

Module 6: Jenkins Assignment – 1

1. Trigger a pipeline using Git when push on develop branch
2. Pipeline should pull Git content to a folder

Prerequisites:

A Vm with jenkins installed

- Navigated to the jenkins installed VM and created directory
- In the created directory , git repo is initialised

```
ubuntu@ip-172-31-38-170:~$ mkdir git
ubuntu@ip-172-31-38-170:~$ cd git
ubuntu@ip-172-31-38-170:~/git$ ls
ubuntu@ip-172-31-38-170:~/git$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/ubuntu/git/.git/
```

- Then a file is created and committed to the repo

```
ubuntu@ip-172-31-38-170:~/git$ touch 1.txt
ubuntu@ip-172-31-38-170:~/git$ git add .
ubuntu@ip-172-31-38-170:~/git$ git commit -m "1st commit"
[master (root-commit) 7c2b2b6] 1st commit
Committer: Ubuntu <ubuntu@ip-172-31-38-170.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

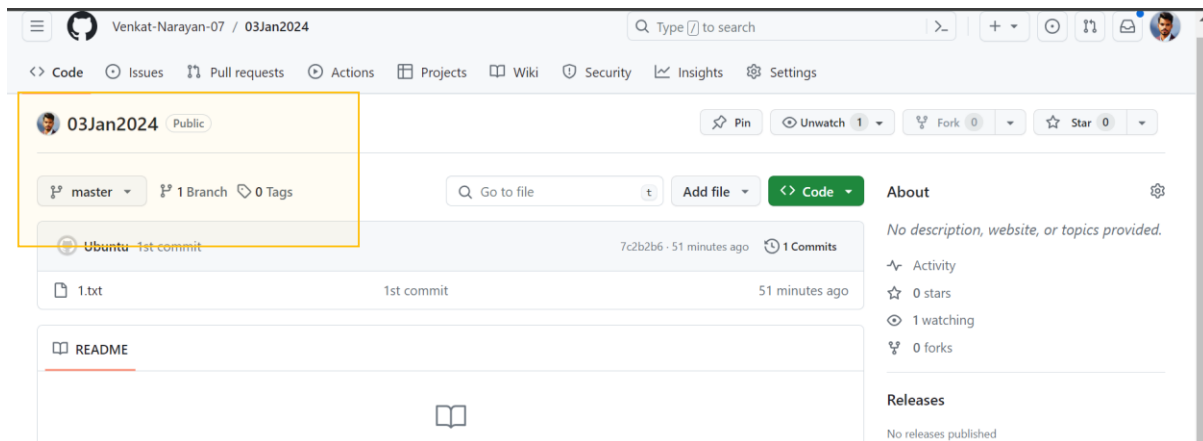
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 1.txt
```

- After that the git-hub repo is added as origin

```
and the repository added:
ubuntu@ip-172-31-38-170:~/git$ git remote add origin https://github.com/Venkat-Narayan-07/03Jan2024.git
```

- The changes committed are pushed to the git hub repo

```
Branch
ubuntu@ip-172-31-38-170:~/git$ git branch
* master
ubuntu@ip-172-31-38-170:~/git$ git push -u origin master
Username for 'https://github.com': Venkat-Narayan-07
Password for 'https://Venkat-Narayan-07@github.com':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 214 bytes | 214.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Venkat-Narayan-07/03Jan2024.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
ubuntu@ip-172-31-38-170:~/git$
```



- Then a new branch develop is created

```
ubuntu@ip-172-31-38-170:~/git$ git branch develop
```

- A file is created and added committed to the remote repo

```
ubuntu@ip-172-31-38-170:~/git$ touch assign1.txt
ubuntu@ip-172-31-38-170:~/git$ git add assign1.txt
ubuntu@ip-172-31-38-170:~/git$ git commit -m "ji"
[develop 2bd5bc4] ji
Committer: Ubuntu <ubuntu@ip-172-31-38-170.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

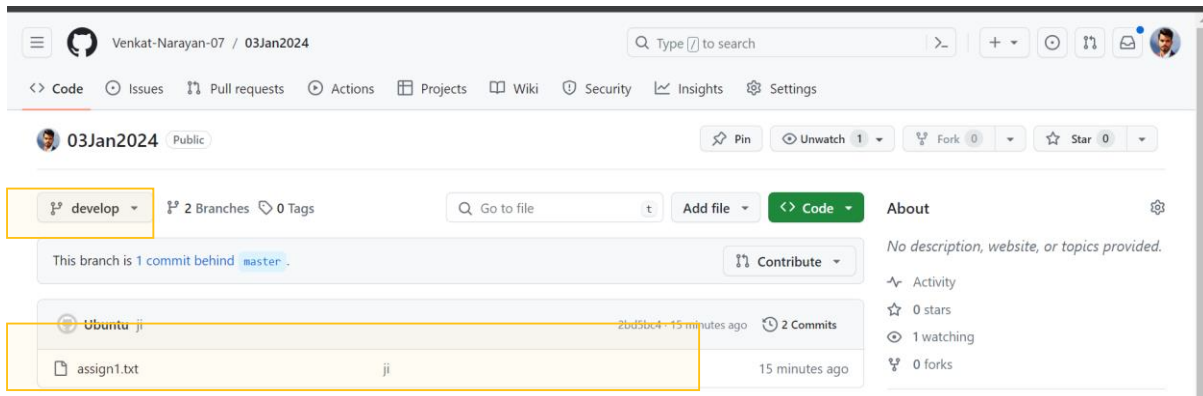
After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

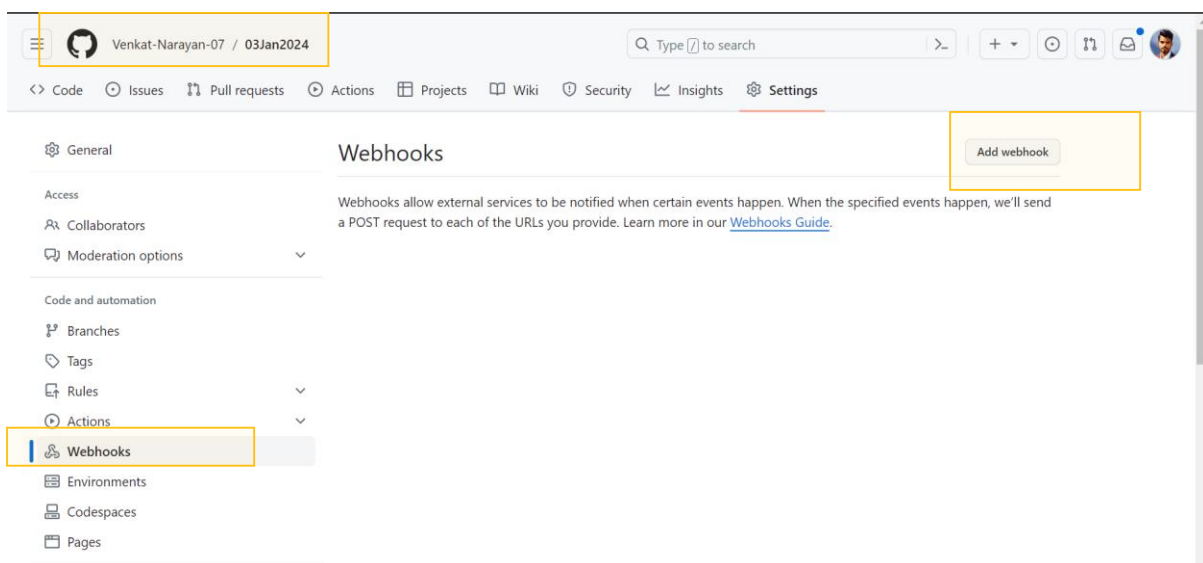
1 file changed, 0 insertions(+), 0 deletions(-)
rename 1.txt => assign1.txt (100%)
```

The committed changes are pushed to the remote repo

```
ubuntu@ip-172-31-38-170:~/git$ git push origin develop
Username for 'https://github.com': Venkat-Narayan-07
Password for 'https://Venkat-Narayan-07@github.com':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (2/2), 238 bytes | 238.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'develop' on GitHub by visiting:
remote:   https://github.com/Venkat-Narayan-07/03Jan2024/pull/new/develop
remote:
To https://github.com/Venkat-Narayan-07/03Jan2024.git
 * [new branch]      develop -> develop
ubuntu@ip-172-31-38-170:~/git$
```



- Then navigated to the github wesite
- In the repository selected webhooks and created a new webhook



- In the webhook configuration provided jenkins dashboard url as the payload url

ACCESS

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security and analysis

Deploy keys

Secrets and variables

Integrations

GitHub App

We'll send a post request to the URL below with details of any subscribed events. You can also specify which data format you'd like to receive (JSON, x-www-form-urlencoded, etc). More information can be found in [our developer documentation](#).

Payload URL *

http://54.88.29.204:8080/

Content type

application/x-www-form-urlencoded

Secret

Which events would you like to trigger this webhook?

☒ Just the push event.

☐ Send me **everything**.

☐ Let me select individual events.

☒ **Active**
We will deliver event details when this hook is triggered.

Add webhook

- webhook is created

Venkat-Narayan-07 / 03Jan2024

Type to search

Code Issues Pull requests Actions Projects Wiki Security Insights **Settings**

General **Webhooks** Add webhook

ACCESS

Collaborators

Moderation options

Code and automation

Branches

Webhooks allow external services to be notified when certain events happen. When the specified events happen, we'll send a POST request to each of the URLs you provide. Learn more in our [Webhooks Guide](#).

Last delivery was not successful: Invalid HTTP Response: 403.

http://54.88.29.204:8080/ (push)

Edit Delete

Navigated to jenkins dashboard and added a new job

← → ↻ 🏠 ⚠ Not secure 54.88.29.204:8080

Jenkins Search (CTRL+K) venkata narayana log out

Dashboard >

+ New Item

People

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

Welcome to Jenkins! Add description

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.


Start building your software project


Create a job +


Enter an item name

job1

» Required field

 **Freestyle project**
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

 **Pipeline**
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

 **Multi-configuration project**
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific etc.

OK

- Job1 is configured with git repo url and develop branch as the build trigger branch
- And webhook is enabled to connect github and jenkins

Dashboard > job1 > Configuration

Source Code Management

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

None

Git

Repositories

Repository URL

https://github.com/Venkat-Narayan-07/03Jan2024.git

Credentials

ubuntu

+ Add

Advanced

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Add Repository

Branches to build

Branch Specifier (blank for 'any')

*/develop

Add Branch

Repository browser

(Auto)

Additional Behaviours

Add

Dashboard > job1 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Build Triggers

Trigger builds remotely (e.g., from scripts)

Build after other projects are built

Build periodically

GitHub hook trigger for GITScm polling

Poll SCM

Build Environment

Delete workspace before build starts

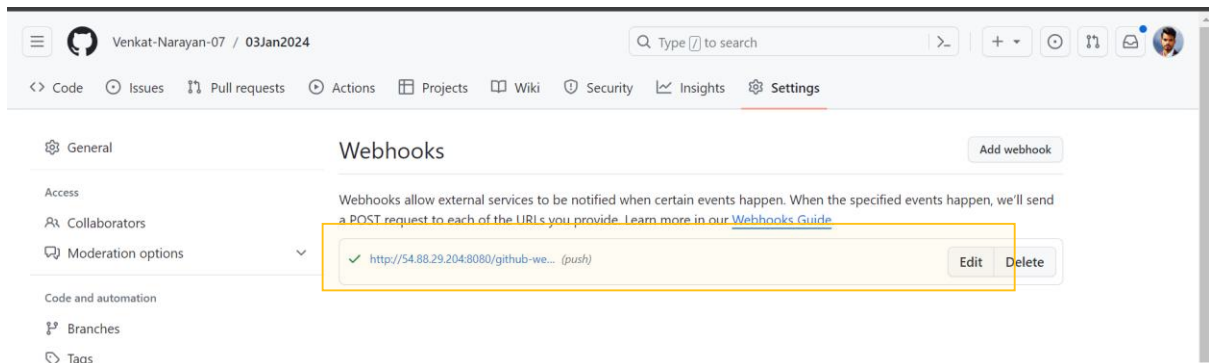
Use secret text(s) or file(s)

Add timestamps to the Console Output

Insert build log for published build page

Save

Apply



- Navigated to the jenkins master vm
- Switched to the develop branch

```
ubuntu@ip-172-31-38-170:~/git$ git status
On branch develop
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    1.txt
    venkat.html

nothing added to commit but untracked files present (use "git add" to track)
```

- Then a file is created staged and committed to the repo

```
ubuntu@ip-172-31-38-170:~/git$ git add .
ubuntu@ip-172-31-38-170:~/git$ git commit -m "committing"
[develop aadda09] committing
Committer: Ubuntu <ubuntu@ip-172-31-38-170.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 1.txt
create mode 100644 venkat.html
```

- Changes are pushed to the github repo

```
ubuntu@ip-172-31-38-170:~/git$ git push origin develop
Username for 'https://github.com': Venkat-Narayan-07
Password for 'https://Venkat-Narayan-07@github.com':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 260 bytes | 260.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Venkat-Narayan-07/03Jan2024.git
   2bd5bc4..aadda09  develop -> develop
ubuntu@ip-172-31-38-170:~/git$
```

03Jan2024
Public

Pin
Unwatch 1
Fork 0
Star 0

develop had recent pushes 22 seconds ago
Compare & pull request

develop
2 Branches
0 Tags

Go to file
Add file
Code

This branch is 1 commit ahead of, 1 commit behind master.
Contribute

Ubuntu committing
aadda09 · 1 minute ago
3 Commits

1.txt	committing	1 minute ago
assign1.txt	ji	3 hours ago
venkat.html	committing	1 minute ago

About
No description, website, or topics provided.

Activity
0 stars
1 watching
0 forks

Releases
No releases published
[Create a new release](#)

Packages
No packages published

- In the jenkins dashboard job1 is auto triggerd with the push

Dashboard > job1 >

Build Now
Configure
Delete Project
GitHub Hook Log
Rename

Permalinks

- Last build (#3), 5.9 sec ago
- Last stable build (#2), 8 min 41 sec ago
- Last successful build (#2), 8 min 41 sec ago
- Last completed build (#2), 8 min 41 sec ago

Build History
trend

Filter builds...

#4
(pending—In the quiet period. Expires in 2.7 sec)

#3 Jan 3, 2024, 9:04 AM

#2 Jan 3, 2024, 8:56 AM

#1 Jan 3, 2024, 8:56 AM

Atom feed for all
Atom feed for failures

```

7 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

*** System restart required ***
Last login: Tue Jan  2 15:28:54 2024 from 18.206.107.28
ubuntu@ip-172-31-47-180:~$ ls
jenkins
ubuntu@ip-172-31-47-180:~$ cd jenkins
ubuntu@ip-172-31-47-180:~/jenkins$ ls
remoting  remoting.jar  workspace
ubuntu@ip-172-31-47-180:~/jenkins$ cd workspace
ubuntu@ip-172-31-47-180:~/jenkins/workspace$ ls
job1  job1@tmp
ubuntu@ip-172-31-47-180:~/jenkins/workspace$ cd job1
ubuntu@ip-172-31-47-180:~/jenkins/workspace/job1$ ls
1.txt  123.txt  assign1.txt  trigger1.txt  venkat.html
ubuntu@ip-172-31-47-180:~/jenkins/workspace/job1$ cd ..

```

i-02db224271da2dd11 (Slave1)
PublicIPs: 54.172.39.70 PrivateIPs: 172.31.47.180