What is the Jenkins pipeline?

Jenkins Pipeline is a tool for creating and automating software delivery processes. It allows developers to define a series of steps that automate the entire process, from building to testing to deployment. The pipeline is defined using a script in a Jenkinsfile, which is stored in the project's source code repository. Jenkins will automatically execute the pipeline whenever changes are made to the repository.

What scripting language is Jenkins pipeline syntax based on?

The Jenkins pipeline syntax is based on the Groovy programming language. Groovy is a dynamic, interpreted language that is designed to be used in conjunction with Java. It is a powerful language that can be used to automate a wide range of tasks.

What are the different ways to trigger a pipeline ?

1. Slack Commands
2. commit commands
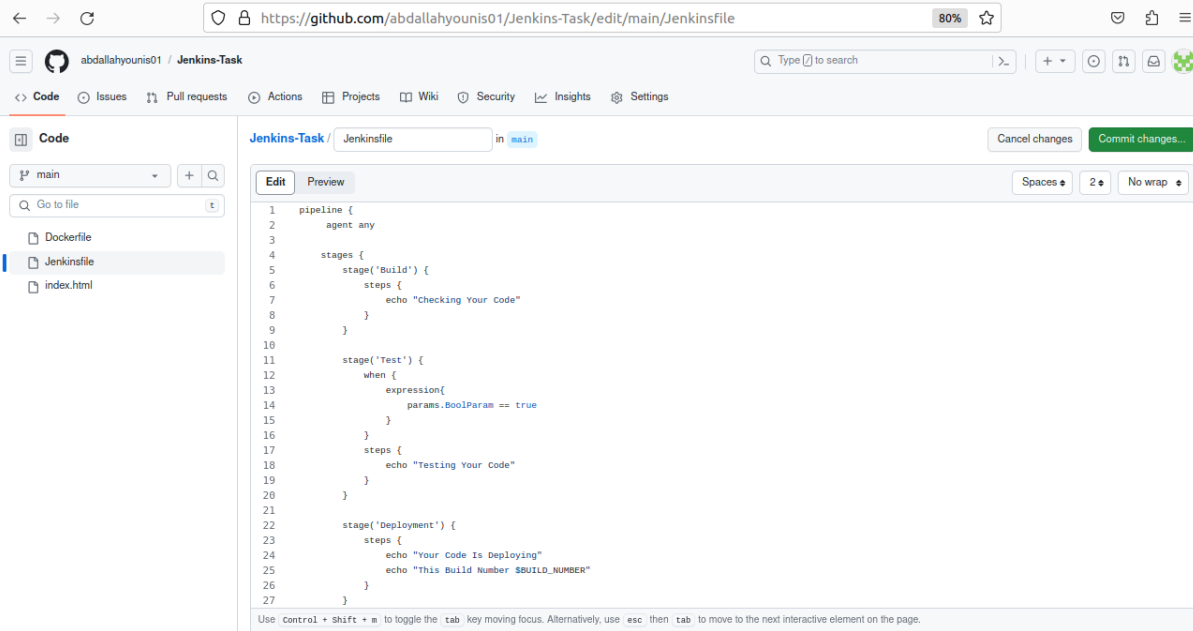3. Rest API
4. Webhook

What is the difference between parameter and jenkins env variable?

Parameters are values passed into a pipeline at runtime to allow user customization, while Jenkins environment variables are predefined variables with information about the Jenkins environment used to customize the pipeline behavior accordingly.

What is the organization folder job and what is used for ?

The Organization Folder job in Jenkins automatically creates and manages multiple pipelines based on the repositories in your organization's source code management system. It's useful for managing large-scale software development projects and provides visibility and control over pipelines, as well as the ability to easily add new repositories.

Create a jenkins pipeline for your repo and use script file (jenkinsfile) to write pipeline syntax, include parameter functions and env variables in it ?

Configure

- General
- Advanced Project Options
- Pipeline

Preserve stashes from completed builds ?

☑ This project is parameterized ?

☰ **Boolean Parameter** ?   ✕

Name ?

BoolParam

☑ Set by Default ?

Description ?

[Plain text] **Preview**

Add Parameter ▾

☐ Throttle builds ?

Build Triggers

Save   Apply

Jenkins   Search (CTRL+K) ?   🛡 1   👤 Abdallah M. Younis ▾   log out

- 📄 Status
- </> Changes
- ▷ Build with Parameters
- ⚙ Configure
- 🗑 Delete Pipeline
- 🔍 Full Stage View
- ✏ Rename
- ? Pipeline Syntax

Build History   trend ▾

Filter builds...   /

- ✓ #3   Jun 21, 2023, 6:11 PM
- ✕ #2   Jun 21, 2023, 6:07 PM
- ✕ #1   Jun 21, 2023, 5:56 PM

📶 Atom feed for all 📶 Atom feed for failures

Pipeline First-Pipline

This build requires parameters:
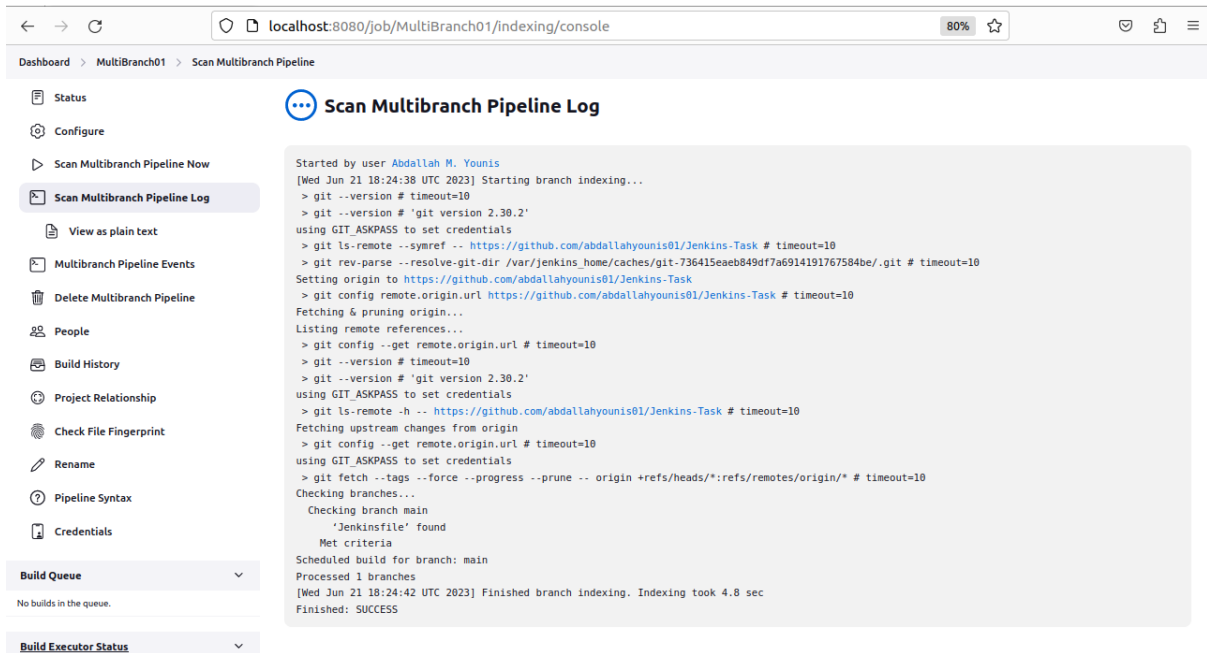
☑ BoolParam

▷ **Build**   Cancel

Dashboard > First-Pipline >

Pipeline First-Pipline

✎ Add description

Disable Project

Status

</> Changes

▷ Build with Parameters

⚙ Configure

🗑 Delete Pipeline

🔍 Full Stage View

✎ Rename

? Pipeline Syntax

☁ Build History   trend ∨

🔍 Filter builds...   /

✓ #4   Jun 21, 2023, 6:15 PM
✓ #3   Jun 21, 2023, 6:11 PM
✗ #2   Jun 21, 2023, 6:07 PM
✗ #1   Jun 21, 2023, 5:56 PM

📶 Atom feed for all 📶 Atom feed for failures

Stage View

	Declarative: Checkout SCM	Check	Test	Deployment
Average stage times: (Average full run time: ~7s)	1s	472ms	642ms	485ms
#4 Jun 21 21:15 — No Changes	1s	373ms	387ms	521ms
#3 Jun 21 21:11 — 1 commit	1s	383ms	450ms	629ms
#2 Jun 21 21:07 — 1 commit	1s	474ms	440ms failed	326ms failed
#1 Jun 21 20:56 — No Changes	2s	661ms	1s	467ms

Dashboard > First-Pipline > #4

```
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Check)
[Pipeline] echo
Checking Your Code
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test)
[Pipeline] echo
Testing Your App
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deployment)
[Pipeline] echo
Your Code Is Deploying
[Pipeline] echo
This Build Number 4
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

Create another multibranch pipeline and filter branches to contain only (master , dev , test) ?

abdallahyounis01 / Jenkins-Task

<> Code ⊙ Issues ⑁ Pull requests ⊙ Actions ⊞ Projects ⊞ Wiki ⊙ Security ⊵ Insights ⊛ Settings

🌸 **Jenkins-Task** Public

☆ Pin ⊙ Unwatch 2 ▾ ⑃ Fork 0 ▾ ☆ Star 0 ▾

⑁ main ▾   ⑁ 3 branches   ⬡ 0 tags

Go to file   Add file ▾   <> Code ▾

Switch branches/tags ✕

| Find or create a branch… |

Branches | Tags

✓ main   default

dev   Add files via upload   2 days ago

test   Update Jenkinsfile   16 minutes ago

View all branches   Add files via upload   2 days ago

2bf228b 16 minutes ago ⊙ 7 commits

Protect this branch ✕

...tion, or require status checks before merging. Learn more

Help people interested in this repository understand your project by adding a README.   **Add a README**

About ⊛

No description, website, or topics provided.

⋀ Activity

☆ 0 stars

⊙ 2 watching

⑃ 0 forks

Releases

No releases published
Create a new release

Packages

No packages published
Publish your first package

Languages

● Dockerfile 59.3%   ● HTML 40.7%

Dashboard > MultiBranch01 > Configuration

Configuration

⊛ General

⊛ **Branch Sources**

⊛ Build Configuration

⊛ Scan Multibranch Pipeline Triggers

⊛ Orphaned Item Strategy

⊛ Appearance

⋀ Health metrics

⚒ Properties

Branch Sources

Git
Project Repository ?   ✕

| https://github.com/abdallahyounis01/Jenkins-Task |

Credentials ?

| abdallahyounis01/****** ▾ |

Add ▾

Behaviors

Discover branches   ✕
?

Filter by name (with wildcards)   ✕
Include ?

| main dev test |

Exclude ?

| |

Save   Apply

Jenkins

Search (CTRL+K)

Abdallah M. Younis ⌄   log out

MultiBranch01

- Status
- Configure
- Scan Multibranch Pipeline Now
- Scan Multibranch Pipeline Log
- Multibranch Pipeline Events
- Delete Multibranch Pipeline
- People
- Build History
- Project Relationship
- Check File Fingerprint
- Rename
- Pipeline Syntax
- Credentials

Build Queue ⌄

No builds in the queue.

MultiBranch01

Disable Multibranch Pipeline

Branches (3)

S	W	Name ↓	Last Success		Last Failure	Last Duration	
✓	☀	dev	1 min 17 sec	#1	N/A	12 sec	▷
✓	☀	main	11 min	#1	N/A	9.7 sec	▷
✓	☀	test	1 min 17 sec	#1	N/A	11 sec	▷

Icon: s M L

Icon legend   Atom feed for all   Atom feed for failures   Atom feed for just latest builds