

Workflow

compile and deploy it on slave using Declarative pipeline

1

Click "Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or o..."

assignment-14

» Required field



Freestyle project

This is the central feature of Jenkins. Jenkins will build your project, combining any SCM and something other than software build.



Pipeline

Orchestrates long-running activities that can span multiple build agents. Suitable for building and/or organizing complex activities that do not easily fit in free-style job type.



Multi-configuration project

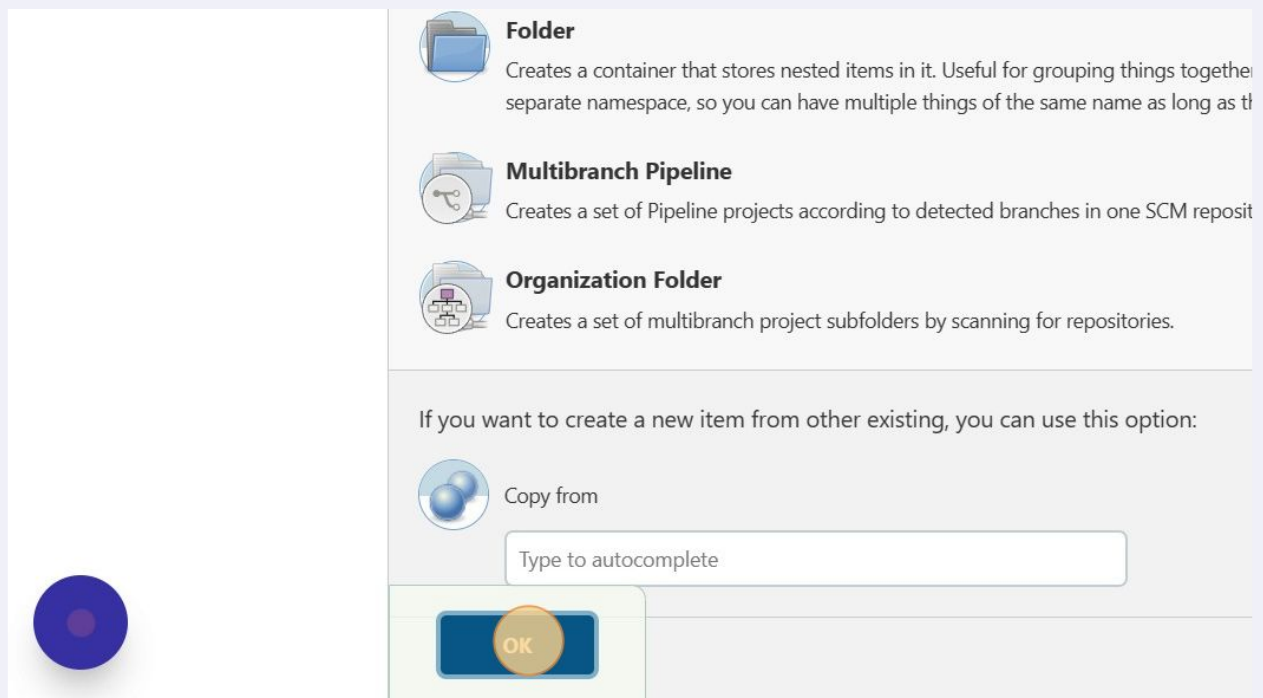
Suitable for projects that need a large number of different configurations, such as testing etc.



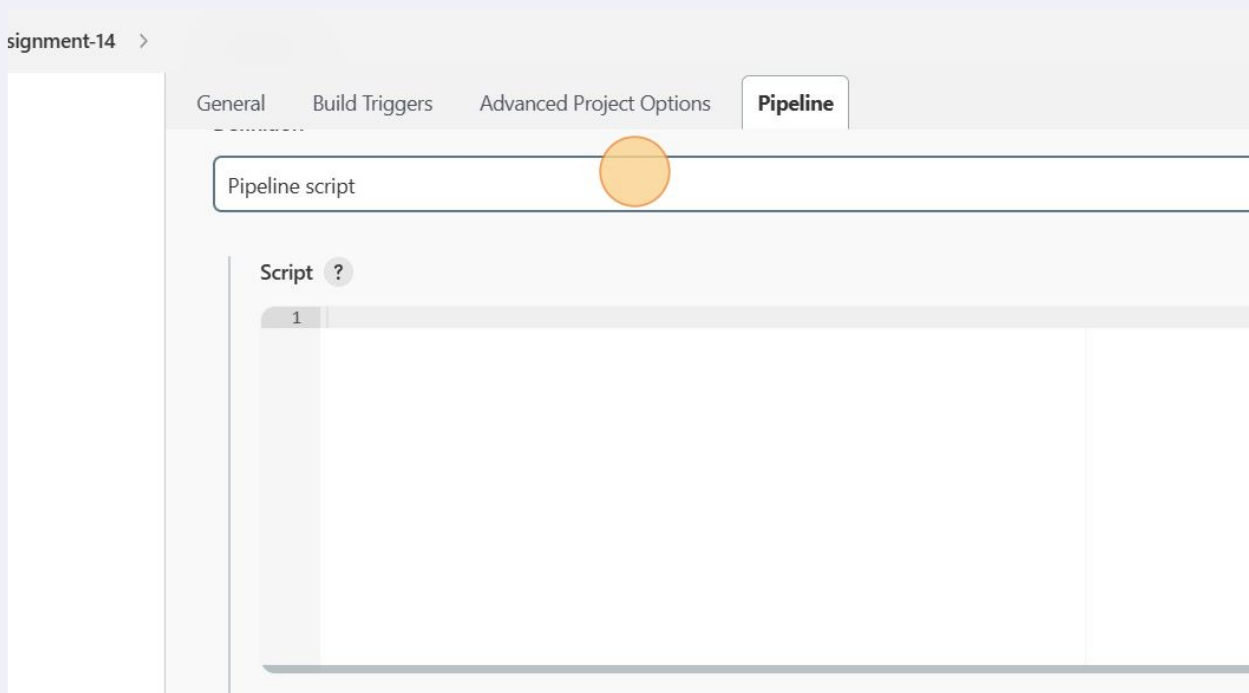
Folder

Creates a container that stores nested items in it. Useful for grouping things together. Useful for creating a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

2 Click "OK"



3 Click this dropdown.



4 Click this dropdown.

Pipeline

Definition

Pipeline script from SCM

SCM ?

None

Script Path ?

Jenkinsfile

☒ Lightweight checkout ?

[Pipeline Syntax](#)

5 Click this text field.

SCM ?

Git

Repositories ?

Repository URL ?

Please enter Git repository.

Credentials ?

- none -

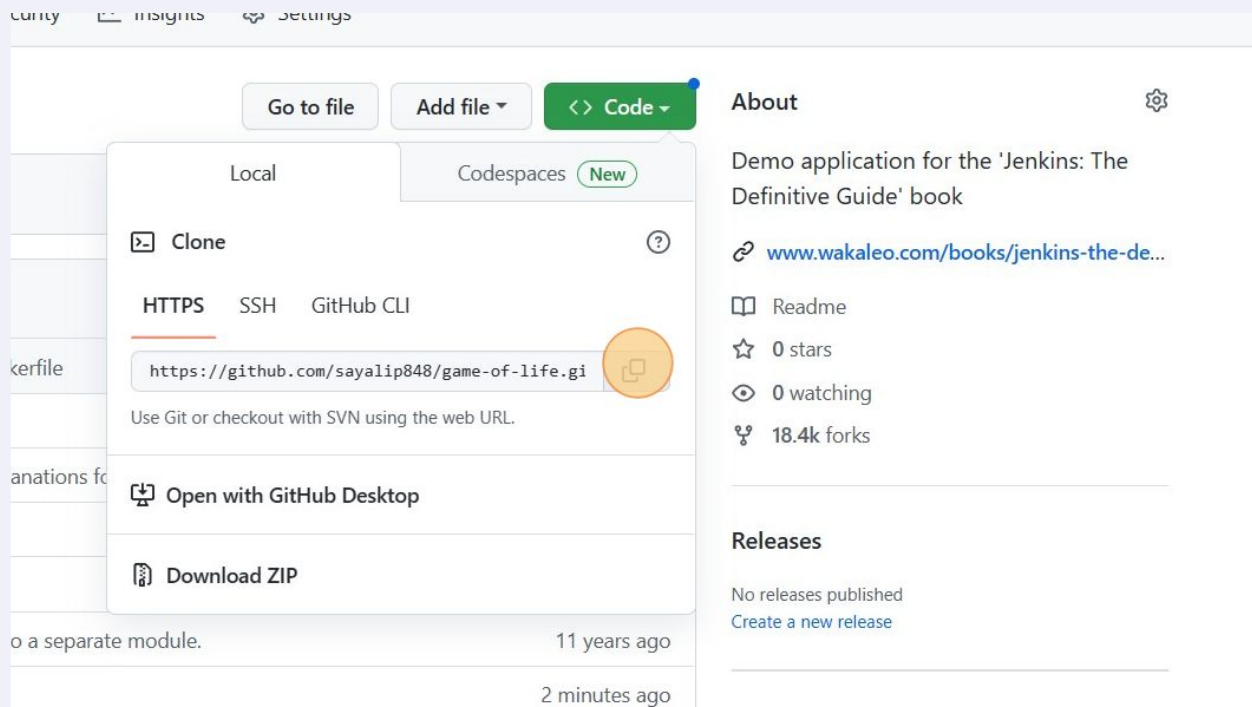
+ Add

6

Switch to tab "sayalip848/game-of-life: Demo application for the 'Jenkins: The Definitive Guide' book"

7

Click this icon.



8

Press [[ctrl]] + [[v]]

9 Click here.

https://github.com/sayalip848/game-of-life.git

❌ Please enter Git repository.

Credentials ?

- none -

+ Add

Advanced...

Add Repository

Branches to build ?

Save Apply

10 Click this text field.

Repository browser ?

(Auto)

Additional Behaviours

Add ▾

Script Path ?

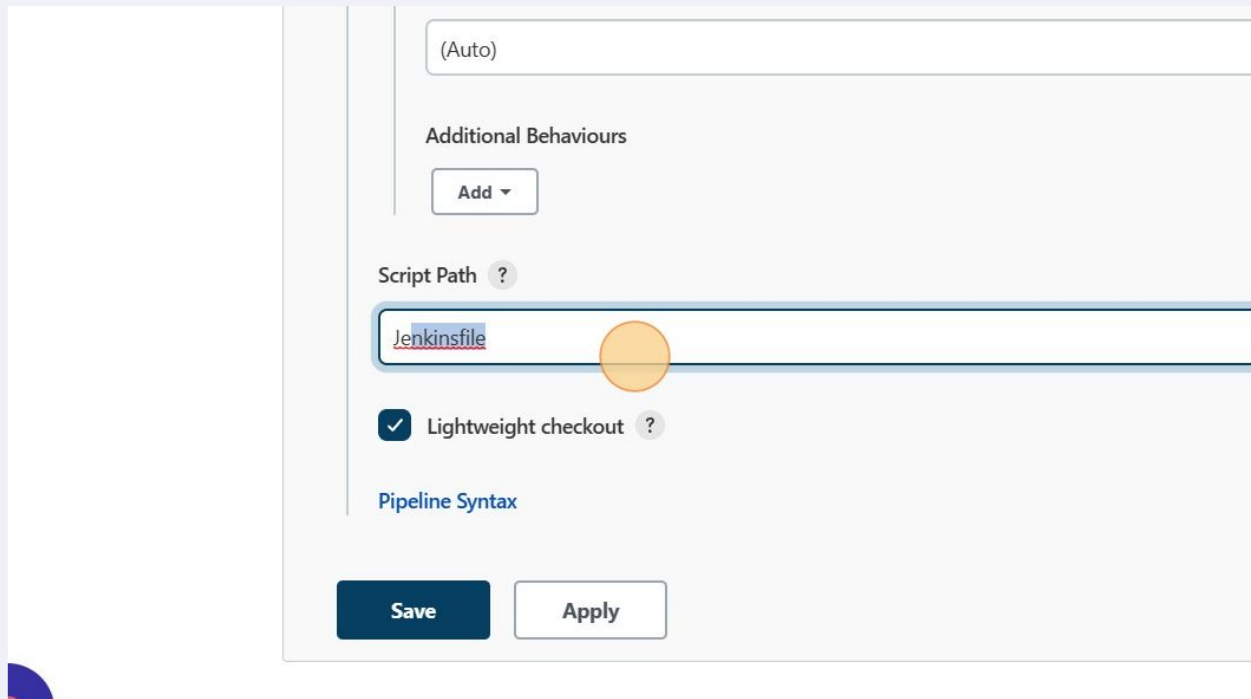
Jenkinsfile

☒ Lightweight checkout ?

[Pipeline Syntax](#)

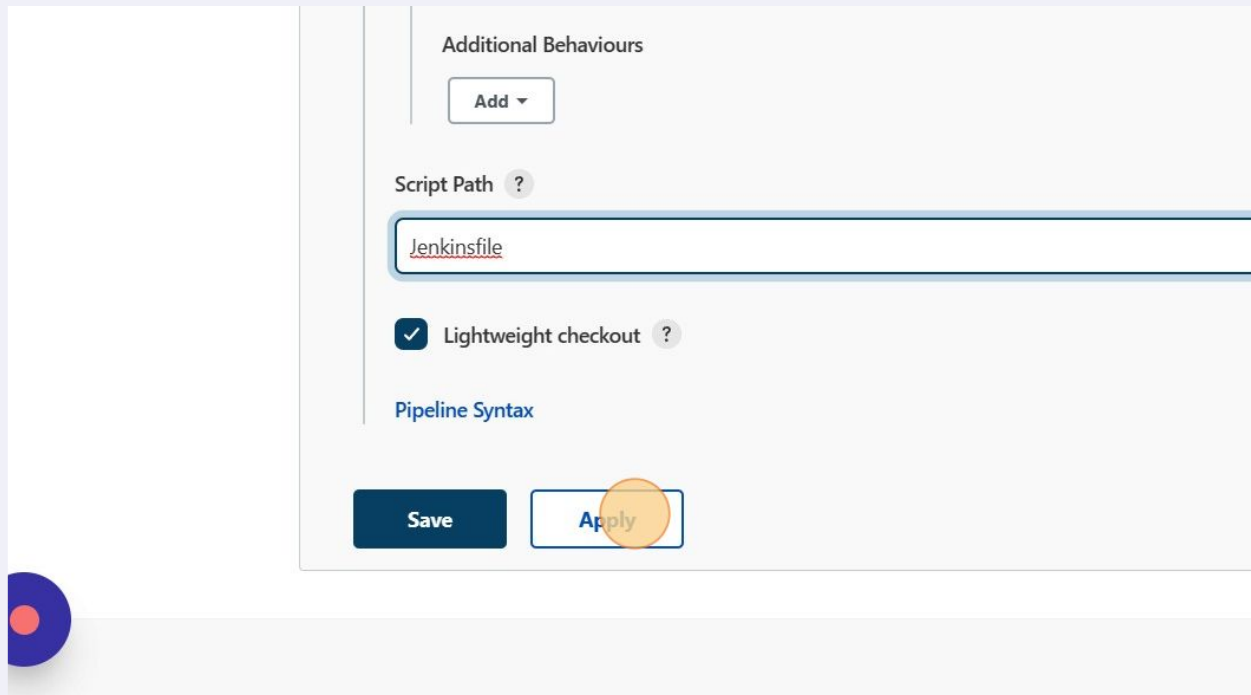
Save Apply

11 Click this text field.



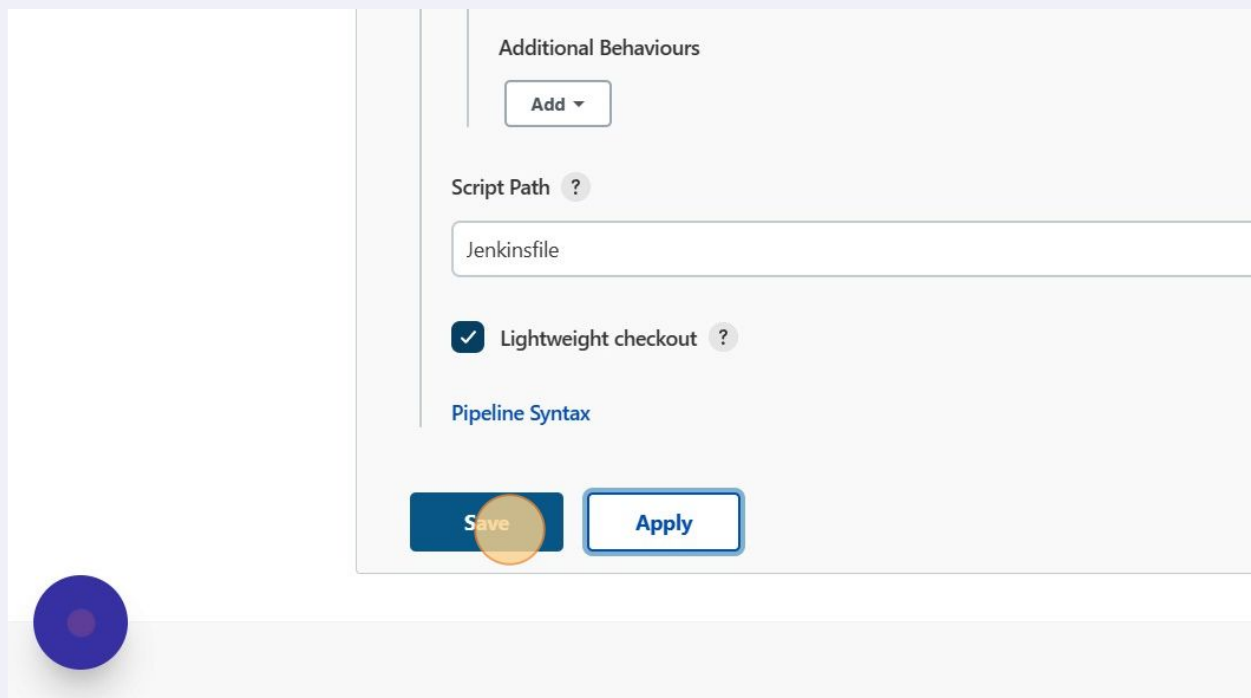
This screenshot shows the Jenkins configuration page for a step. At the top, there is a dropdown menu set to "(Auto)". Below it is the "Additional Behaviours" section with an "Add" button. The "Script Path" field is highlighted with a blue border and contains the text "Jenkinsfile", with an orange circle pointing to it. Below the script path is a checked checkbox for "Lightweight checkout". At the bottom are "Save" and "Apply" buttons. A blue semi-circle is visible in the bottom-left corner of the page.

12 Click "Apply"



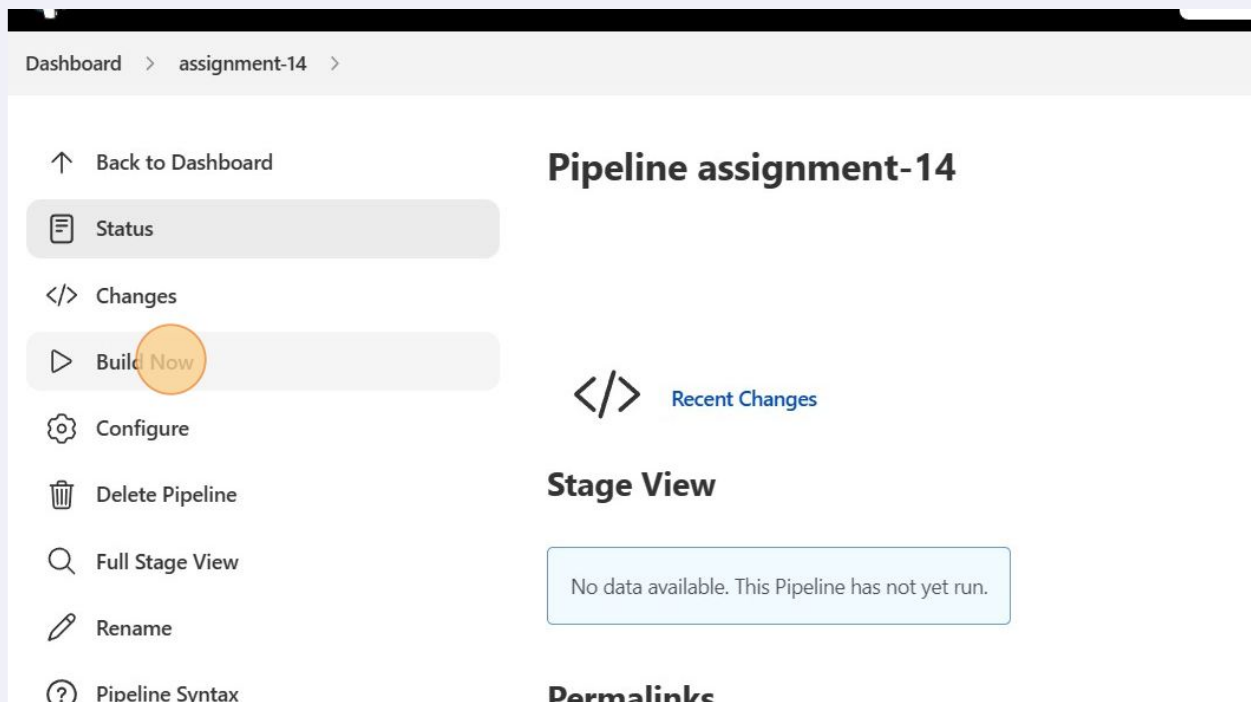
This screenshot shows the same Jenkins configuration page as step 11, but with an orange circle highlighting the "Apply" button at the bottom right. The "Script Path" field still contains "Jenkinsfile" and the "Lightweight checkout" checkbox is checked. A blue semi-circle is visible in the bottom-left corner of the page.

13 Click "Save"



A screenshot of the Jenkins Pipeline configuration page. The page is divided into two main sections. The left section is a sidebar with a blue circular icon at the bottom. The right section contains the configuration options. At the top, there is a section titled "Additional Behaviours" with an "Add" button. Below this is a "Script Path" field with a question mark icon, containing the text "Jenkinsfile". Underneath is a checkbox labeled "Lightweight checkout" with a question mark icon, which is checked. At the bottom of the configuration section, there are two buttons: "Save" (highlighted with an orange circle) and "Apply".

14 Click "Build Now"



A screenshot of the Jenkins Pipeline assignment page. The page has a dark header bar. Below the header, there is a breadcrumb trail: "Dashboard > assignment-14 >". On the left side, there is a sidebar with a list of actions: "Back to Dashboard", "Status", "Changes", "Build Now" (highlighted with an orange circle), "Configure", "Delete Pipeline", "Full Stage View", "Rename", and "Pipeline Syntax". The main content area is titled "Pipeline assignment-14". Below the title, there is a "Recent Changes" section with a code icon and the text "Recent Changes". Underneath is a "Stage View" section with a message box that says "No data available. This Pipeline has not yet run." At the bottom, there is a section titled "Permalinks".

15 Click "Stage View"

Dashboard

Pipeline assignment-14

</> Recent Changes

Stage View

Average stage times:

| Declarative: Checkout SCM | Declarative: Tool Install | git |
|---------------------------|---------------------------|-------|
| 937ms | 92ms | 819ms |

#1 Dec 22 15:02 No Changes

trend v

16 Click here.

Add description

Disable Project

| Declarative: Checkout SCM | Declarative: Tool Install | git | comple |
|---------------------------|---------------------------|-------|--------|
| 937ms | 92ms | 819ms | 354ms |

17 Click "Dec 22, 2022 3:02 PM"

Build Now

Configure

Delete Pipeline

Full Stage View

Rename

Pipeline Syntax

Build History trend

Filter builds...

#1 Dec 22, 2022 3:02 PM

Atom feed for all Atom feed for failures

Permalinks

Recent Changes

Stage View

Average stage times:

| Declarative: Checkout SCM | Declarative: Tool Install |
|---------------------------|---------------------------|
| 937ms | 92ms |

#1 Dec 22 15:02 No Changes

18 Click "Console Output"

Dashboard > assignment-14 > #1

Back to Project

Status

Changes

Console Output

Edit Build Information

Git Build Data

Thread Dump

Pause/resume

Replay

Build #1 (Dec 22, 2022 3:02:07 PM)

Started by user [sayali](#)

Revision: 1d3ea7d4e41aa14b6595cb6008317dc08dfebb51

Repository: <https://github.com/sayalip848/game-of-life.git>

- refs/remotes/origin/master

19 Click "[Pipeline] Start of Pipeline (hide)"

ashboard > assignment-14 > #1

↑ Back to Project

☰ Status

</> Changes

☒ Console Output

📄 View as plain text

✎ Edit Build Information

🔗 Git Build Data

📈 Thread Dump

⏸ Pause/resume

Console Output

Started by user [sayali](#)
Obtained Jenkinsfile from git <https://github.com/sayalip848/game-of-life.git>
[Pipeline] Start of Pipeline (hide)
[Pipeline] node
Running on 172.31.46.198 in /mnt/project/workspace/assignment-14
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
The recommended git tool is: /usr/bin/git
No credentials specified
Fetching changes from the remote Git repository
Checking out Revision 1d3ea7d4e41aa14b6595cb6008317dc08dfebb51 (refs/remotes/origin/master)
Commit message: "Create Jenkinsfile"

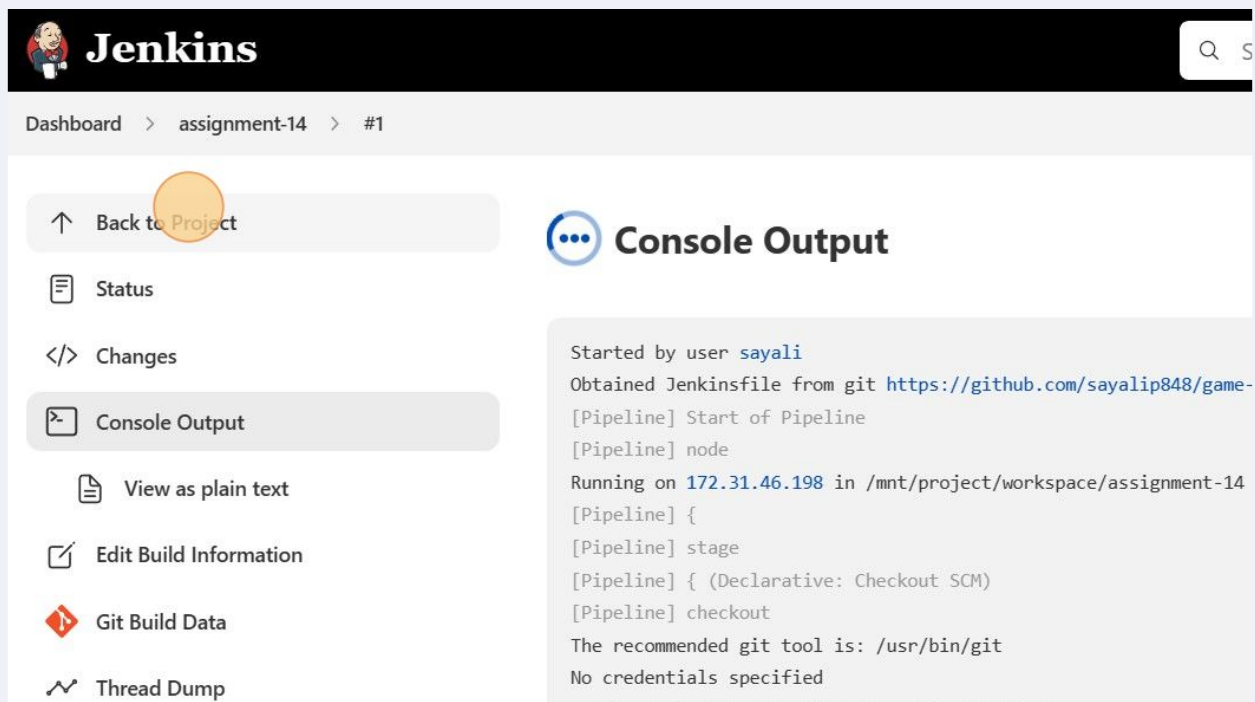
20 Click here.

```
ser sayali
kinsfile from git https://github.com/sayalip848/game-of-life.git
tart of Pipeline
ode
72.31.46.198 in /mnt/project/workspace/assignment-14
tage
(Declarative: Checkout SCM)
heckout
ded git tool is: /usr/bin/git
ls specified
nges from the remote Git repository
Revision 1d3ea7d4e41aa14b6595cb6008317dc08dfebb51 (refs/remotes/origin/master)
ge: "Create Jenkinsfile"
uild. Skipping changelog.

/ stage
ithEnv

tage
(Declarative: Tool Install)
```

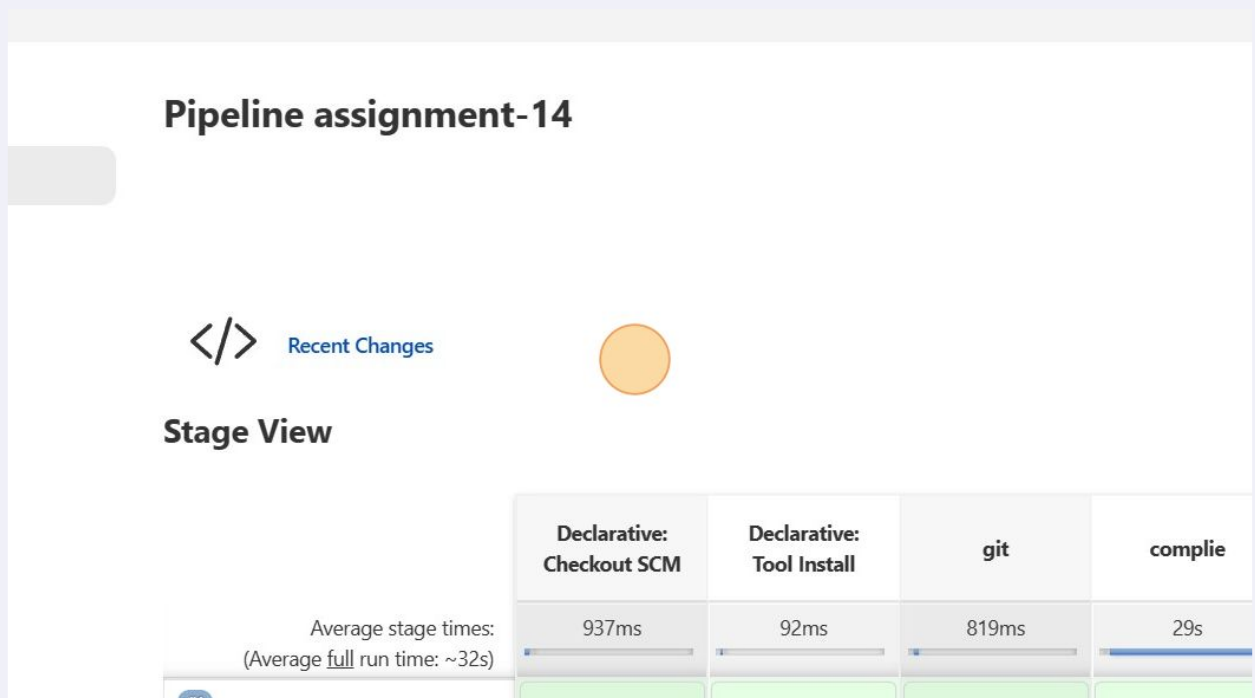
21 Click "Back to Project"



The screenshot shows the Jenkins web interface. At the top is the Jenkins logo and a search bar. Below the header is a breadcrumb trail: Dashboard > assignment-14 > #1. On the left sidebar, there are several menu items: 'Back to Project' (highlighted with an orange circle), 'Status', 'Changes', 'Console Output' (selected), 'View as plain text', 'Edit Build Information', 'Git Build Data', and 'Thread Dump'. The main area is titled 'Console Output' and displays the following text:

```
Started by user sayali
Obtained Jenkinsfile from git https://github.com/sayalip848/game-
[Pipeline] Start of Pipeline
[Pipeline] node
Running on 172.31.46.198 in /mnt/project/workspace/assignment-14
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
The recommended git tool is: /usr/bin/git
No credentials specified
```

22 Click here.



The screenshot shows the 'Pipeline assignment-14' page in Jenkins. It features a 'Recent Changes' link with a code icon and a 'Stage View' section. The 'Stage View' section displays a table of stage times:

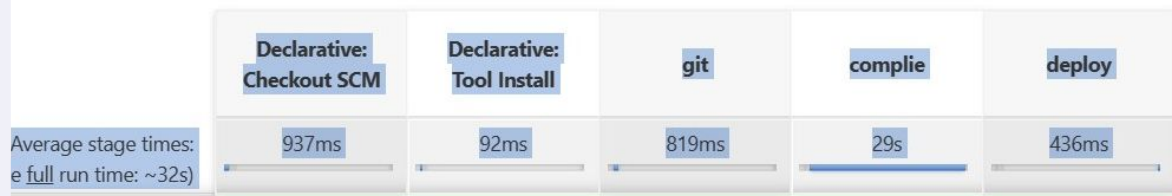
| | Declarative: Checkout SCM | Declarative: Tool Install | git | comple |
|---|---------------------------|---------------------------|-------|--------|
| Average stage times: (Average full run time: ~32s) | 937ms | 92ms | 819ms | 29s |

23 Click here.

assignment-14

cent Changes

W



24 Switch to tab "Instances | EC2 Management Console"

25 Click here.

Instance: i-05e57eff096cea296 (slave1)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

▼ Instance summary Info

| | | | | | |
|---------------|---|---------------------------------|--|-----------------------------------|--|
| Instance ID | i-05e57eff096cea296 (slave1) | Public IPv4 address | 3.108.44.104 open address | Private IPv4 address | |
| IPv6 address | - | Instance state | Running | Public IPv6 address | |
| Hostname type | IP name: ip-172-31-46-198.ap-south-1.compute.internal | Private IP DNS name (IPv4 only) | ip-172-31-46-198.ap-south-1.compute.internal | Private IPv6 DNS name (IPv6 only) | |

Find it in the new [Unified Settings](#)

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26 Switch to tab "New tab"

27 Click "New Game"

This is a really cool web version of Conway's famous Game Of Life. The Game Of Life is a cellular automaton devised

The universe of the Game of Life is an infinite two-dimensional orthogonal grid of square cells, each of which is in one of two states, live or dead. The cells that are directly horizontally, vertically, or diagonally adjacent.

- Any live cell with fewer than two live neighbours dies, as if caused by underpopulation.
- Any live cell with more than three live neighbours dies, as if by overcrowding.
- Any live cell with two or three live neighbours lives on to the next generation.
- Any dead cell with exactly three live neighbours becomes a live cell.


New Game













28 Navigate to github.com/sayalip848/game-of-life/tree/master

29 Click "Jenkinsfile"


This branch is [15 commits ahead](#) of Shantanumajan6:master. 🔔 Control

 **sayalip848** Create Jenkinsfile ... 1d3ea7d 5 minutes

| | | |
|---|-----------------------------|---|
|  | gameoflife-acceptance-tests | move Selenium Dockerfile |
|  | gameoflife-build | Updated versions |
|  | gameoflife-core | Added function explanations for grid, cell, and related classes |
|  | gameoflife-deploy | Tidied up code |
|  | gameoflife-web | Update pom.xml |
|  | .gitignore | Moved web tests into a separate module. |
|  | Jenkinsfile | Create Jenkinsfile |
|  | README.markdown | Edit for clarity |
|  | infinittest.filters | First commit |
|  | nom.xml | Update nom.xml |

30 Click "pipeline {"

 **sayalip848** Create Jenkinsfile ... 1d3ea7d 5 minutes

 1 contributor

26 lines (26 sloc) | 563 Bytes

```
1 pipeline {
2   agent {
3     label 'test'
4   }
5   tools {
6     maven 'mvn-install'
7     git 'git'
8   }
9   stages {
10    stage ('git') {
11      steps {
12        git url: 'https://github.com/sayalip848/game-of-life.git'
13      }
14    }
15    stage ('compile') {
16      steps {
17        sh "mvn clean install"
```