Module 4: Application Deployment Using Elastic Beanstalk

Demo Document 2

edureka!

Deploy An Application In Beanstalk Using Docker

Demo steps:

Step 1: Create an Application

- In your local system, create a file with the name application.py
- Type the below code and save it local system in the name of **application.py**

```
from flask import Flask

# Print a nice greeting

def say_hello(username = "World"):

    return '<html><body background="https://bit.ly/2NuGl9Q" background-position=center background-repeat=no-repeat background-size=cover style="padding: 210px 0; background-color:#000" ><font color="white"><center><h1>Hello %s!</h1></font><br><br><br></body>' % username


# Some bits of text for the page

header_text = '''

    <html>\n<head> <title> Docker Demo</title> </head>\n<body>'''

instructions = '''

    <font color="white"><h2><em> Hey!!!! It is Working </h2></font>\n'''

home_link = '<p><a href="/">Back</a></p>\n'

footer_text = '</body>\n</html>'


# Elastic Beanstalk looks for an 'application' that is callable by default

application = Flask(__name__)


# Add a rule for the index page

application.add_url_rule('/', 'index', (lambda: header_text +

    say_hello() + instructions + footer_text))
```

```
# Add a rule when the page is accessed with a name appended to the site
# URL
application.add_url_rule('/<username>', 'hello', (lambda username:
    header_text + say_hello(username) + home_link + footer_text))


# Run the application
if __name__ == "__main__":
    # Setting debug to True enables debug output. This line should be
    # removed before deploying a production application.
    application.debug = True
    application.run(host="0.0.0.0")
```

Step 2: Create a Dockerfile

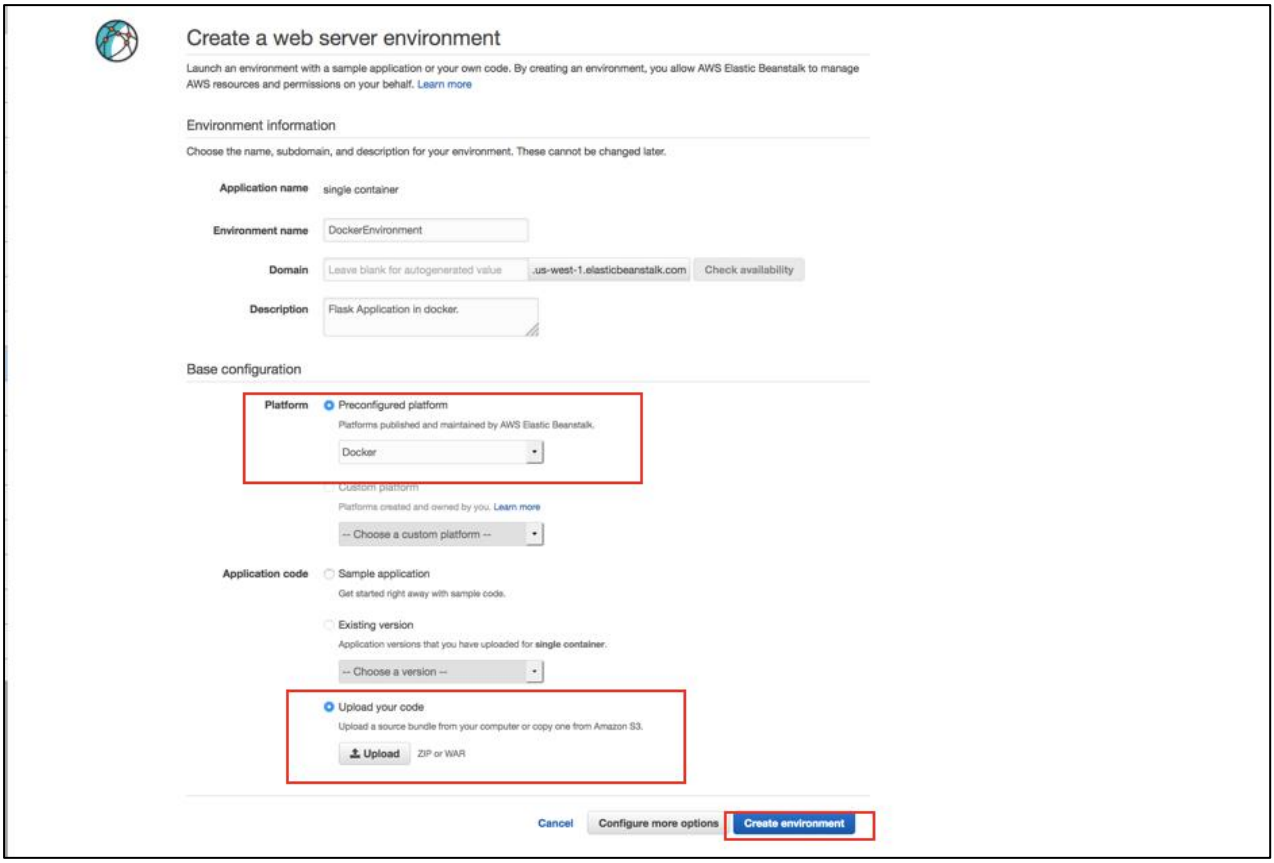
- In your Notepad, type the below code
- And Save it in the name of Dockerfile

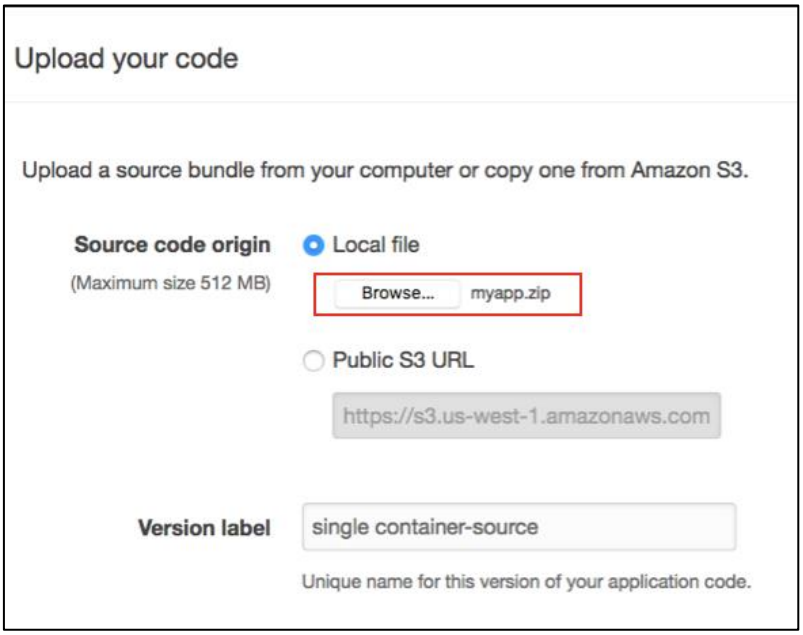
```
FROM python:3.6
COPY . /app
WORKDIR /app
RUN pip install Flask==1.0.2
EXPOSE 5000
CMD ["python", "application.py"]
```

Step 3: Create a source bundle

- Zip the Dockerfile and the application.py file to form the source bundle

Step 4: Create a new single docker environment in beanstalk and upload the myapp.zip bundle





Step 5: Once the environment is Created, test it with the URL if the application works