**Assignment -4**

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| Assignment Date | 09 November 2022 |
| Student Name | Charles Manickam N |
| Student Roll Number | 713319CS024 |
| Maximum Marks | 2 Marks |

**Question-1:**

**1.Pull an Image from docker hub and run it in docker playground.**

**2.Create a docker file for the jobportal application and deploy it in Docker desktop application.**

**3.Create a IBM container registry and deploy helloworld app or jobportalapp.**

**4.Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.**

**Solution:**

**HTML**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>FlaskBlog</title>

</head>

<body style="background-color:green;">

<h1>Welcome to Hello page</h1>

<h1>This is a demo page for Docker & Kubernetes</h1>

</body>

</html>

**Dockerfile**

FROM python:3.10.4

WORKDIR /app

COPY requirements.txt ./

RUN pip install -r requirements.txt

COPY . .

EXPOSE 5000

CMD ["python","./app.py"]

**Python**

from flask import Flask, render\_template, request, url\_for, flash, redirect

app = Flask(\_\_name\_\_)

app.config['SECRET\_KEY'] = 'df0331cefc6c2b9a5d0208a726a5d1c0fd37324feba25506'

@app.route('/')

def index():

return render\_template('index.html')

if \_\_name\_\_ == '\_\_main\_\_':

app.run(host='0.0.0.0', port=5000, debug=True)