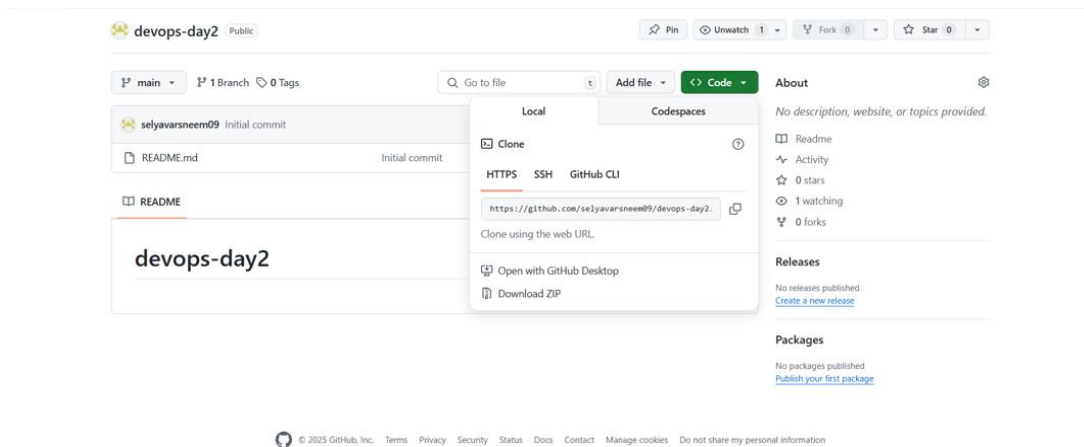


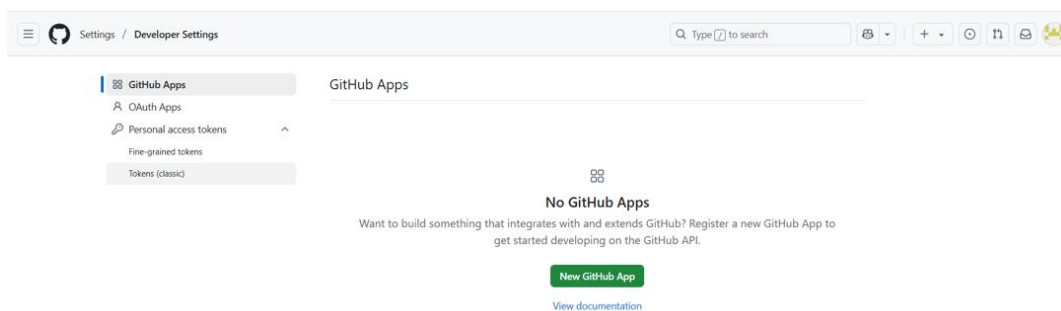
STEP 1:

Creating a new repository and copying the url.



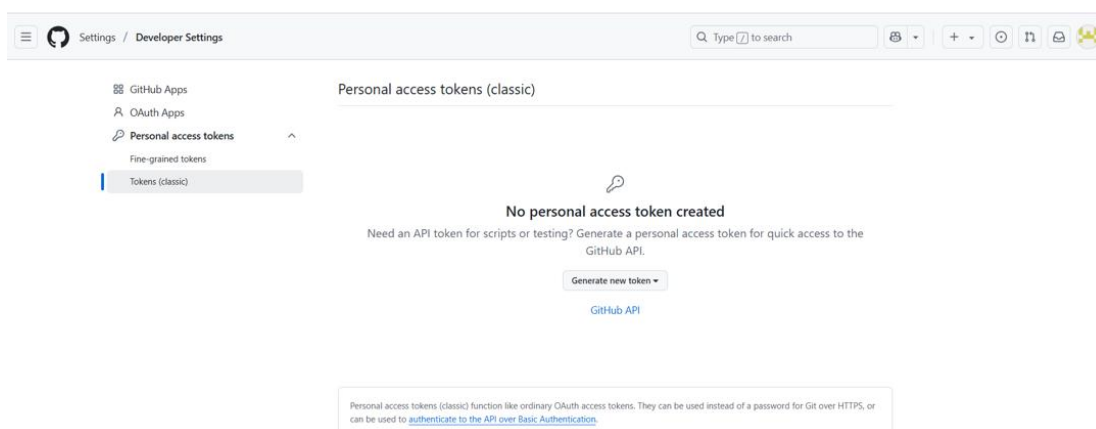
STEP 2:

Go to the Developer Settings



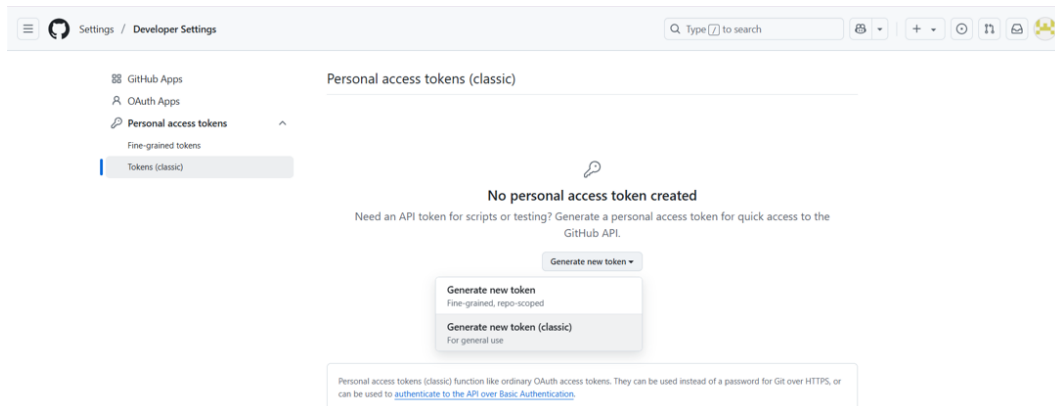
STEP 3:

Select Tokens(classic) Option



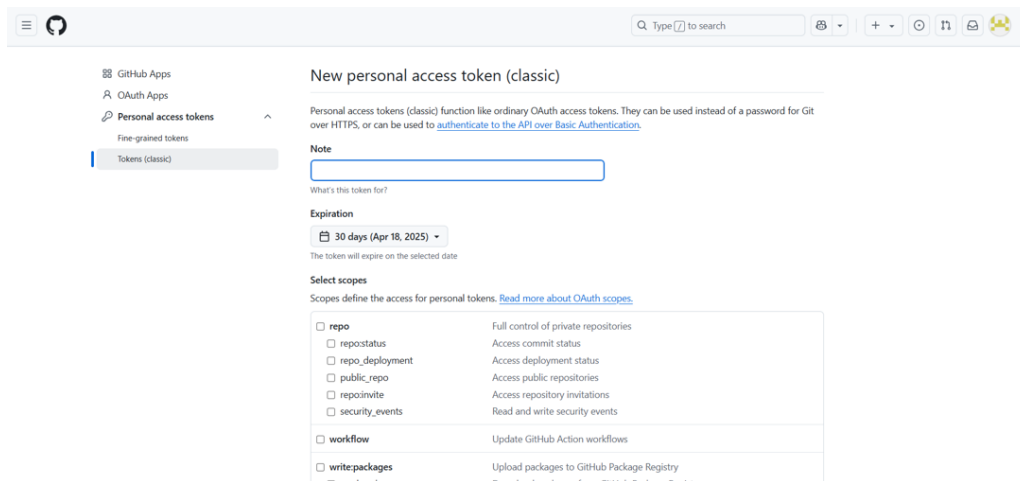
STEP 4:

Select the “Generate new token (classic)” option



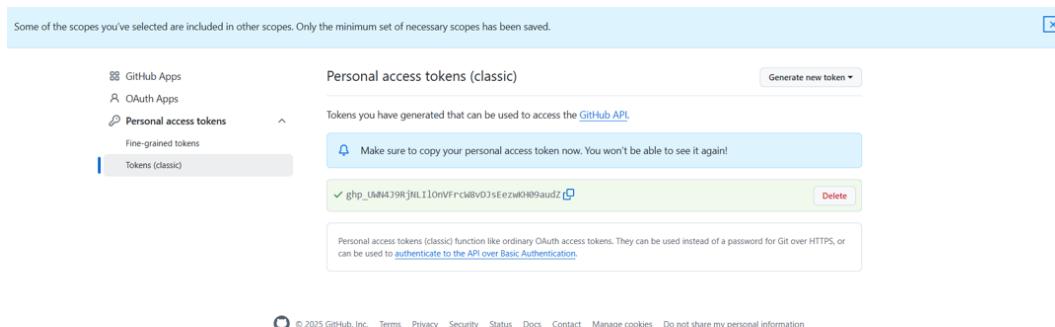
STEP 5:

Add note and generate token



STEP 6:

Copy the token generated



STEP 7:

Create a pipeline

The screenshot shows the Jenkins 'Configure' page for a new pipeline. On the left, the 'Configure' sidebar has tabs for 'General', 'Triggers', 'Pipeline', and 'Advanced'. The 'Pipeline' tab is selected. The main area is titled 'Pipeline' and contains the instruction 'Define your Pipeline using Groovy directly or pull it from source control.' Below this, the 'Definition' section has a dropdown menu with three options: 'Pipeline script', 'Pipeline script', and 'Pipeline script from SCM'. The third option is selected and highlighted in blue. Below the dropdown is a large text area for the pipeline script. At the bottom, there is a checkbox labeled 'Use Groovy Sandbox' which is checked, and a link for 'Pipeline Syntax'.

STEP 8:

Provide the credentials and save

The screenshot shows the Jenkins 'Configure' page for a pipeline, specifically the 'Pipeline' tab. The 'Definition' dropdown is set to 'Pipeline script from SCM'. Below this, the 'SCM' dropdown is set to 'Git'. Under the 'Repositories' section, there is a 'Repository URL' field and a 'Credentials' dropdown. The 'Credentials' dropdown is currently set to '- none -'. A red error message 'Please enter Git repository.' is displayed below the 'Repository URL' field. At the bottom, there are 'Save' and 'Apply' buttons.

STEP 9:

The screenshot shows the Jenkins dashboard for a pipeline named 'devops-day2'. The left sidebar contains a list of actions: 'Status', 'Changes', 'Build Now', 'Configure', 'Delete Pipeline', 'Stages', 'Rename', and 'Pipeline Syntax'. The 'Status' tab is selected. The main area shows the pipeline name 'devops-day2' with an 'Add description' button. Below this, there is a 'Permalinks' section. At the bottom, there is a 'Builds' section showing 'No builds'. The bottom right corner of the dashboard displays 'REST API' and 'Jenkins 2.492.2'.

STEP 10:

Clone the remote repository

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj$ git clone https://github.com/selyavarsneem09/devops-day2.git
```

STEP 11:

List the files in the directory "devops-proj"

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj$ ls
Dockerfile  app.py  devops-day2  docker-compose.yml  require.txt
```

STEP 12:

Move the files to the repo and change the directory and list it again

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj$ mv Dockerfile app.py docker-compose.yml require.txt devops-day2/
selya11@LAPTOP-0R6BSQFD:~/devops-proj$ ls
devops-day2
selya11@LAPTOP-0R6BSQFD:~/devops-proj$ cd devops-day2
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ ls
Dockerfile  README.md  app.py  docker-compose.yml  require.txt
```

STEP 13:

Now add the listed files to the repo

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git add .
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ 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:   Dockerfile
    new file:   app.py
    new file:   docker-compose.yml
    new file:   require.txt
```

STEP 14:

Commit your activity using git commit

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git commit -m 'first commit'
Author identity unknown

*** Please tell me who you are.

Run

  git config --global user.email "you@example.com"
  git config --global user.name "Your Name"

to set your account's default identity.
Omit --global to set the identity only in this repository.
```

STEP 15:

Now config using user name and email

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git config --global user.email "selyavarsneem09@gmail.com"
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git config --global user.name "selyavarsneem09"
```

STEP 16:

Use push command to push the changes

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git push https://selyavarsneem09:ghp_UWN4J9RjNLiL0nVFrcW8vDJsEezwKH09audZ@github.com/selyavarsneem09/devops-day2.git
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (6/6), 774 bytes | 258.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/selyavarsneem09/devops-day2.git
f916a00..e022be8  main -> main
```

STEP 17:

Now create a nano file called jenkinsfile

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ nano jenkinsfile
```

STEP 18:

Edit the Jenkins file by providing docker credentials and git hub credentials

```
pipeline {
  agent any
  environment {
    DOCKER_IMAGE = "selyavarsneel/docker-app:latest" // Change this to your registry
    CONTAINER_NAME = "docker-running-app"
    REGISTRY_CREDENTIALS = "docker-hub-credentials" // Jenkins credentials ID
  }
  stages {
    stage('Checkout Code') {
      steps {
        withCredentials([usernamePassword(credentialsId: 'selya_docker', usernameVariable: 'GIT_USER', passwordVariable: 'GIT_TOKEN')]) {
          git url: "https://$GIT_USER:$GIT_TOKEN@github.com/selyavarsneem09/devops-day2.git", branch: 'main'
        }
      }
    }
    stage('Build Docker Image') {
      steps {
        sh 'docker build -t $DOCKER_IMAGE .'
      }
    }
    stage('Login to Docker Registry') {
      steps {
        withCredentials([usernamePassword(credentialsId: 'docker-hub-credentials', usernameVariable: 'DOCKER_USER', passwordVariable: 'DOCKER_PASS')]) {
          sh 'echo $DOCKER_PASS | docker login -u $DOCKER_USER --password-stdin'
        }
      }
    }
    stage('Push to Container Registry') {
      steps {
        sh 'docker push $DOCKER_IMAGE'
      }
    }
  }
}
```

STEP 19:

Now add the Jenkins file to the git repo, then commit it

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git add jenkinsfile
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git add .
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git commit -m "Added Jenkinsfile"
```

STEP 20:

Then push it to the repository

```
selya11@LAPTOP-0R6BSQFD:~/devops-proj/devops-day2$ git push https://selyavarsneem09:ghp_UWN4J9RjNLiL0nVFrcW8vDJsEezwKH09audZ@github.com/selyavarsneem09/devops-day2.git
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 951 bytes | 237.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/selyavarsneem09/devops-day2.git
e022be8..debd97  main -> main
```

STEP 21:

Go to Jenkins and give “build now” option



Console Output

[Download](#)[Copy](#)[View as plain text](#)

```
Started by user selya varsnee muthusamy
Obtained Jenkinsfile from git https://github.com/selyavarsneem09/devops-day2.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/devops-day2
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/devops-day2/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/selyavarsneem09/devops-day2.git # timeout=10
Fetching upstream changes from https://github.com/selyavarsneem09/devops-day2.git
> git --version # timeout=10
> git --version # 'git version 2.43.0'
> git fetch --tags --force --progress -- https://github.com/selyavarsneem09/devops-day2.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse origin/main^{commit} # timeout=10
Checking out Revision b526f20d7bcb73498bfb80608ce77ee107b67959 (origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f b526f20d7bcb73498bfb80608ce77ee107b67959 # timeout=10
Commit message: "commit"
> git rev-list --no-walk b526f20d7bcb73498bfb80608ce77ee107b67959 # timeout=10
[Pipeline] }
```

STEP 22:

Run the localhost on port number : 5001 and see the screen with message “hello world”

