Deployment 4 documentation

First I made my AWS user called test user and gave it Admin access to elastic beanstalk



Once I made my account, I made sure to download the ,CSV file(which contains test user's access key, and secret access key) so I can use it later. If you forget to do that it is ok because you can make a new csv key.

Then I followed the documentation for deployment 4 pdf instructions to create an elastic beanstalk and created a Jenkins freestyle project for the URL shortener.

After I tried using build now on my Jenkins to run my app it gave me an error.



Application Version python-01\$(BUILD ID) already exists.

The error I got was because, in my Jenkins, the versioning label format should be python-01\${BUILD_ID} not python-01\$(BUILD_ID).

After I did that, it worked correctly.

Console Output

```
Started by user Bishajit ▼
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/Deployment4
The recommended git tool is: NONE
using credential Deployment4
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/Deployment4/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Bishajit/DEPLOY4_FLASK_APP # timeout=10
Fetching upstream changes from https://github.com/Bishajit/DEPLOY4_FLASK_APP
> git --version # timeout=10
 > git --version # 'git version 2.32.0'
using GIT ASKPASS to set credentials token for deployment4
 > git fetch --tags --force --progress -- https://github.com/Bishajit/DEPLOY4_FLASK_APP +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision 428bbca608d84ca57d108478c55730202cace5ae (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
 > git checkout -f 428bbca608d84ca57d108478c55730202cace5ae # timeout=10
Commit message: "Create .gitignore"
> git rev-list --no-walk 428bbca608d84ca57d108478c55730202cace5ae # timeout=10
AWSEB Deployment Plugin Version 0.3.21 (aws-java-sdk version: 1.11.995)
Using region: 'us-east-2'
Zipping contents of Root File Object (Deployment4) into tmp file awseb-1263994017558658385.zip (includes=, excludes=)
Using archive '/tmp/awseb-1263994017558658385.zip'
bucketName not set. Calling createStorageLocation
Using s3 Bucket 'elasticbeanstalk-us-east-2-323867645900'
Uploading \ file \ awseb-1263994017558658385.zip \ as \ s3://elasticbean stalk-us-east-2-323867645900/url-shortner-python-0130.zip
Creating application version python-0130 for application url-shortner for path s3://elasticbeanstalk-us-east-2-323867645900/url-shortner-python-0130.zip
Created version: python-0130
Using environmentId 'e-kcv4kupc4m'
No pending Environment Updates. Proceeding.
Checking health/status of environmentId e-kcv4kupc4m attempt 1/30
Environment Status is 'Ready'. Moving on.
Updating environmentId 'e-kcv4kupc4m' with Version Label set to 'python-0130'
Checking health/status of environmentId e-kcv4kupc4m attempt 1/30
Versions reported: (current: python-01$(BUILD_ID), underDeployment: python-0130). Should I move on? false
Checking health/status of environmentId e-kcv4kupc4m attempt 2/30
Versions reported: (current: python-0130, underDeployment: python-0130). Should I move on? false
Environment Status is 'Ready' and Health is 'Green'. Moving on.
Deployment marked as 'successful'. Starting post-deployment cleanup.
VersionLabels are matching for environmentId: %#039;e-kcv4kupc4m' and version: 'python-0130')
Cleaning up temporary file /tmp/awseb-1263994017558658385.zip
```

Build #30 (Aug 31, 2021 1:58:15 AM)



No changes.



Started by user Bishajit

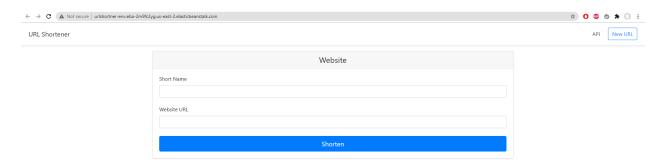


Revision: 428bbca608d84ca57d108478c55730202cace5ae

Repository: https://github.com/Bishajit/DEPLOY4_FLASK_APP

· refs/remotes/origin/main

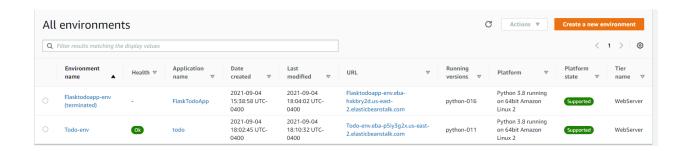
Also after my Jenkins pipeline was working I checked if the elastic beanstalk url was working. So when I click on the link in elastic beanstalk, this appears which means GitHub code was working properly.

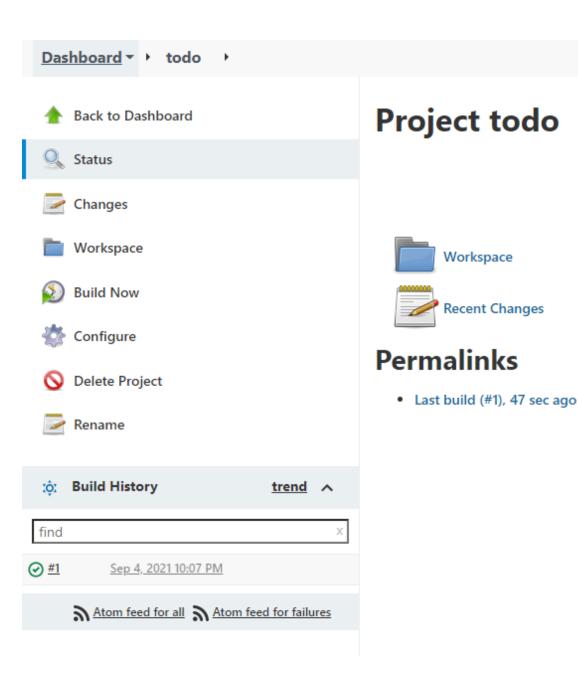


Next, I needed to deploy the Todo app

To do app

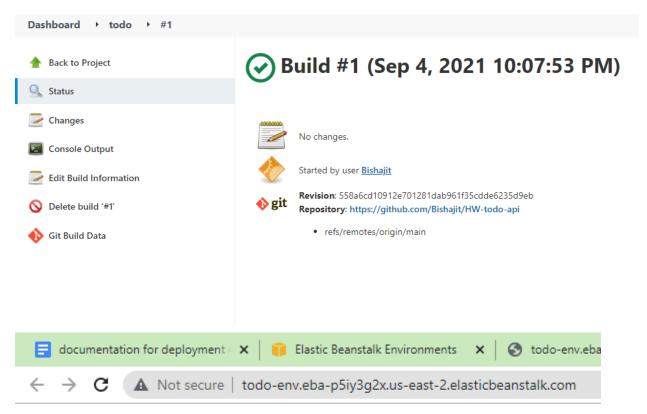
To deploy the todo app, I had to do the same steps for doing the url shortener. However, When I tried to run the todo app I created prior to this deployment it didn't run because its health would get degraded for some reason when its Jenkins pipeline would finish. I found out this was the case because elastic beanstalk doesn't recognize the file if it isn't called (application.py). My file was called (app.py) so it wasn't running. Not only did I have to change the name but I had to change this command in the newly renamed application.py by adding the command application = app = Flask(__name__) which was app = Flask(_name__). When I changed the name to the application.py and changed it, it ran perfectly.



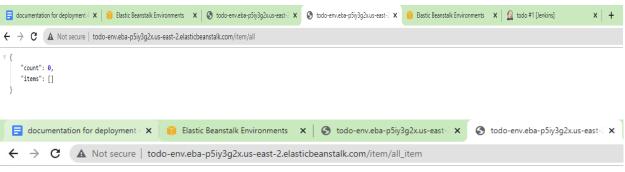


Hello World!





Hello World!



News custom app

For my custom app, I created an app that can get the headlines from an api and save it in a database.

The api I used is the news API https://newsapi.org/

This api allowed me to grab the headline. As a template, I followed this video on how to create an app.

Python Flask Create News Web Application With News API https://www.youtube.com/watch?v=15syfw5zqnc

This video also helped me understand the new api better https://www.youtube.com/watch?v=oUulVJ96Jsl&ab_channel=lzzyAnalytics

I went through a lot of issues with connecting my database to my application.py because I was trying to do it on my own but it was going well. This is where stack overflow helped me

https://stackoverflow.com/questions/55258575/insert-data-into-sqlite3-database-with-api

Even after learning how to connect my application and my sqlite database. It was not working with the todo method using post. So instead I just connected my application.py instead of trying to go todo post route.

This is the abandoned method i tried to implement

```
# import sqlite3
# import requests
# from newsapi.newsapi_client import NewsApiClient
# import collections

# DB_PATH = "news.db"
# current_date = dt.date.today
# newsapi = NewsApiClient(api_key="lec0f2aedee24c70b1eecb0f97e30d26")

# def add_to_list(article):
# try:
# conn = sqlite3.connect(DB_PATH)

# # Once a connection has been established, we use the cursor
# # object to execute queries
# api_req = requests.get( "https://newsapi.org/v2/top-headlines?sources=engadget&apiKey=lec0f2aedee24c70b1eecb0f97e30d26")
# api_req = api_req.json()

# extracted_articles = api_req["articles"]["source"]

# c = conn.cursor()

# for ex in extracted_articles:
# article = ex["titles"]
# DateViewed = current_date
# sql = 'INSERT INTO news (article, DateViewed) VALUES(?,?)'
# val = (article, DateViewed)
# c.execute(sql,val)
```

This is what worked becAUSE i added to my application.py instead of trying to make it a method

```
DB_PATH = "news.db"

conn = sqlite3.connect(DB_PATH)

api_req = requests.get("https://newsapi.org/v2/top-headlines?sources=engadget&apiKey=1ec0f2aedee24c70bleecb0f97e30d26")
api_req = api_req.json()
extracted_articles = api_req["articles"]

c = conn.cursor()

for ex in extracted_articles:
    article = ex['title']
    publication_date = ex['publishedAt']
    sql = 'INSERT INTO news (article, publication_date) VALUES(?,?)'
    val = (article, publication_date)
    c.execute(sql,val)

conn.commit()

if __name__ == "__main__":
    app.run(debug=True)
```