

Understanding the Practical Usage of Matrix, Concurrency, Environment

Steps to be followed:

1. Log in to GitHub.com.
2. Create a new workflow file to perform the basic execution of the command.

Step 1: Log in to GitHub.com

- 1.1 Sign in to the GitHub portal at <https://github.com>
- 1.2 Navigate to your repository main page where we are going to create a workflow file.
- 1.3 In case the repository is not available fork below mentioned repository in your GitHub account.

<https://github.com/anujdevopslearn/MavenBuild.git>

Step 2: Create a new workflow file to perform the basic execution of the command.

- 2.1 Once you are on GitHub's main repository page, we can get started with creating a new Workflow file.
- 2.2 Create a .github/workflows directory in your repository in case the directory does not exist.
- 2.3 In workflow directory, create a new workflow file with the name maven-cache.yml.
- 2.4 Add below workflow content in **maven-cache.yml** file:

name: Java CI with Maven

on:

push:

concurrency:

group: environment-\${{ github.ref }}

cancel-in-progress: true

jobs:

maven_build:

strategy:

matrix:

version: [11, 8]

runs-on: ubuntu-latest

steps:

- uses: actions/checkout@v3

- name: Set up JDK "\${{ matrix.version }}"

uses: actions/setup-java@v3

with:

java-version: "\${{ matrix.version }}"

distribution: 'temurin'

cache: maven

- name: Cache Maven Dependencies

uses: actions/cache@v3

with:

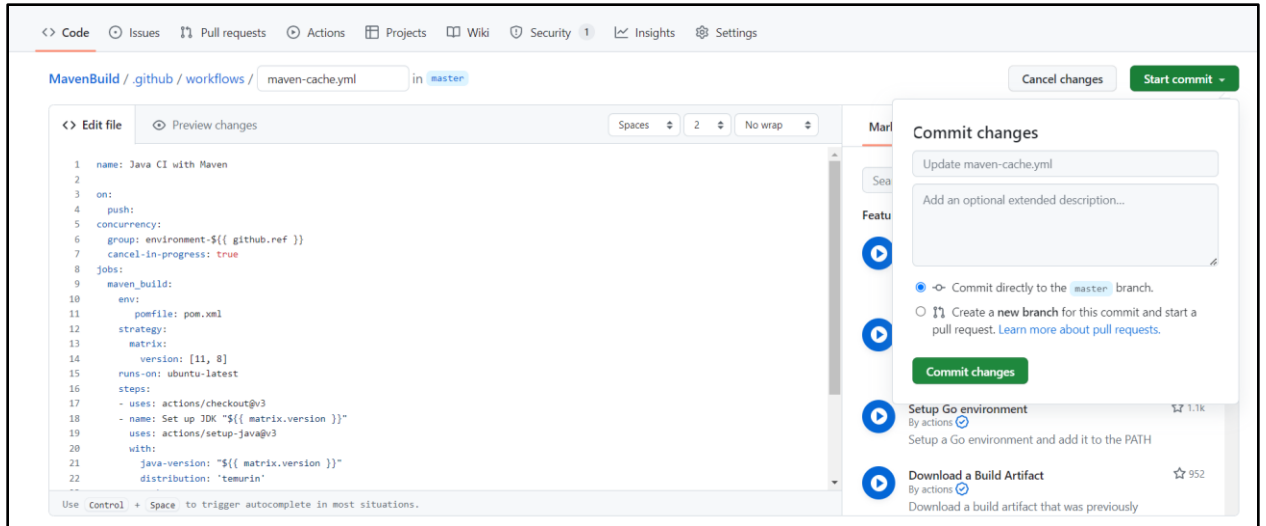
path: ~/.m2

key: \${{ runner.os }}-cache

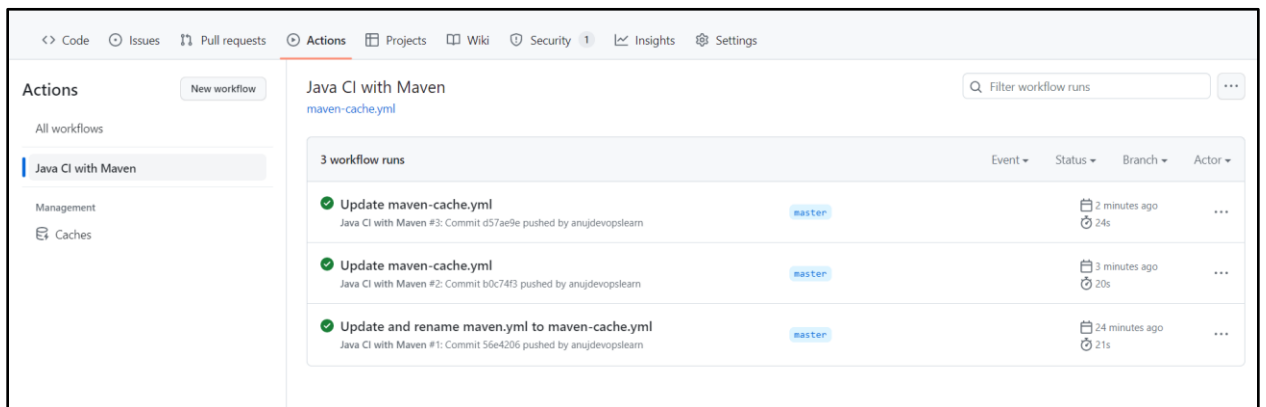
- name: Build with Maven

run: mvn -B package --file pom.xml

2.5 Once the file is created, click on Commit new file to save the workflow file in your code repository.



2.6 Next navigate to the Actions tab on your repository to access the workflow execution page as below:



2.7 From the left sidebar you can select the workflow with which you want to access execution logs.

2.8 Select the latest workflow execution run to access execution logs for the jobs configured in the workflow.

2.9 Click on matrix to access all jobs logs, you can choose each and every job to get detailed information regarding jobs executions.

← Java CI with Maven

Update maven-cache.yml #3

Re-run all jobs ...

Summary

Jobs

- maven_build (11)
- maven_build (8)

Run details

- Usage
- Workflow file

Triggered via push 3 minutes ago

anujdevopslearn pushed → d57ae9e master

Status: Success

Total duration: 24s

Artifacts: —

maven-cache.yml

on: push

Matrix: maven_build

2 jobs completed

Show all jobs

Matrix view with both JDK 11 and JDK8 jobs

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Update maven-cache.yml #3

Re-run all jobs ...

Summary

Jobs

- maven_build (11)
- maven_build (8)

Run details

- Usage
- Workflow file

Triggered via push 4 minutes ago

anujdevopslearn pushed → d57ae9e master

Status: Success

Total duration: 24s

Artifacts: —

maven-cache.yml

on: push

Matrix: maven_build

maven_build (11)	13s
maven_build (8)	14s

JDK 11 Detailed logs

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Update maven-cache.yml #3

Re-run all jobs ...

Summary

Jobs

- maven_build (11)
- maven_build (8)

Run details

- Usage
- Workflow file

maven_build (11)

succeeded 4 minutes ago in 13s

Search logs

- Set up job 3s
- Run actions/checkout@v3 1s
- Set up JDK "11" 2s
- Cache Maven Dependencies 1s
- Build with Maven 3s
- Post Cache Maven Dependencies 0s
- Post Set up JDK "11" 0s
- Post Run actions/checkout@v3 0s
- Complete job 0s

JDK 8 Detailed logs

← Java CI with Maven

✓ Update maven-cache.yml #3

Re-run all jobs

...

Summary

Jobs

Run details

Usage

Workflow file

maven_build (8)

succeeded 4 minutes ago in 14s

Search logs

⌂

> Set up job

> Run actions/checkout@v3

> Set up JDK "8"

> Cache Maven Dependencies

> Build with Maven

> Post Cache Maven Dependencies

> Post Set up JDK "8"

> Post Run actions/checkout@v3

> Complete job

2s

1s

2s

2s

4s

0s

0s

0s

0s