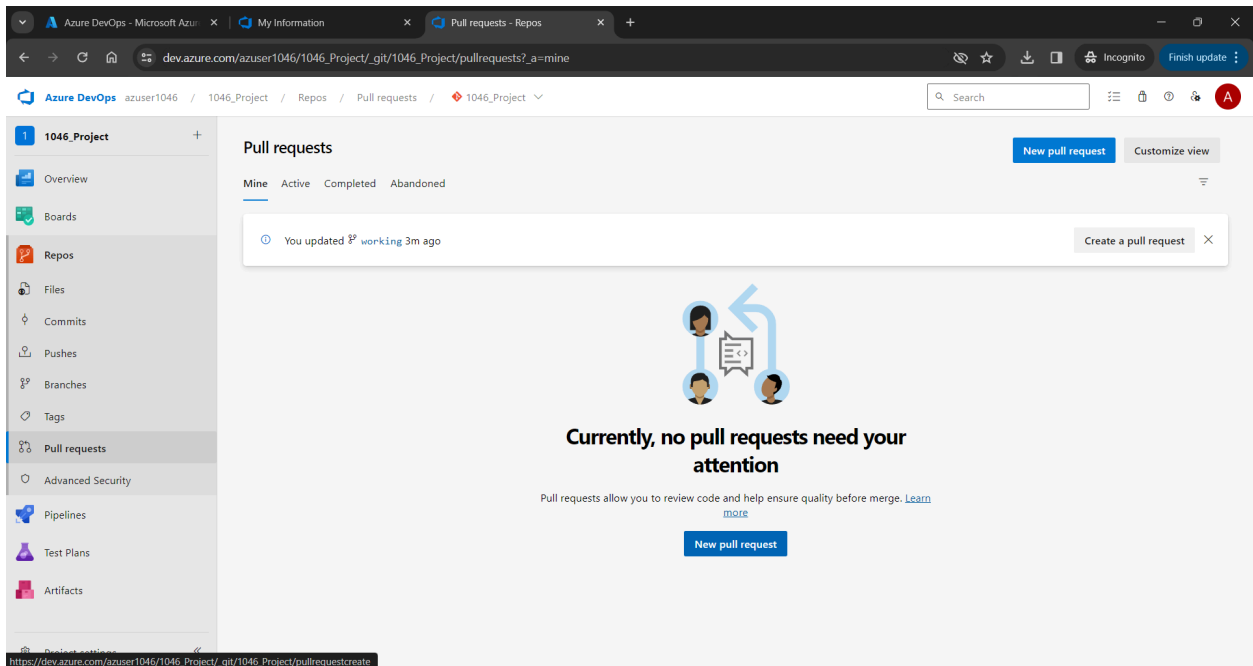# Creating pull request

dev.azure.com/azuser1046/1046_Project/_git/1046_Project/pullrequestcreate?sourceRef=working&targetRef=main&sourceRepositoryId=90f329cd-0b37-4...

Incognito | Finish update

Azure DevOps azuser1046 / 1046_Project / Repos / Pull requests / 1046_Project

1046_Project

- Overview
- Boards
- Repos
  - Files
  - Commits
  - Pushes
  - Branches
  - Tags
  - Pull requests
  - Advanced Security
- Pipelines
- Test Plans
- Artifacts

Project settings

New pull request

⑂ working ⌄ into ⑂ main ⌄ ⇄

Overview | Files 1 | Commits 1

Title

working_branch_pull request

Description

working_branch_commit

21/4000

ⓘ Markdown supported. Drag & drop, paste, or select files to insert.   ⚭ Link work items.

working_branch_commit

Reviewers   Add required reviewers

⚭ Search users and groups to add as reviewers

Work items to link

Search work items by ID or title ⌄

Tags

---

dev.azure.com/azuser1046/1046_Project/_git/1046_Project/pullrequest/1

Incognito | Finish update

Azure DevOps azuser1046 / 1046_Project / Repos / Pull requests / 1046_Project

1046_Project

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Project settings

working_branch_pull request

Active !1 A azuser1046 proposes to merge working into main

Approve ⌄ | ⑂ Complete ⌄ | ⋮

Overview | Files | Updates | Commits

✓ No merge conflicts
Last checked Just now

Description ✎

working_branch_commit

Show everything (1) ⌄

A Add a comment...

A azuser1046 created the pull request   Just now

Reviewers Add ⌄

Required

No required reviewers

Optional

No optional reviewers

Tags +

No tags

Work items +

No work items

Merged working branch and main branch using pull request