Maven Reusable Workflow with Caching

Steps to be followed:

1. Log in to GitHub.com.
2. Create a new workflow file to implement reusability and caching mechanism.

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/Simplilearn-Edu/MavenBuild

Step 2: Create a new workflow file to implement the reusability and caching mechanism.

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-cache.yml.**

2.4 Add below workflow content in the above created file.

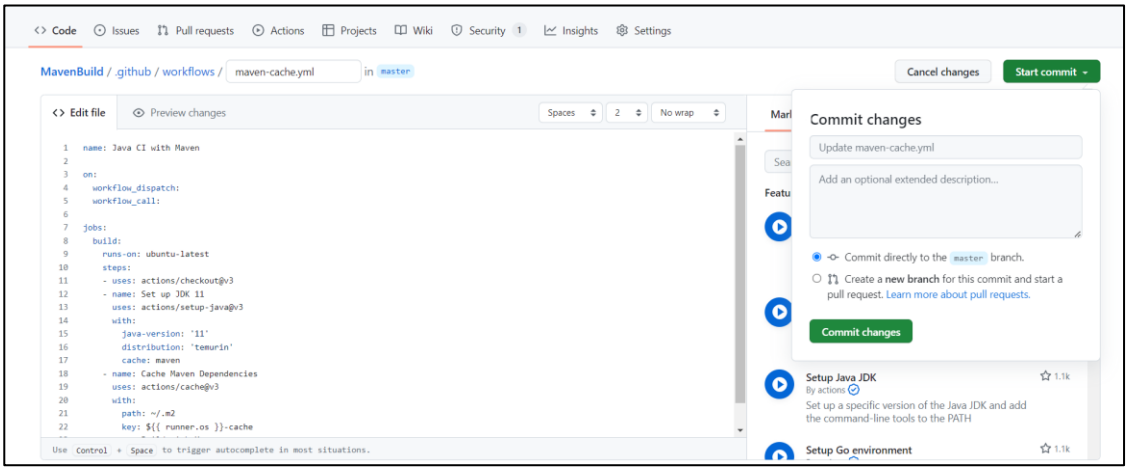
```
name: Java CI with Maven

on:
  workflow_dispatch:
  workflow_call:

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: 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, we have to create a **caller.yml** which is going to invoke Reusable workflow as per the below content:

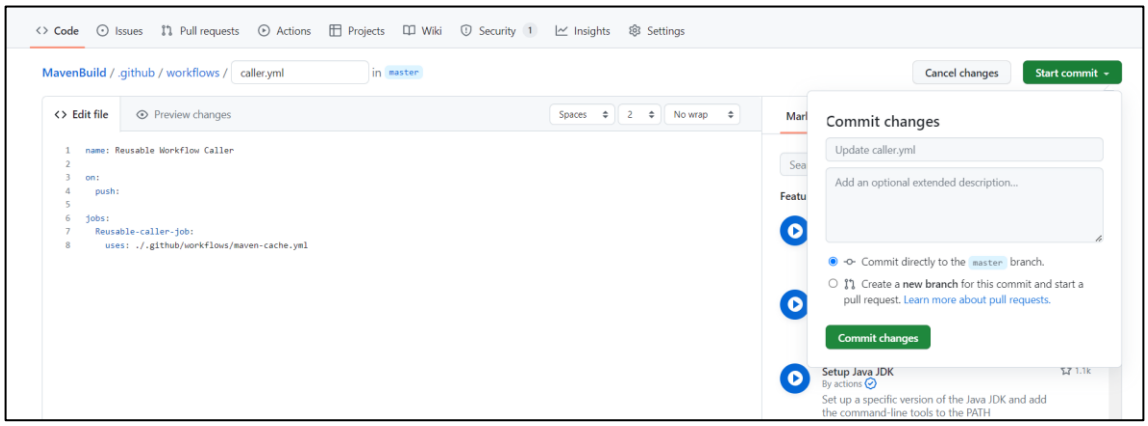
```
name: Reusable Workflow Caller

on:
  push:
```

jobs:

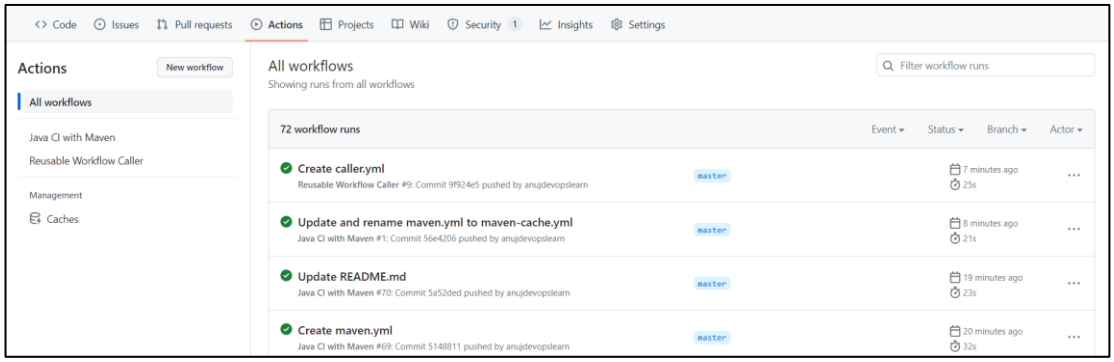
Reusable-caller-job:

uses: ./.github/workflows/maven-cache.yml

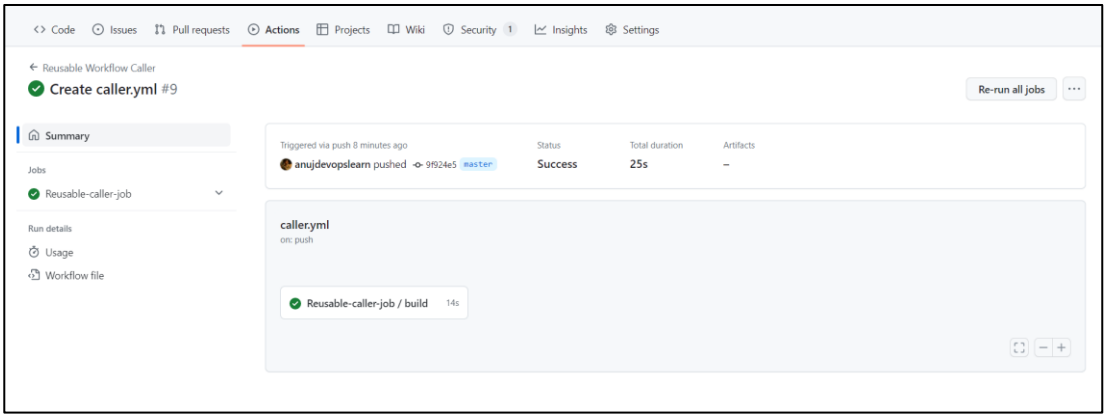


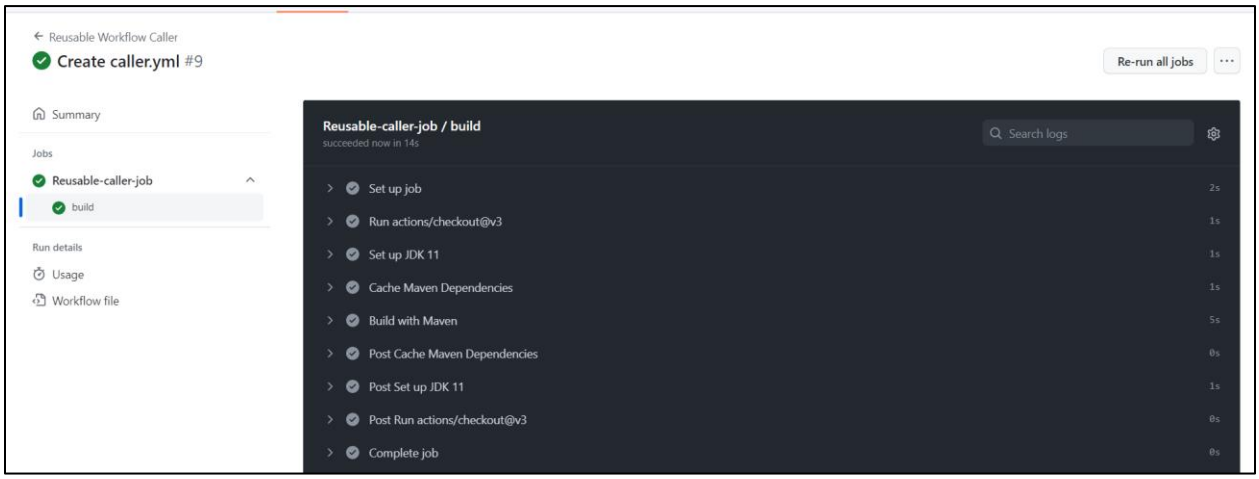
2.7 Next in order to test our event, we can go to code from your repository and start performing some code changes.

2.8 This will invoke workflow automatically, navigate to the **Actions** tab on your repository to access the workflow execution page as below:



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



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

2.11 Click on **Basic-Workflow** to access jobs logs, you can also expand different steps execution logs to get detailed information regarding jobs executions.