

Lesson 5 Demo 1

Build and Test Java

Objective: You wanted to create a new CI CD workflow for performing build and test cases execution for Java-based projects.

Tools required: GitHub Actions

Prerequisites: None

Steps to be followed:

1. Login to GitHub.com.
2. Create a new workflow file to perform build and test cases automation.

Step 1: Login 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/Simplilearn-Edu/MavenBuild>

Step 2: Create a new workflow file to perform build and test case automation.

- 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 the workflow directory, create a new workflow file with the name **maven-ci.yml**.
- 2.4 Add below workflow content in the above created file.

name: Java CI with Maven

on:

workflow_dispatch:

push:

jobs:

build:

runs-on: ubuntu-latest

steps:

- uses: actions/checkout@v3

- name: Set up JDK 11

uses: actions/setup-java@v3

with:

java-version: '11'

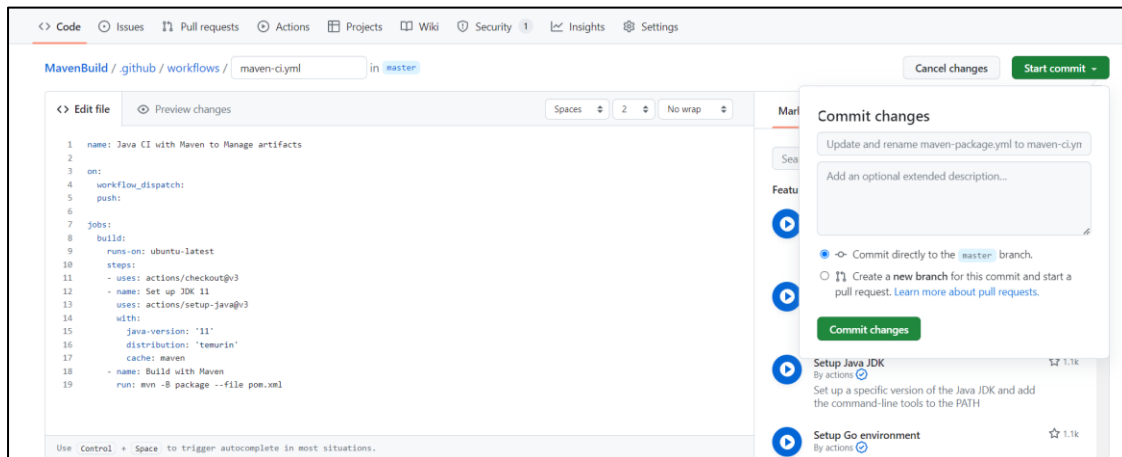
distribution: 'temurin'

cache: maven

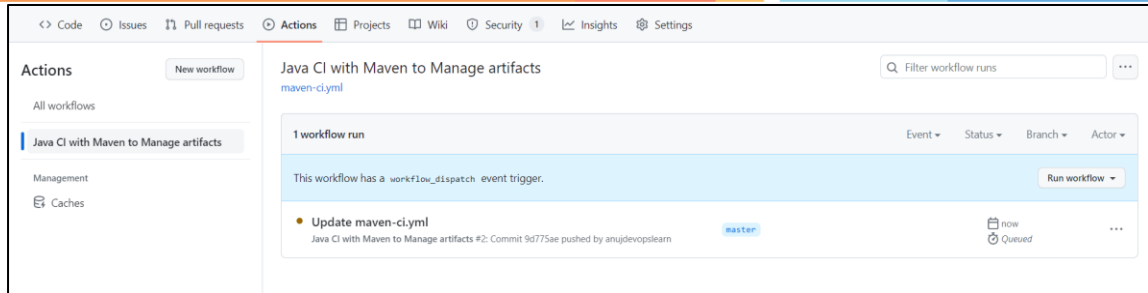
- name: Build with Maven

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 Next click on the **latest execution** to access execution detailed logs.

