

Week 5 - Capstone: Azure DevOps Pipeline for Supply Chain Script

Objective

Create a simple Azure DevOps pipeline that:

- Installs dependencies
- Executes a Python script
- Logs results and marks completion

Tools

- Azure DevOps
- Git
- Python

1. Project Setup

Ensure your local folder contains the following:

- requirements.txt

```
1 pandas
2
```

- run_pipeline.py

```
1 import logging
2
3 logging.basicConfig(filename='output.log', level=logging.INFO, format='%(asctime)s - %(message)s')
4
5 def run():
6     logging.info('Starting pipeline task...')
7     print('Supply Chain script ran successfully')
8     logging.info('Script execution completed')
9
10 if __name__ == '__main__':
11     run()
12
```

- YAML Pipeline File (azure-pipelines.yml)

```
1  trigger:
2    | - main
3
4  pool:
5    | vmImage: 'ubuntu-latest'
6
7  steps:
8    | - script: |
9      |     pip install -r requirements.txt
10     |     python run_pipeline.py
11     |     displayName: 'Run Supply Chain Script'
12
```

5. Git Push Instructions

cd to your project folder

Initialize and push:

git init

git remote add origin <git@ssh.dev.azure.com:v3/----url>

git add .

git commit -m "Add pipeline and script"

git push -u origin main

6. Run the Pipeline

1. Go to Azure DevOps > Pipelines > New Pipeline
2. Choose Azure Repos Git
3. Select your repo
4. Use existing azure-pipelines.yml
5. Click Run

Deliverables

- Azure DevOps YAML pipeline file
- Execution log or console output