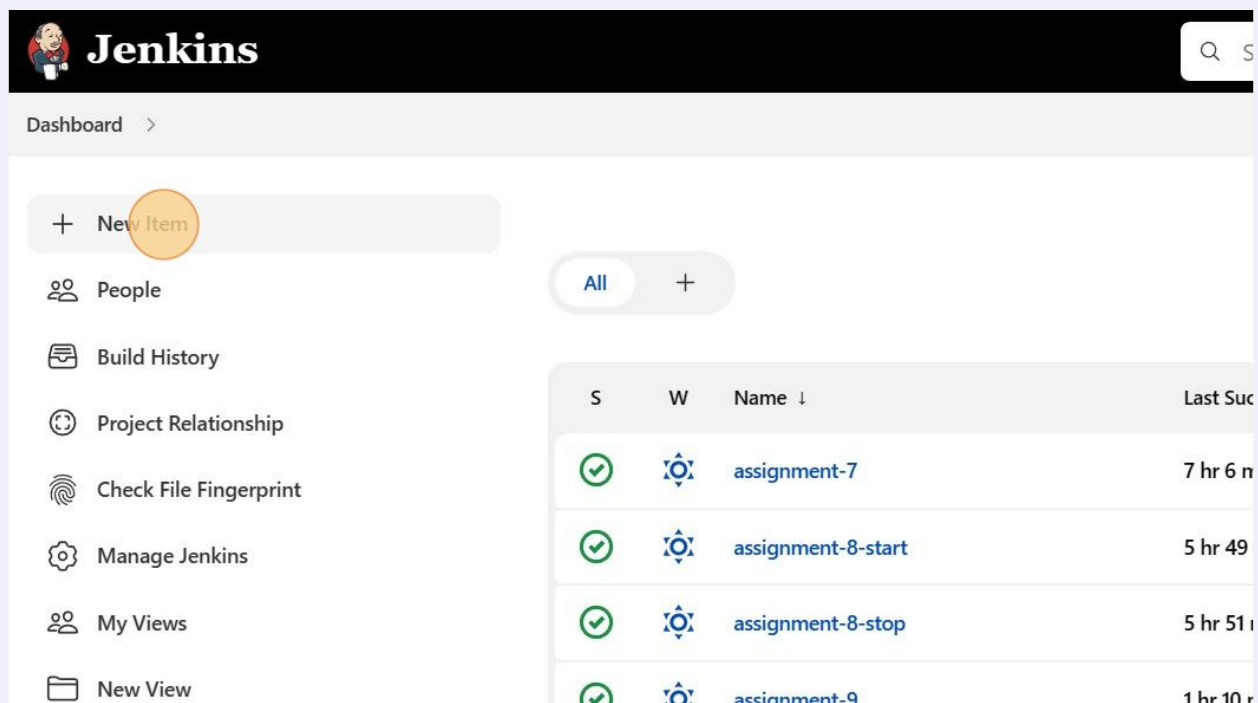


Workflow

compile and deploy gameoflife on slave.

1 Navigate to 13.234.38.99:8080/jenkins

2 Click "New Item"





3 Click "Freestyle project"


Enter an item name

assignment-10


» Required field


**Freestyle project**
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with anything 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 on multiple operating systems etc.


4 Click "OK"

**Freestyle project**
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with anything 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.

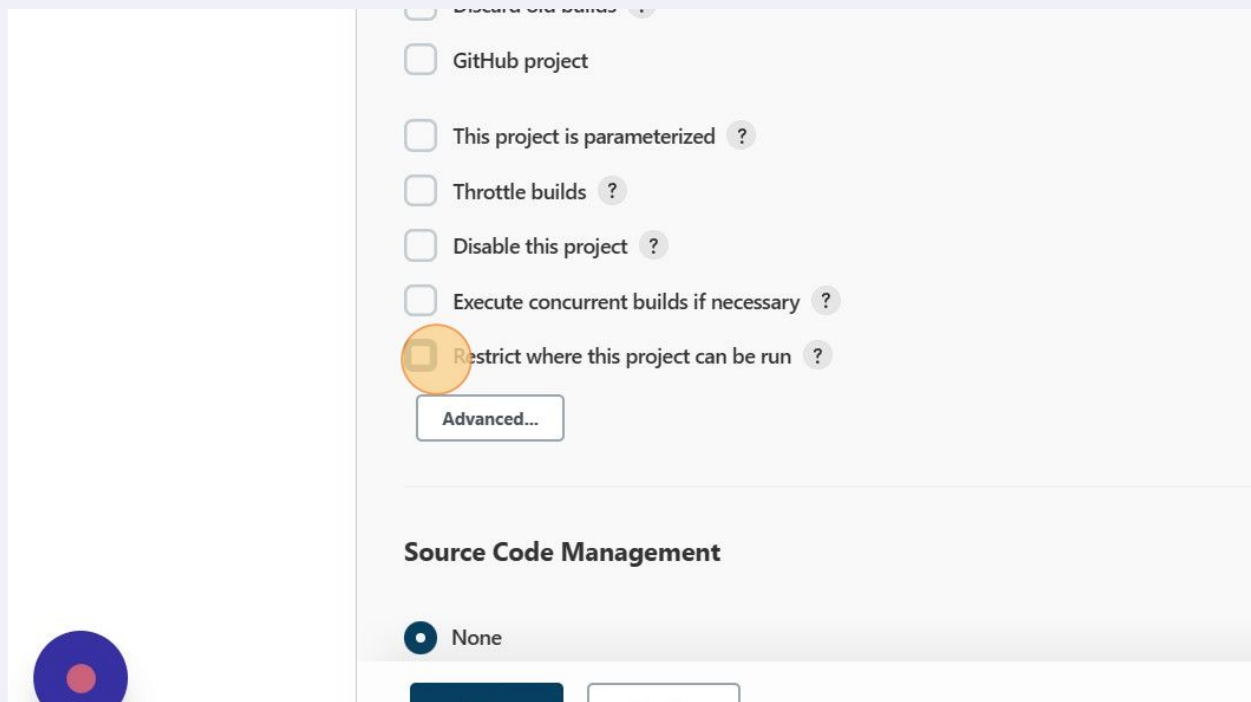
**Multi-configuration project**
Suitable for projects that need a large number of different configurations, such as testing on multiple operating systems etc.

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

**Branch Pipeline**
Creates a set of Pipeline projects according to detected branches in one SCM repository.

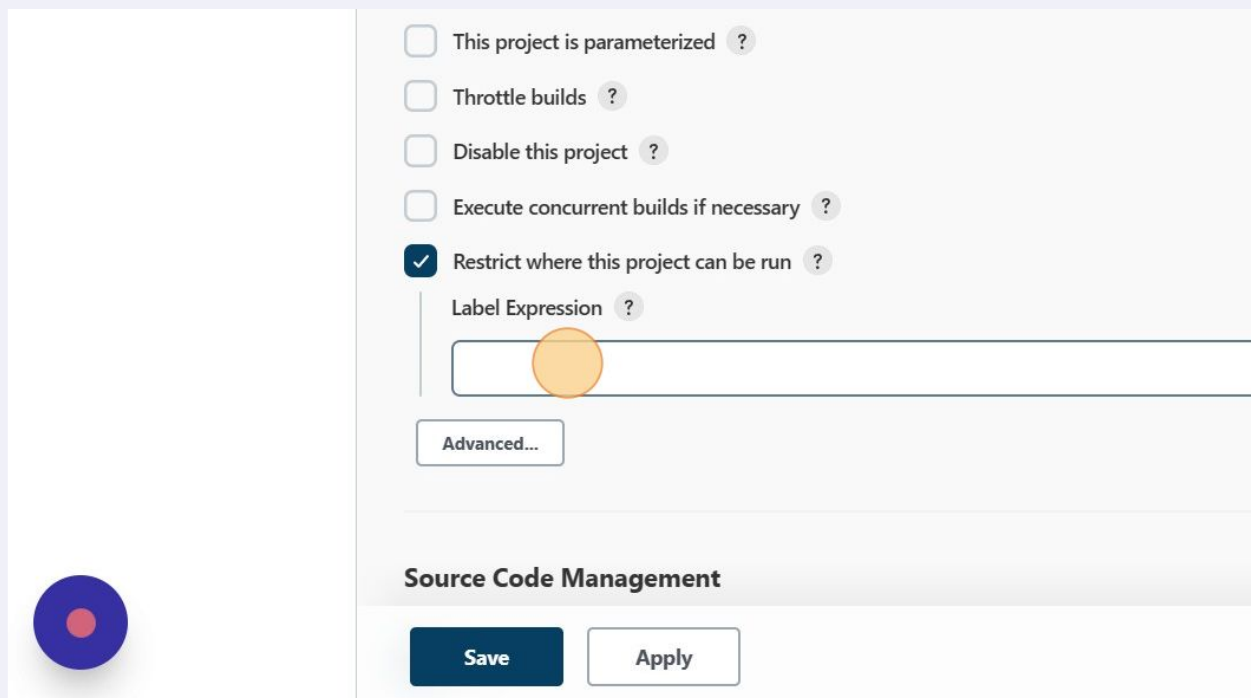
OK

5 Click "Restrict where this project can be run"



A screenshot of the Jenkins configuration page for a build step. On the left is a large empty white box with a blue circular icon in the bottom-left corner. On the right is a configuration panel with several unchecked checkboxes: "Create and build", "GitHub project", "This project is parameterized", "Throttle builds", "Disable this project", "Execute concurrent builds if necessary", and "Restrict where this project can be run". The "Restrict where this project can be run" checkbox is highlighted with an orange circle. Below the checkboxes is an "Advanced..." button. Further down is a section titled "Source Code Management" with a radio button selected for "None".

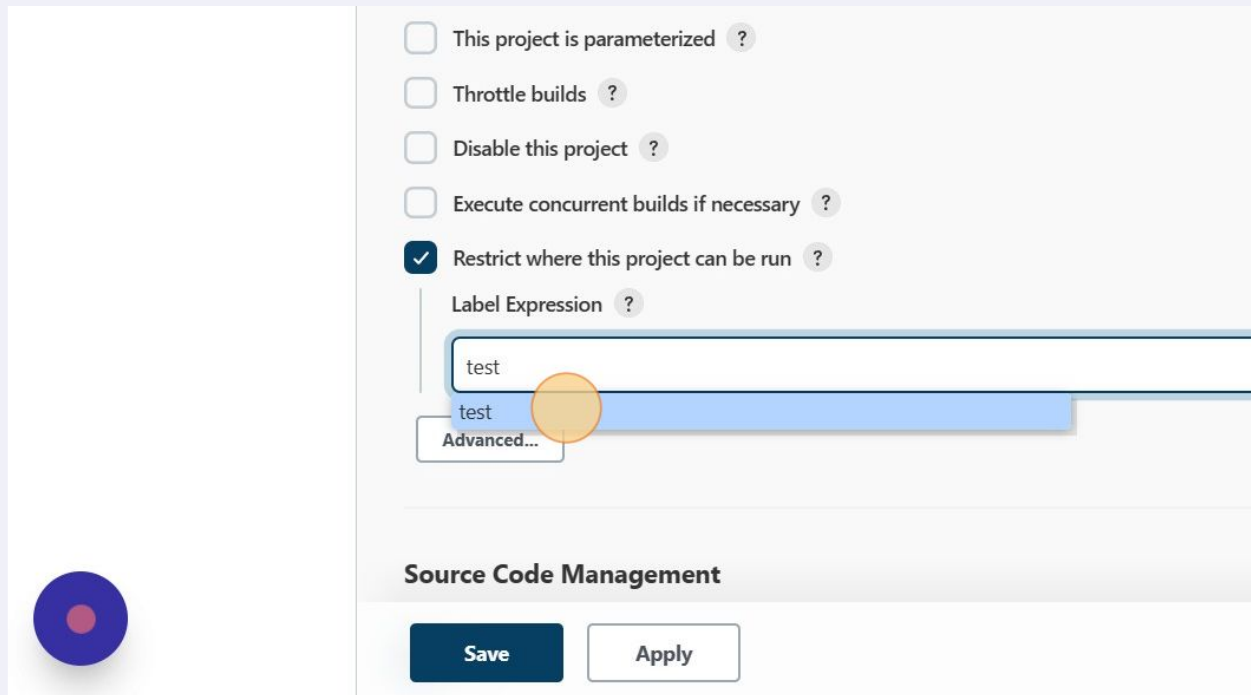
6 Click this text field.



A screenshot of the Jenkins configuration page, showing the same configuration panel as in step 5. In this step, the "Restrict where this project can be run" checkbox is checked and highlighted with an orange circle. Below it, the "Label Expression" text field is also highlighted with an orange circle. The "Advanced..." button remains below the text field. The "Source Code Management" section at the bottom now includes "Save" and "Apply" buttons.

7 Type "test"

8 Click "test"



☐ This project is parameterized ?

☐ Throttle builds ?

☐ Disable this project ?

☐ Execute concurrent builds if necessary ?

☒ Restrict where this project can be run ?

Label Expression ?

test

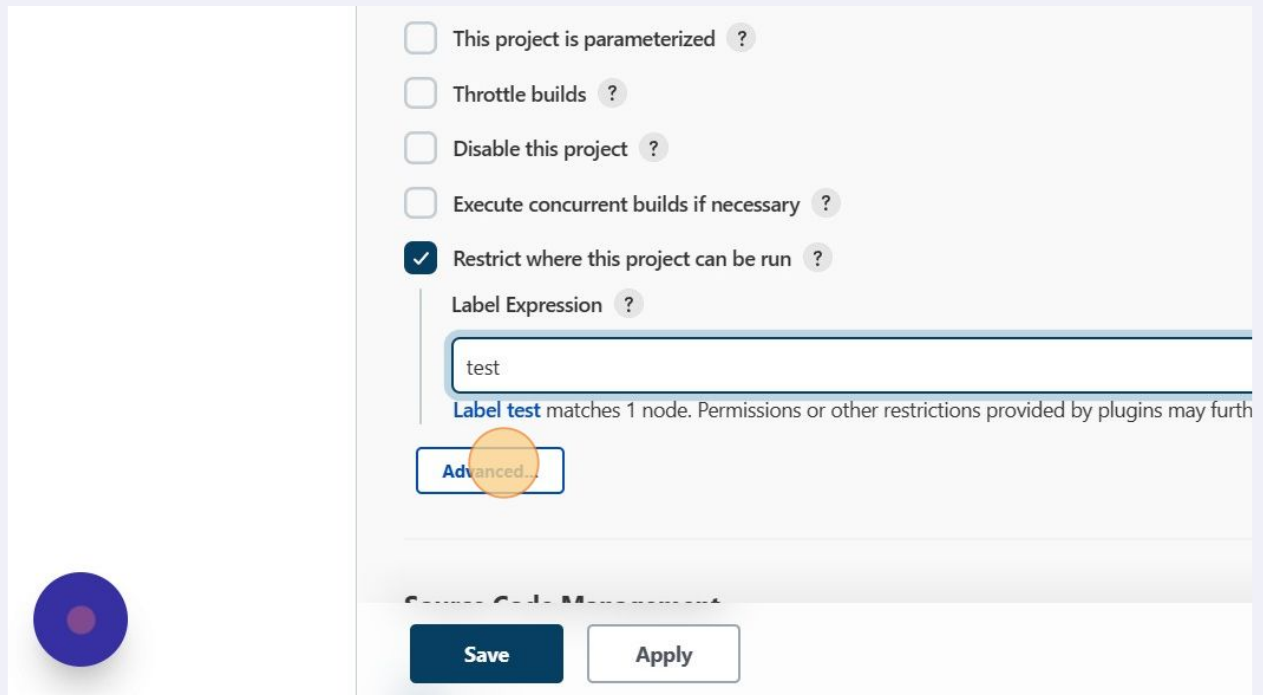
test

Advanced...

Source Code Management

Save **Apply**

9 Click "Advanced..."



☐ This project is parameterized ?

☐ Throttle builds ?

☐ Disable this project ?

☐ Execute concurrent builds if necessary ?

☒ Restrict where this project can be run ?

Label Expression ?

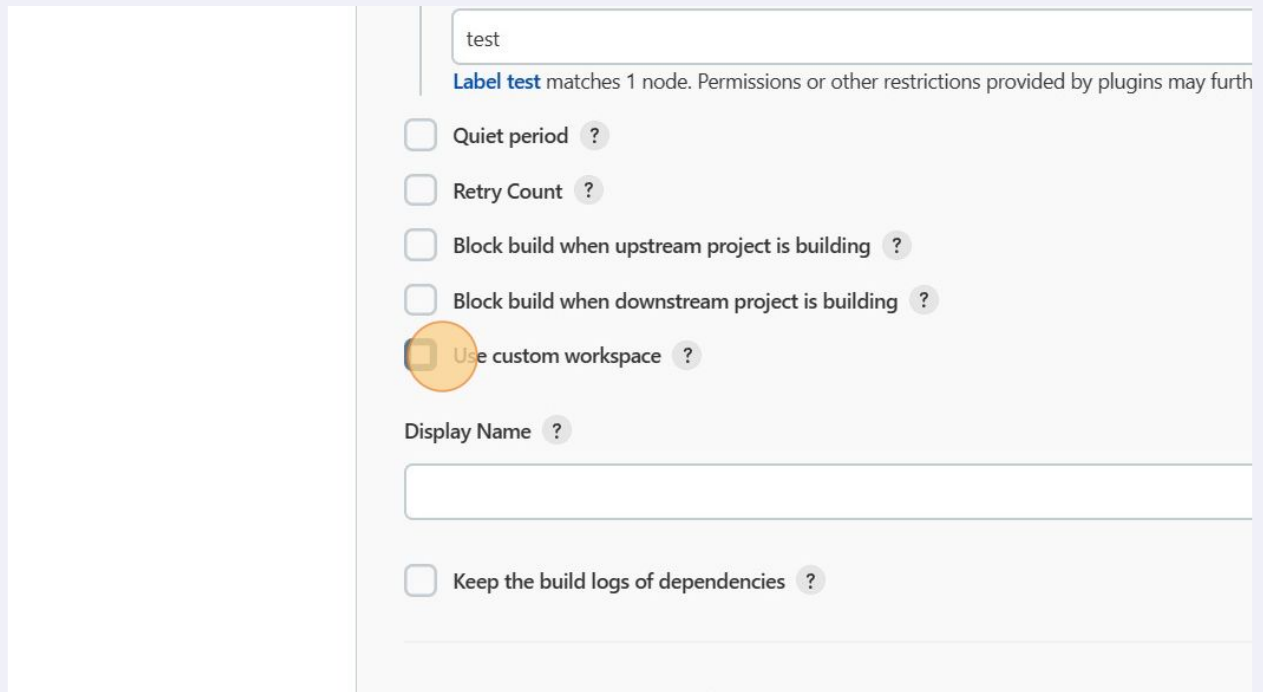
test

Label test matches 1 node. Permissions or other restrictions provided by plugins may further restrict this.

Advanced...

Save Apply

10 Click "Use custom workspace"



test

Label test matches 1 node. Permissions or other restrictions provided by plugins may further restrict this.

☐ Quiet period ?

☐ Retry Count ?

☐ Block build when upstream project is building ?

☐ Block build when downstream project is building ?

☒ Use custom workspace ?

Display Name ?

Keep the build logs of dependencies ?

Save Apply

11 Click this text field.

The screenshot shows the Jenkins configuration interface for a build job. The 'General' tab is selected, and the 'Use custom workspace' checkbox is checked. The 'Directory' text field is empty, and an orange circle highlights it. A red error message 'Custom workspace is empty.' is displayed below the field. Other options include 'Retry Count', 'Block build when upstream project is building', 'Block build when downstream project is building', 'Display Name', and 'Keep the build logs of dependencies'.

12 Type `"/mnt/project"`

13 Click "Git"

The screenshot shows the 'Source Code Management' tab in a settings interface. The 'None' radio button is selected, and the 'Git' radio button is highlighted with an orange circle. Below the 'Source Code Management' section is the 'Build Triggers' section, which contains three unchecked checkboxes: 'Trigger builds remotely (e.g., from scripts)', 'Build after other projects are built', and 'Build periodically'. Each checkbox has a help icon to its right.

General **Source Code Management** Build Triggers Build Environment Build

☐ Keep the build logs of dependencies ?

Source Code Management

☒ None

☐ Git ?

Build Triggers

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

☐ Build after other projects are built ?

☐ Build periodically ?

14 Click this text field.

This screenshot shows the 'Source Code Management' settings page with the 'Git' radio button selected. The 'Repositories' section is expanded, showing a 'Repository URL' text field which is highlighted with an orange circle. Below the text field is a red error message: 'Please enter Git repository.' Below the error message is a 'Credentials' dropdown menu currently showing '- none -'. At the bottom of the 'Repositories' section is a '+ Add' button. The 'Advanced' section is partially visible at the bottom.

Source Code Management

☐ None

☒ Git ?

Repositories ?

Repository URL ?

Please enter Git repository.

Credentials ?

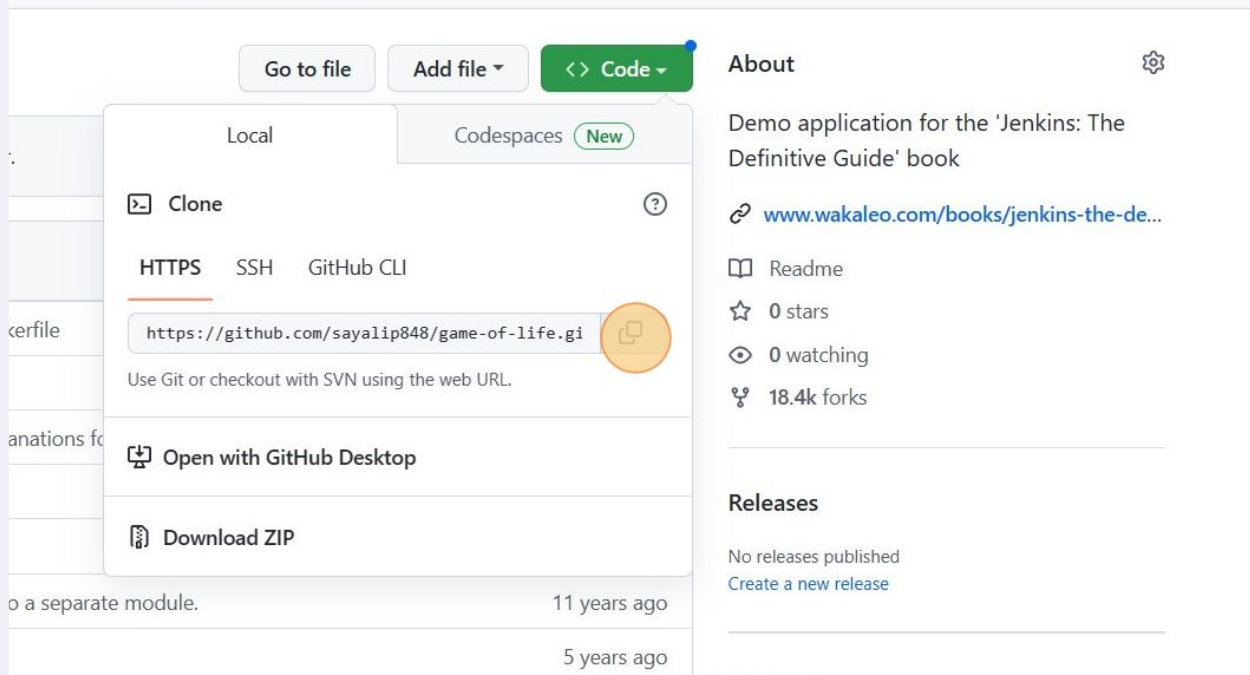
- none -

+ Add

Advanced

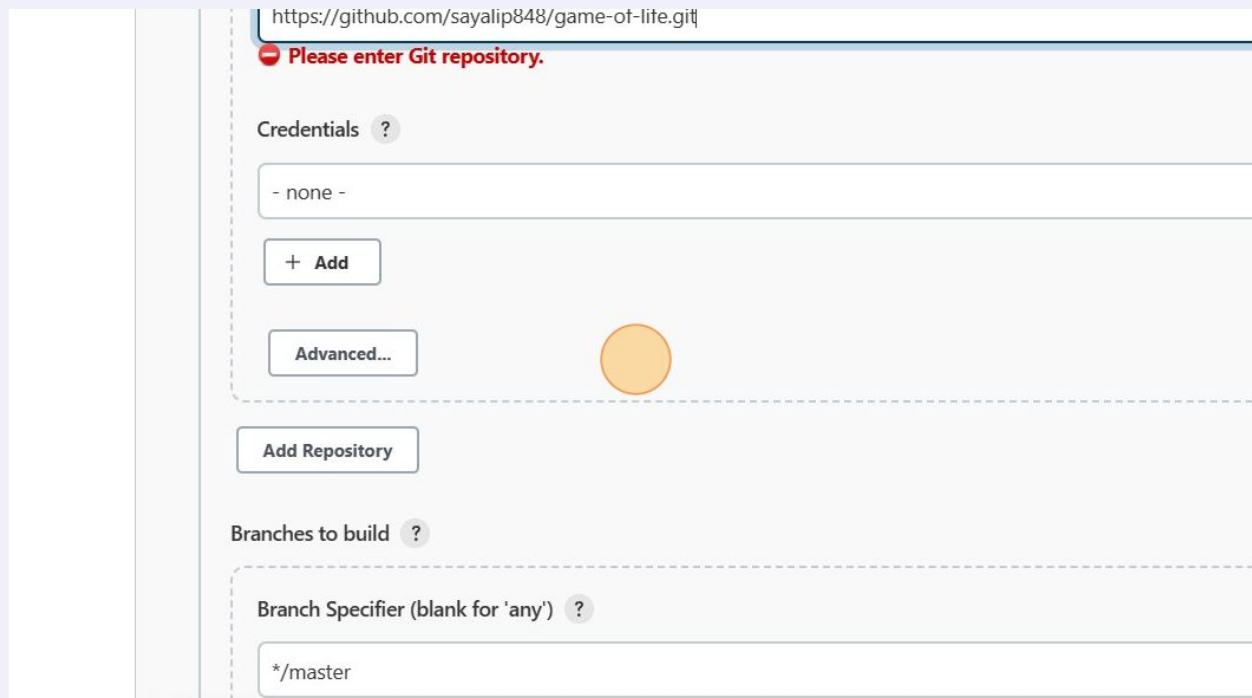
15 Switch to tab "sayalip848/game-of-life: Demo application for the 'Jenkins: The Definitive Guide' book"

16 Click here.



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

18 Click here.



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

— Please enter Git repository.

Credentials ?

- none -

+ Add

Advanced...

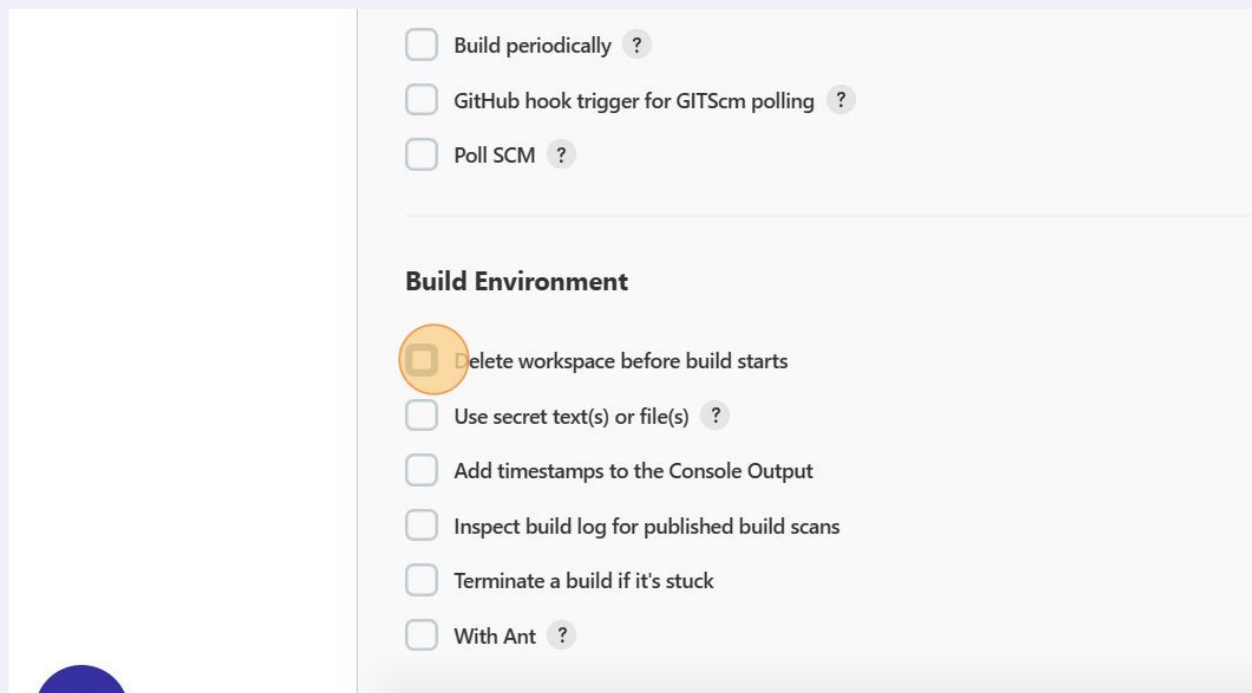
Add Repository

Branches to build ?

Branch Specifier (blank for 'any') ?

*/master

19 Click "Delete workspace before build starts"



☐ Build periodically ?

☐ GitHub hook trigger for GITScm polling ?

☐ Poll SCM ?

Build Environment

☒ Delete workspace before build starts

☐ Use secret text(s) or file(s) ?

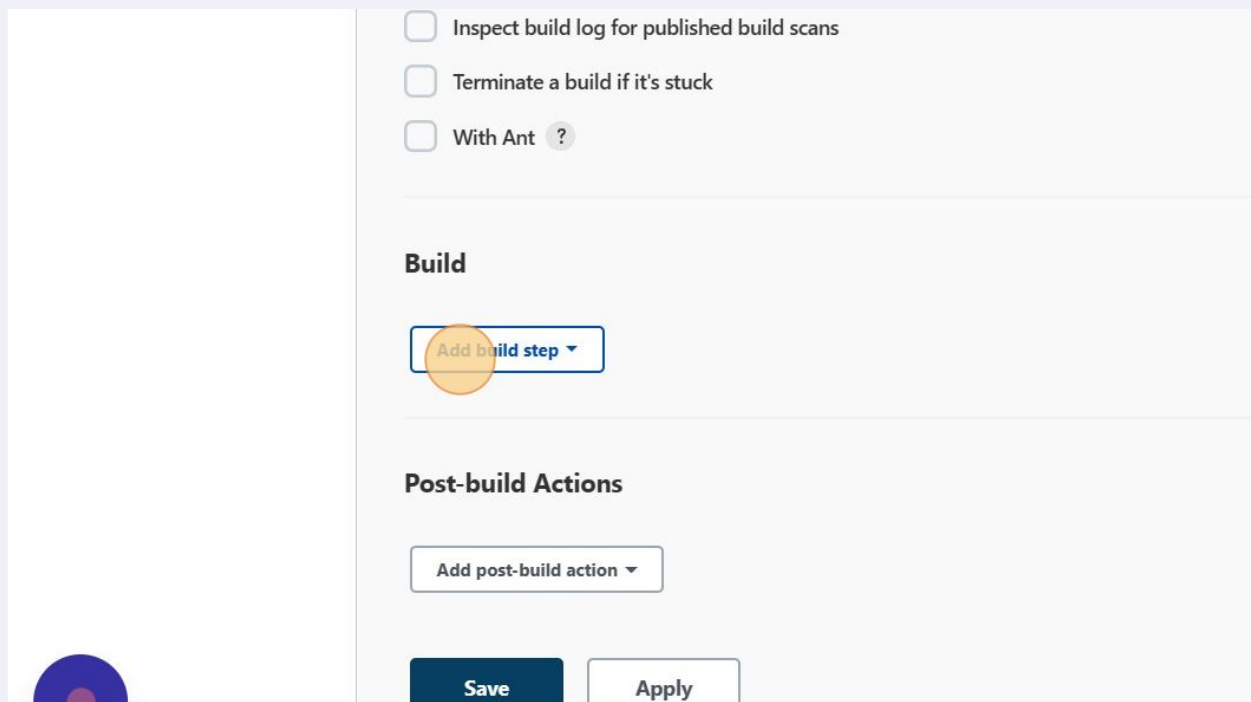
☐ Add timestamps to the Console Output

☐ Inspect build log for published build scans

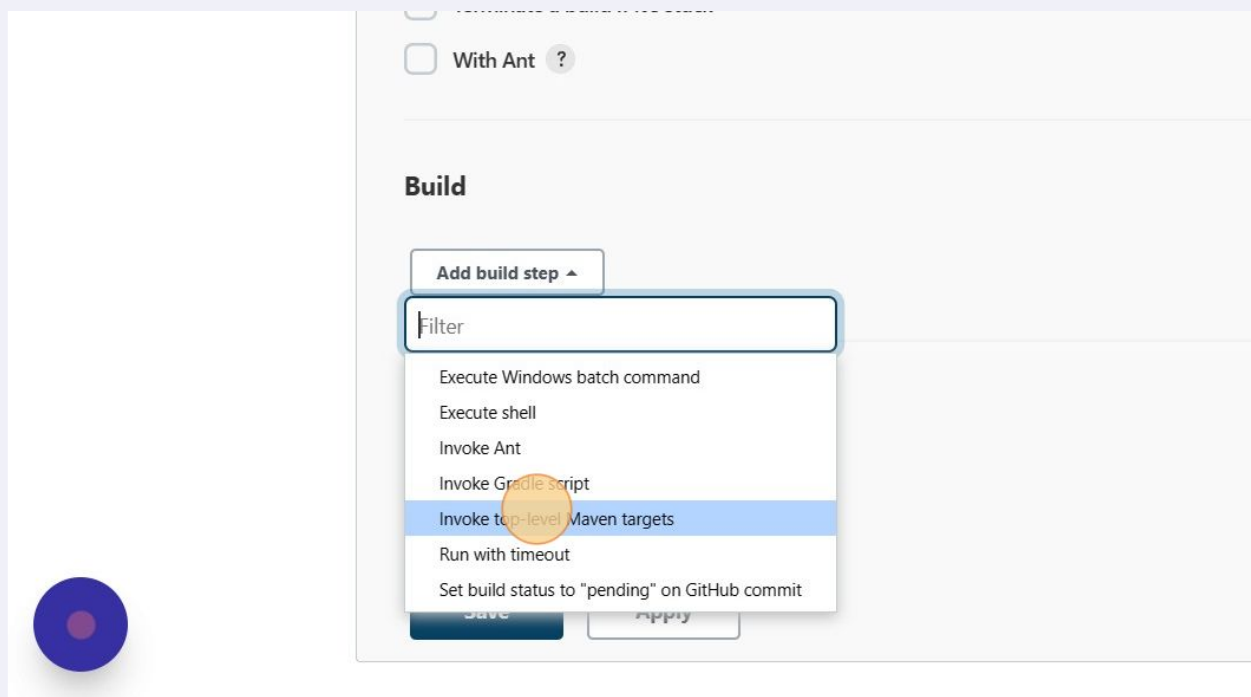
☐ Terminate a build if it's stuck

☐ With Ant ?

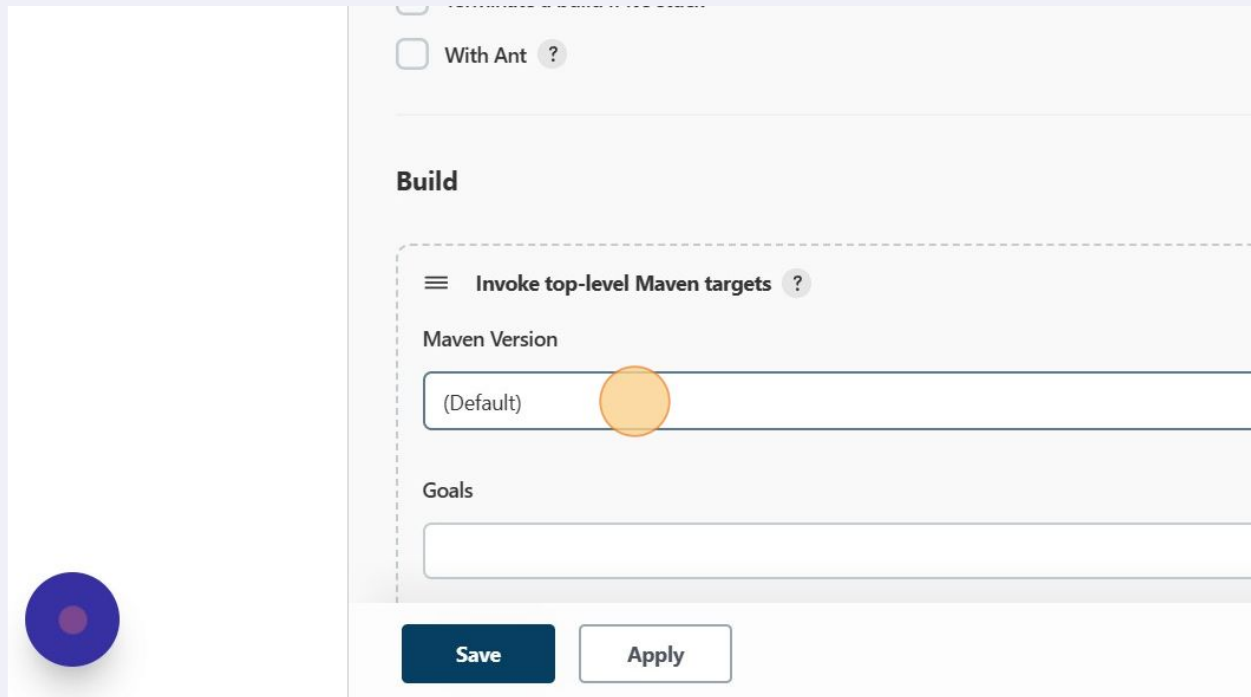
20 Click "Add build step"



21 Click "Invoke top-level Maven targets"

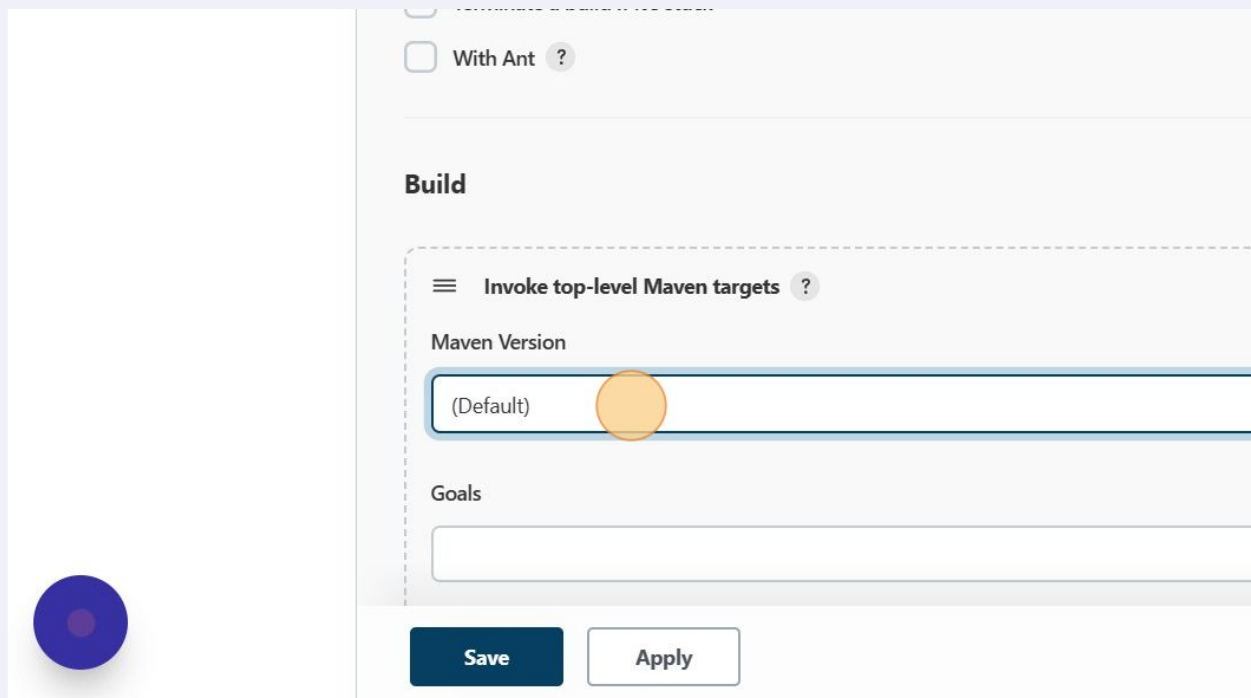


22 Click this dropdown.



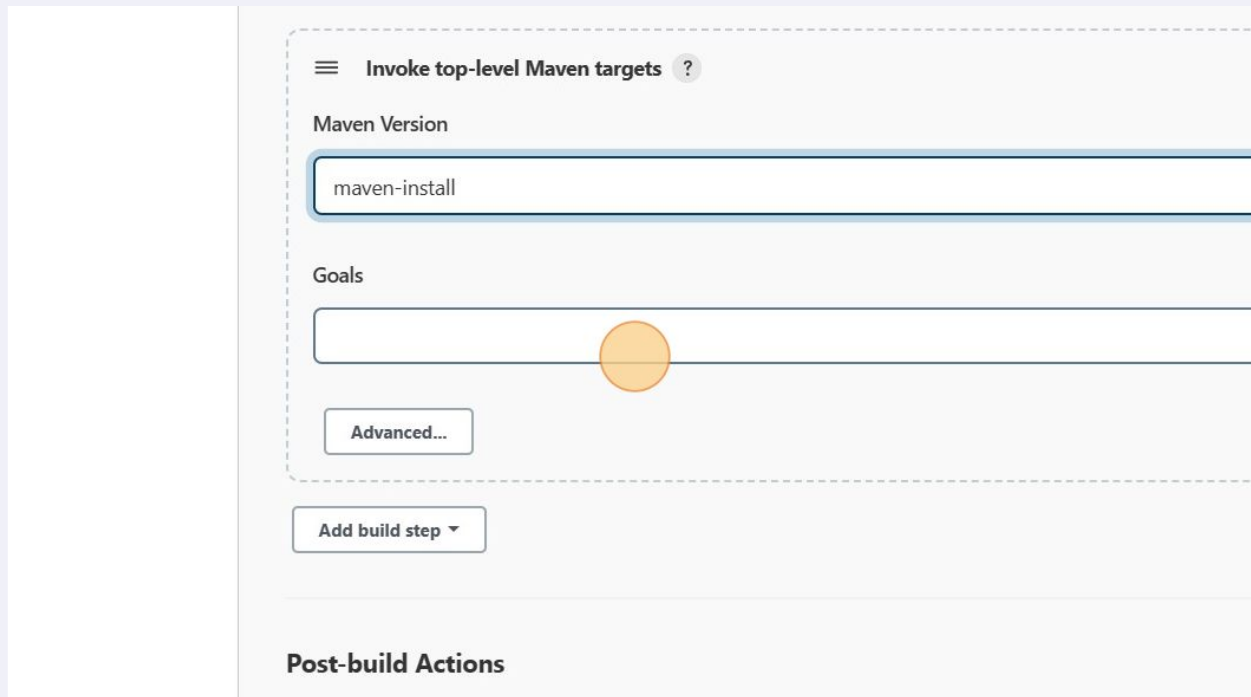
This screenshot shows a configuration window for Maven. On the left is a dark sidebar with a blue circular icon. The main area is titled 'Build' and contains a dashed box labeled 'Invoke top-level Maven targets'. Inside this box, the 'Maven Version' field is a dropdown menu currently showing '(Default)'. An orange circle highlights this dropdown. Below it is a 'Goals' text input field. At the bottom of the dashed box are 'Save' and 'Apply' buttons. Above the dashed box, there is a checkbox labeled 'With Ant'.

23 Click this dropdown.



This screenshot is identical to the one above, showing the same Maven configuration interface. The 'Maven Version' dropdown in the 'Invoke top-level Maven targets' section is highlighted with an orange circle, indicating the target for the next instruction.

24 Click this text field.



The screenshot shows a configuration panel for a build system. The panel has a dashed border and contains the following elements:

- A header section with a hamburger menu icon, the text "Invoke top-level Maven targets", and a question mark icon.
- A "Maven Version" section with a text input field containing the value "maven-install".
- A "Goals" section with a text input field. An orange circle is positioned in the center of this input field, indicating the target for step 24.
- An "Advanced..." button below the Goals input field.
- An "Add build step" button with a downward arrow icon.
- A "Post-build Actions" section at the bottom of the panel.

25 Type "clean install"

26 Click "Add build step"

maven-install

Goals

clean install

Advanced...

Add build step ▾

Post-build Actions

Add post-build action ▾

Save Apply

27 Click "Execute shell"

clean install

Advanced...

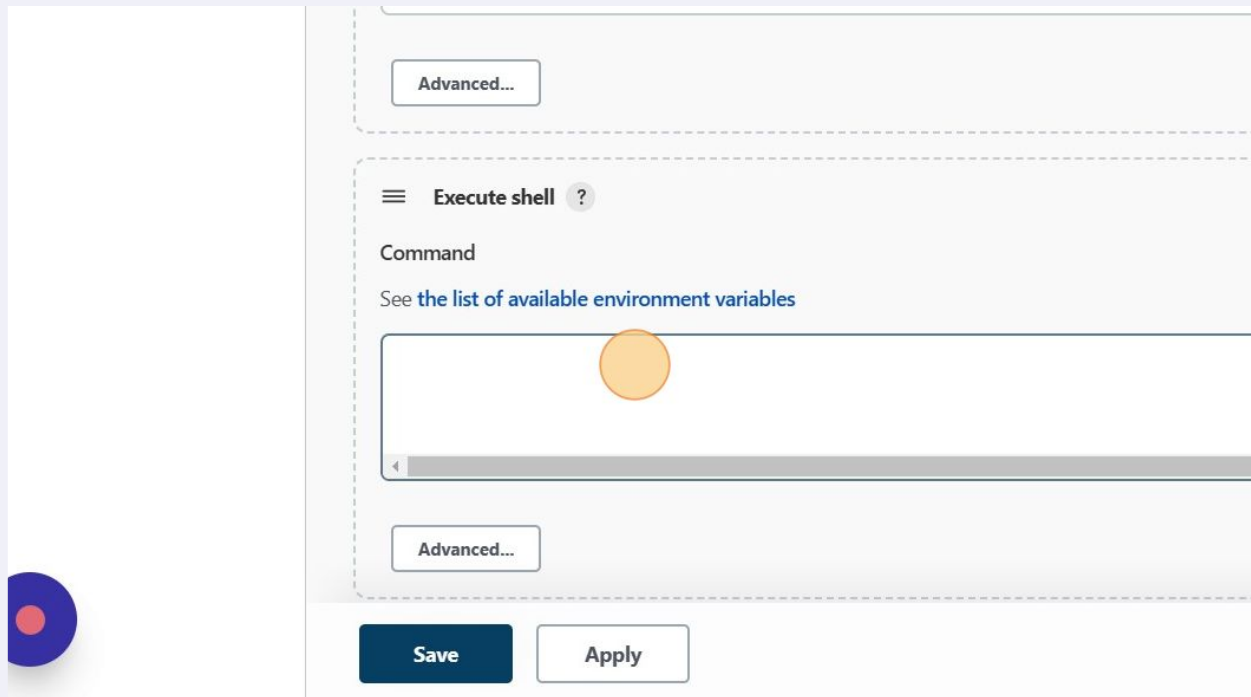
Add build step ▲

Filter

- Execute Windows batch command
- Execute shell
- Invoke Ant
- Invoke Gradle script
- Invoke top-level Maven targets
- Run with timeout
- Set build status to "pending" on GitHub commit

Save Apply

28 Click here.

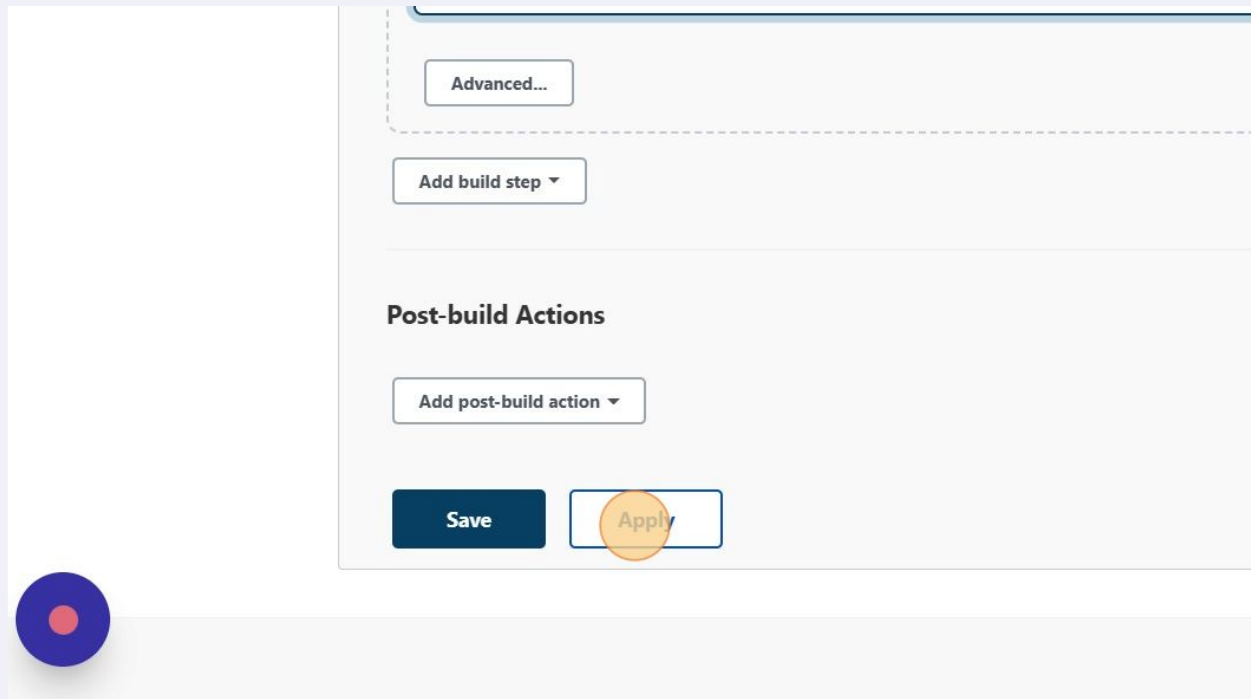


The screenshot shows a web interface with a sidebar on the left containing a blue circular icon with a red dot. The main content area is divided into sections. The top section has an 'Advanced...' button. Below it is a dashed-line section titled 'Execute shell' with a help icon. Under this title is the label 'Command' and a link 'See the list of available environment variables'. A text input field is present, with an orange circle highlighting it. Below the input field is another 'Advanced...' button. At the bottom of the main content area are two buttons: 'Save' and 'Apply'.

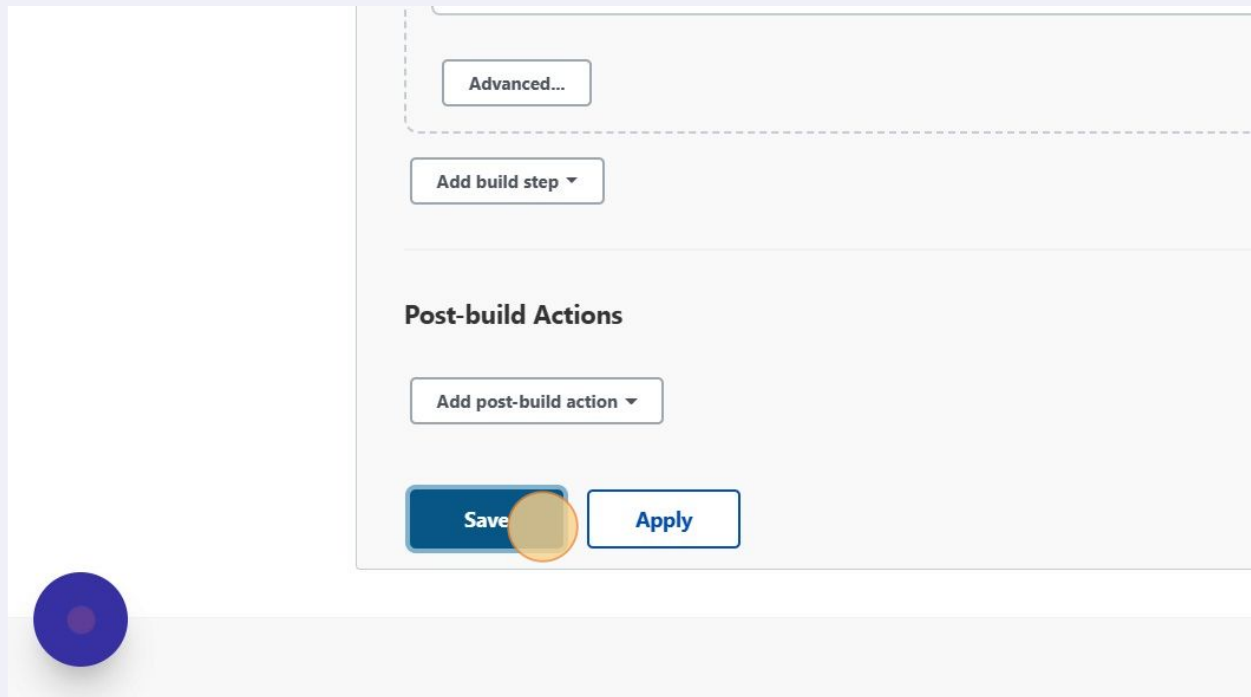
29 Type "cp -r gameoflife-web/target/gameoflife.war"

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

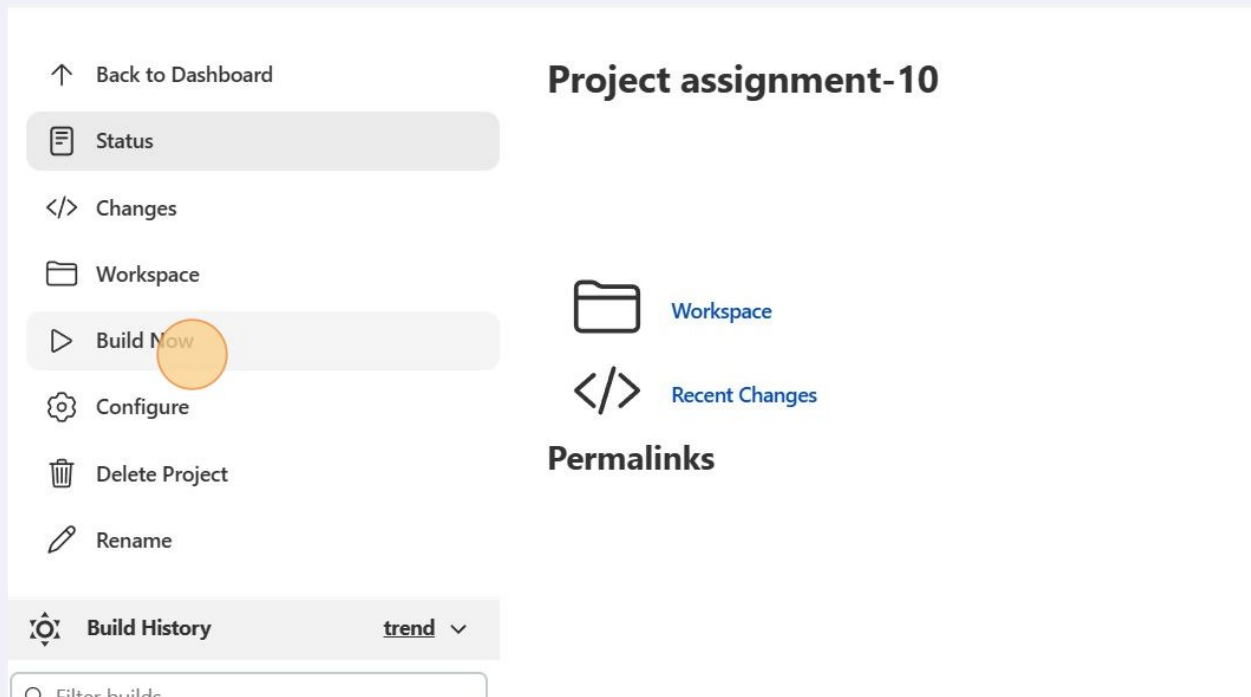
31 Click "Apply"



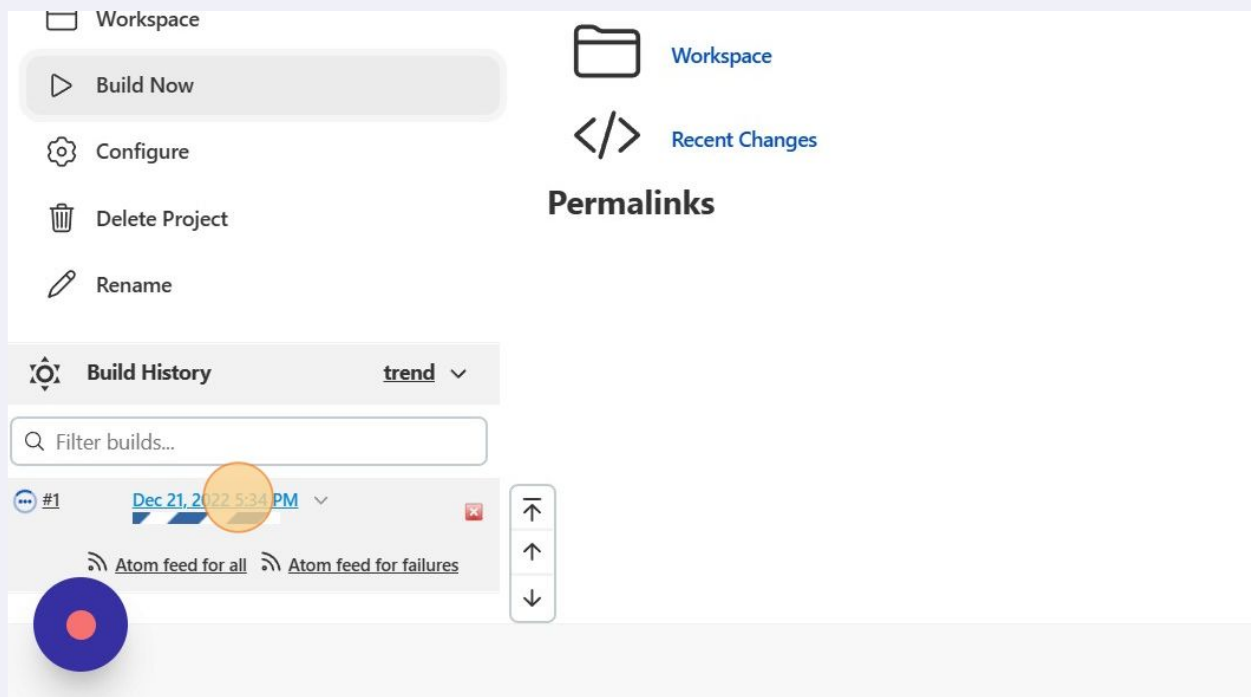
32 Click "Save"



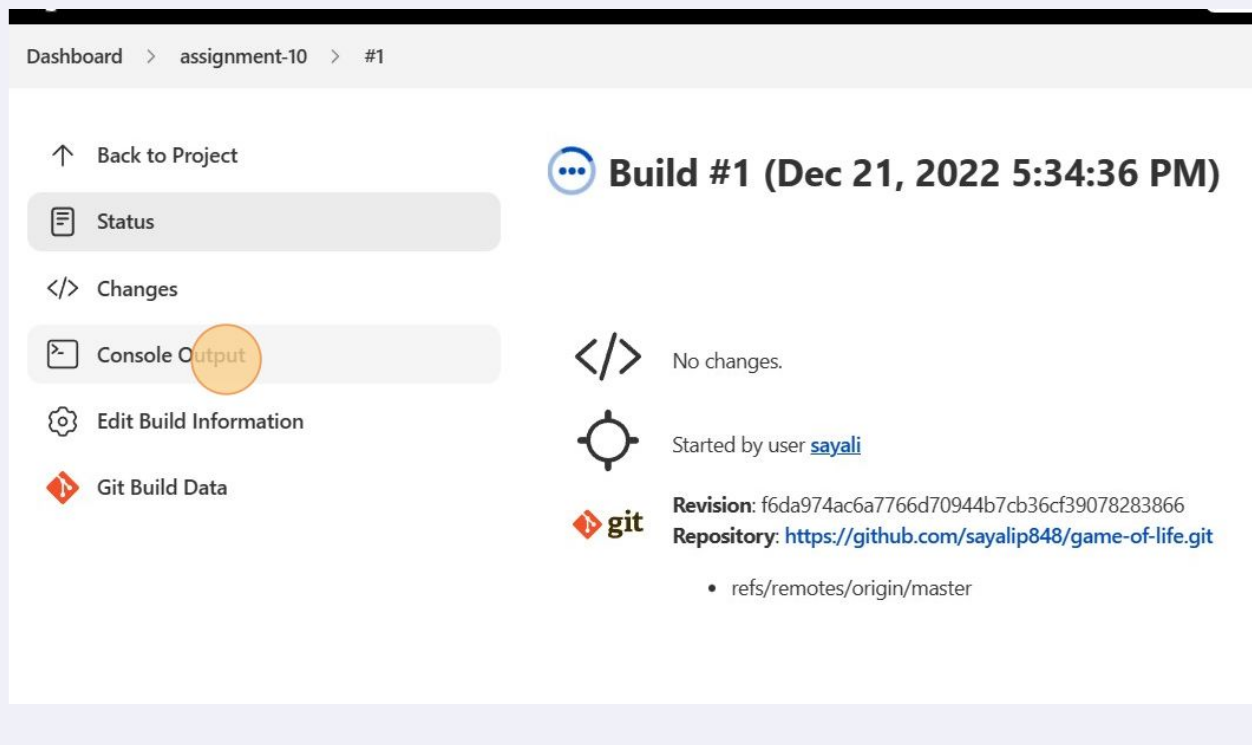
33 Click "Build Now"



34 Click "Dec 21, 2022 5:34 PM"



35 Click "Console Output"



36

Click "Started by user sayali"

Running as SYSTEM

Building remotely on 172.31.44.159

(test) in workspace /mnt/project

[WS-CLEANUP] Deleting project wor..."

```
[INFO] --- maven-install-plugin:2.4:install (default-install) @ g
[INFO] Installing /mnt/project/gameoflife-web/target/gameoflife.w
SNAPSHOT/gameoflife-web-1.0-SNAPSHOT.war
[INFO] Installing /mnt/project/gameoflife-web/pom.xml to /home/ec
SNAPSHOT/gameoflife-web-1.0-SNAPSHOT.pom
[INFO] -----
[INFO] Reactor Summary for gameoflife 1.0-SNAPSHOT:
[INFO]
[INFO] gameoflife ..... SUCCE
[INFO] gameoflife-build ..... SUCCE
[INFO] gameoflife-core ..... SUCCE
[INFO] gameoflife-web ..... SUCCE
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 27.136 s
[INFO] Finished at: 2022-12-21T17:35:12Z
[INFO] -----
[project] $ /bin/sh -xe /tmp/jenkins8496813481040555112.sh
+ cp -r gameoflife-web/target/gameoflife.war /mnt/install/apache-
Finished: SUCCESS
```

37

Switch to tab "Instances | EC2 Management Console"

38

Switch to tab "13.234.38.99"

39 Click here.

board > assignment-10 > #1

Back to Project

Status


Changes

Console Output

View as plain text

Edit Build Information


Git Build Data

 **Console Output**

Started by user [sayali](#)
Running as [SYSTEM](#)
Building remotely on [172.31.44.159](#) (test) in workspace /mnt/project
[WS-CLEANUP] Deleting project workspace...
[WS-CLEANUP] Deferred wipeout is used...
[WS-CLEANUP] Done
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository <https://github.com/sayalip848/game-of-life.git>
> git init /mnt/project # timeout=10
Fetching upstream changes from <https://github.com/sayalip848/game-of-life.git>
> git --version # timeout=10

40 Click here.

#1

 **Console Output**

Started by user [sayali](#)
Running as [SYSTEM](#)
Building remotely on [172.31.44.159](#) (test) in workspace /mnt/project
[WS-CLEANUP] Deleting project workspace...
[WS-CLEANUP] Deferred wipeout is used...
[WS-CLEANUP] Done
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository <https://github.com/sayalip848/game-of-life.git>
> git init /mnt/project # timeout=10
Fetching upstream changes from <https://github.com/sayalip848/game-of-life.git>

41 Click here.

Instance: i-0ad0b017bcfe11690 (slave)

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

▼ Instance summary Info

Instance ID	Public IPv4 address	Private IPv4 address
i-0ad0b017bcfe11690 (slave)	5.206.75.249 open address	1
IPv6 address	Instance state	Public
—	Running	e
Hostname type	Private IP DNS name (IPv4 only)	1.con
IP name: ip-172-31-44-159.ap-south-1.compute.internal	ip-172-31-44-159.ap-south-1.compute.internal	

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

© 2022, Amazon Web Services India Private

42 Switch to tab "New tab"

43

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.

A rectangular button with a grey background and a thin orange border. The text "New Game" is written in a bold, sans-serif font. "New" is in red and "Game" is in orange. The button is slightly tilted to the right.

44

Click "The Game!
home > New Game
Please seed your universe

Go

Game Of Life version 1.0-SNAPSHOT (build job assignment-10 - #1)"

The Game!

home > New Game

Please seed your universe

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Go