

Assignment 2

Unit test that connects to atg.world website.

```
import unittest
import requests

class TestWebsiteLoading(unittest.TestCase):

    def test_atg_world_website_loading(self):
        url = "https://atg.world"
        print("Connecting to", url)

        try:
            response = requests.get(url)
            response.raise_for_status() # Raise an error for non-200 status
            print("Status code:", response.status_code)
```

```

        self.assertEqual(response.status_code, 200, "atg.world website loaded successfully!")
    except requests.RequestException as e:
        print("Error connecting to the atg.world website:", e)
        self.fail("Failed to load the atg.world website")

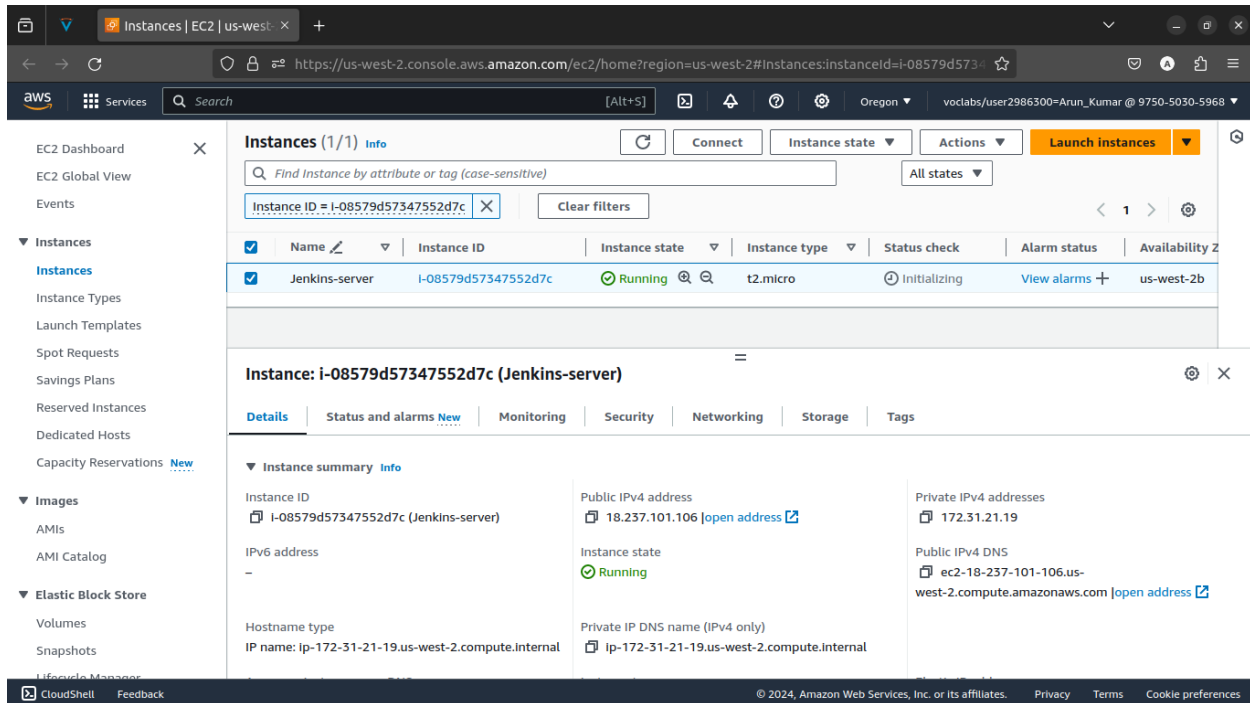
def test_www_domain_hello_world(self):
    url = "http://www.example.com" # Replace with the actual URL
    print("Connecting to", url)

    try:
        response = requests.get(url)
        response.raise_for_status() # Raise an error for non-200 status codes
        print("Status code:", response.status_code)
        self.assertEqual(response.status_code, 200, "Hello world on www domain loaded successfully")
        print("Hello world on www domain loaded successfully")
    except requests.RequestException as e:
        print("Error connecting to the www domain:", e)
        self.fail("Failed to load hello world on www domain")

if __name__ == '__main__':
    unittest.main()

```

Jenkins Setup on AWS Server



```
sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key

echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] \
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
/etc/apt/sources.list.d/jenkins.list > /dev/null

sudo apt-get update

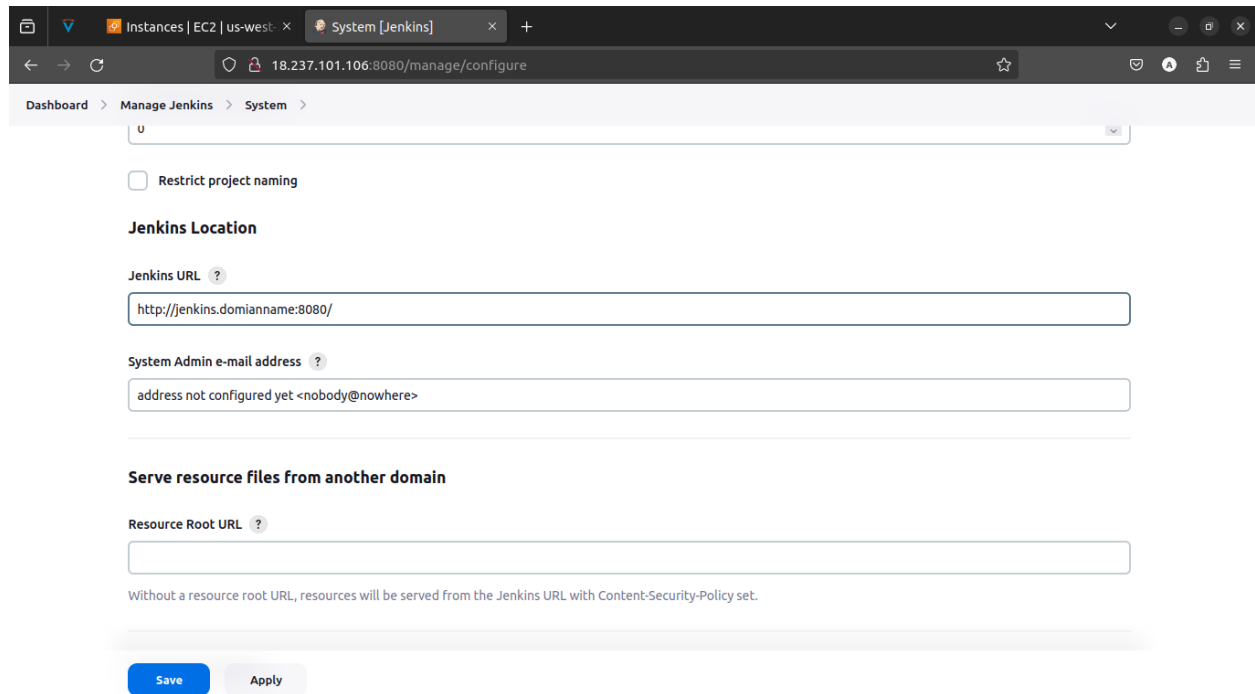
sudo apt-get install jenkins

sudo systemctl start jenkins
sudo systemctl enable jenkins

// For Admin Password

sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

Setup the pipeline



The screenshot shows the Jenkins 'System' configuration page in a web browser. The browser's address bar displays '18.237.101.106:8080/manage/configure'. The page has a breadcrumb trail: 'Dashboard > Manage Jenkins > System >'. Below the breadcrumb is a search bar containing the letter 'U'. A checkbox labeled 'Restrict project naming' is present and is currently unchecked. The 'Jenkins Location' section contains two fields: 'Jenkins URL' with the value 'http://jenkins.domiannname:8080/' and 'System Admin e-mail address' with the value 'address not configured yet <nobody@nowhere>'. The 'Serve resource files from another domain' section contains a 'Resource Root URL' field which is empty. Below this field is a note: 'Without a resource root URL, resources will be served from the Jenkins URL with Content-Security-Policy set.' At the bottom of the form are two buttons: 'Save' (in blue) and 'Apply' (in grey).

Dashboard > Manage Jenkins > System >

U

☐ Restrict project naming

Jenkins Location

Jenkins URL ?
http://jenkins.domiannname:8080/

System Admin e-mail address ?
address not configured yet <nobody@nowhere>

Serve resource files from another domain

Resource Root URL ?

Without a resource root URL, resources will be served from the Jenkins URL with Content-Security-Policy set.

Save Apply

Enter an item name

python-unittest-job

» Required field

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

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 builds, etc.

Folder
A container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

OK

Execute File test.py

Configure

With Ant ?

Build Steps

Execute shell ?

Command
[See the list of available environment variables](#)

python3 test.py

Advanced

Add build step

Save Apply

The screenshot shows the Jenkins Dashboard interface. At the top, there's a navigation bar with the Jenkins logo, a search bar, and user information (arun). Below the navigation bar, the 'Dashboard' link is selected. On the left sidebar, there are links for 'New Item', 'People', 'Build History', 'Manage Jenkins', and 'My Views'. The main content area displays a table of builds for the 'python-unittest-job'. The table has columns for 'S' (Status), 'W' (Icon), 'Name', 'Last Success', 'Last Failure', and 'Last Duration'. A single build is listed with a green status icon, a cloud icon, and a duration of 1.3 sec. Below the table, there's an 'Icon: S M L' section and an 'Atom feed' section with three options: 'for all', 'for failures', and 'for just latest builds'.

S	W	Name ↓	Last Success	Last Failure	Last Duration
✓	☁	python-unittest-job	1 min 40 sec #3	3 min 39 sec #2	1.3 sec

Icon: S M L

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

Home | EC2 | us-west-2 x python-unittest-job #3 x

18.237.101.106:8080/job/python-unittest-job/3/console

Jenkins

Search (CTRL+K)

Dashboard > python-unittest-job > #3 > Console Output

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete build '#3'

Previous Build

Console Output

```
Started by user arun
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/python-unittest-job
[python-unittest-job] $ /bin/sh -xe /tmp/jenkins1849328612888261965.sh
+ python3 test.py
..
-----
Ran 2 tests in 1.031s

OK
Connecting to https://atg.world
Status code: 200
atg.world website loaded successfully!
Connecting to http://www.example.com
Status code: 200
Hello world on www domain loaded successfully!
Finished: SUCCESS
```

RETRY API Jenkins 3.440.3