# Experiment-5

# Containerizing application using Docker Container
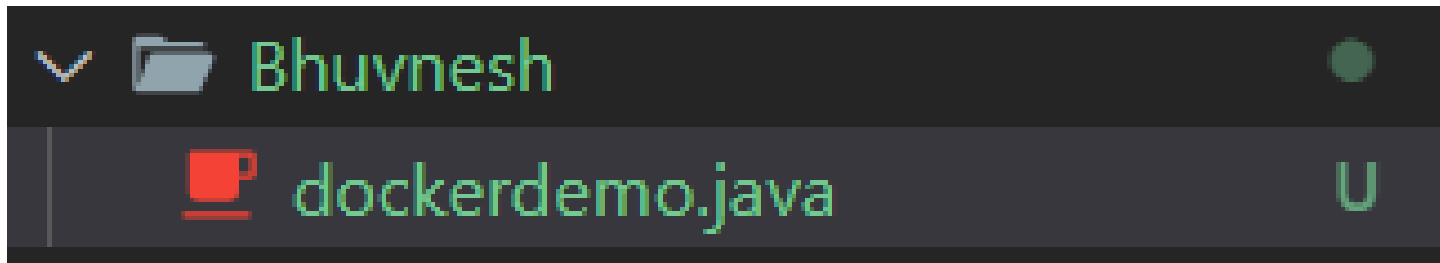
**Prepared By**

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## Semester-7

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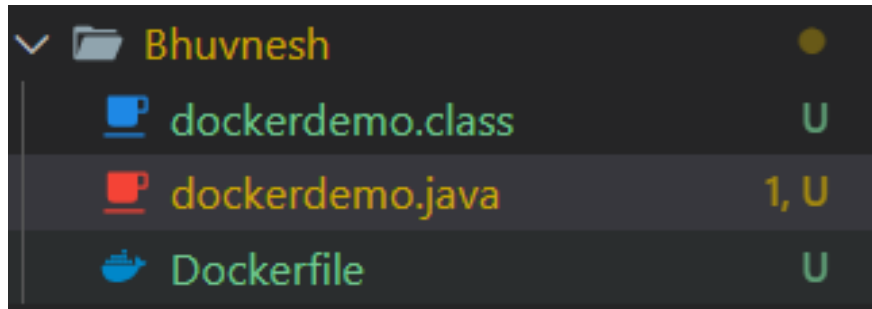# How to Containerizing application using Docker Container?

- Create one Java application and compile it with **javac**





```
class dockerdemo{
    Run | Debug
    public static void main(String[] args) {
        System.out.println(x:"Bhuvnesh Sanathra");
    }
}
```

# How to Containerizing application using Docker Container?

- Create one **DockerFile** application



```
FROM openjdk
WORKDIR /app
COPY . /app
RUN javac dockerdemo.java
CMD ["java","dockerdemo"]
```

# How to Containerizing application using Docker Container?

- Create image using DockerFile

# docker build –t myjavaapp .

```
PS C:\Users\bhuvn\Desktop\Placement Preparation\Repository\TechTitans\Microservices_Java\Bhuvnesh> docker build -t myjavaapp .
[+] Building 9.0s (5/9)                                                                                           docker:default
 => [internal] load build definition from Dockerfile                                                                        0.0s
 => => transferring dockerfile: 130B                                                                                        0.0s
 => [internal] load metadata for docker.io/library/openjdk:latest                                                          3.1s
 => [auth] library/openjdk:pull token for registry-1.docker.io                                                             0.0s
 => [internal] load .dockerignore                                                                                          0.1s
 => => transferring context: 2B                                                                                             0.0s
 => [1/4] FROM docker.io/library/openjdk:latest@sha256:9b448de897d211c9e0ec635a485650aed6e28d4eca1efbc34940560a480b3f1f     5.8s
 => => resolve docker.io/library/openjdk:latest@sha256:9b448de897d211c9e0ec635a485650aed6e28d4eca1efbc34940560a480b3f1f     0.0s
 => => sha256:9b448de897d211c9e0ec635a485650aed6e28d4eca1efbc34940560a480b3f1f 1.04kB / 1.04kB                             0.0s
 => => sha256:fe05457a5e9b9403f8e72eeba507ae80a4237d2d2d3f219fa62ceb128482a9ee 954B / 954B                                 0.0s
 => => sha256:71260f256d19f4ae5c762601e5301418d2516ca591103b1376f063be0b7ba056 4.46kB / 4.46kB                             0.0s
 => => sha256:197c1adcd755131915cd019bdd58658d44445b3638f65449932c18ee39b6047c 25.17MB / 44.56MB                           5.7s
 => => sha256:57b698b7af4b18900b53c768746b1dfb603dfb9aec1eea328fdac86d37001e2a 1.05MB / 12.26MB                            5.7s
```

# How to Containerizing application using Docker Container?

- Check image

<span style="color:red"># docker images</span>

```
● PS C:\Users\bhuvn\Desktop\Placement Preparation\Repository\TechTitans\Microservices_Java\Bhuvnesh> docker images
REPOSITORY      TAG         IMAGE ID        CREATED             SIZE
myjavaapp       latest      db4be7eb5769    59 seconds ago      470MB
nginx           latest      e784f4560448    2 weeks ago         188MB
mongo           latest      ff65a94ec485    3 weeks ago         795MB
```

# How to Containerizing application using Docker Container?

- Run it

  # docker run --name java1 myjavaapp

```
PS C:\Users\bhuvn\Desktop\Placement Preparation\Repository\TechTitans\Microservices_Java\Bhuvnesh> docker run --name java1 my
javaapp
Bhuvnesh Sanathra
```

# How to Containerizing application using Docker Container?

- Check container

# docker ps -a

```
PS C:\Users\bhuvn\Desktop\Placement Preparation\Repository\TechTitans\Microservices_Java\Bhuvnesh> docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED              STATUS                        PORTS                     NAMES
75964513c712   myjavaapp      "java dockerdemo"        About a minute ago   Exited (0) About a minute ago                           java1
532da352c1d1   mongo:latest   "docker-entrypoint.s…"   About an hour ago    Up About an hour              0.0.0.0:2717->27017/tcp   bhuvimongo
4619dcdc5cfd   nginx:latest   "/docker-entrypoint.…"   6 hours ago          Exited (255) About an hour ago 0.0.0.0:80->80/tcp       bhuvi
```

# Thank You