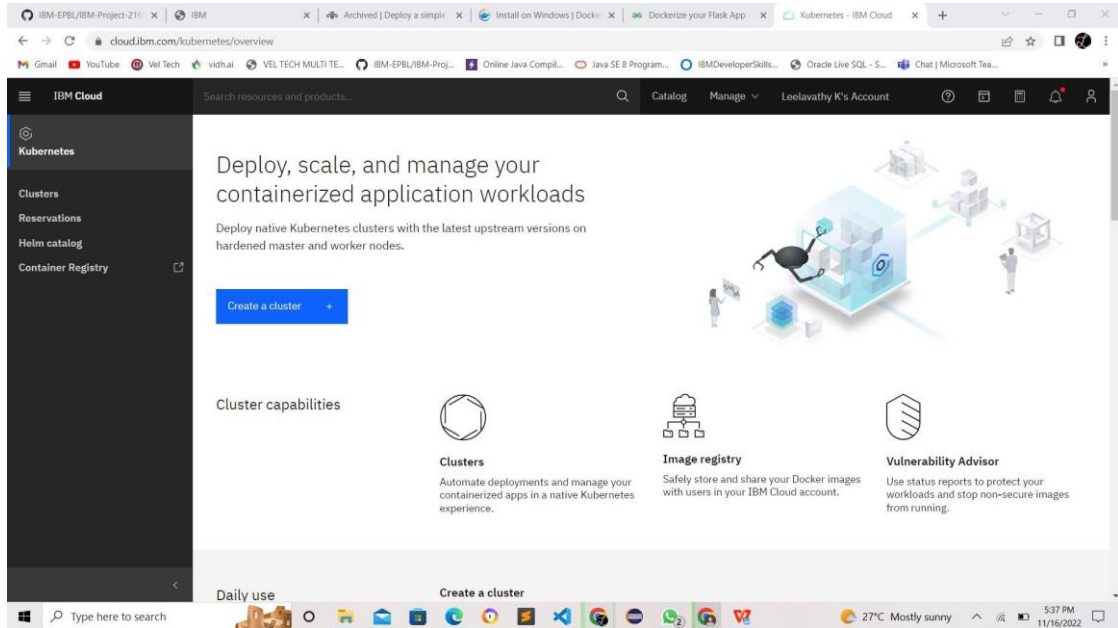


## CONTAINERIZE THE APP

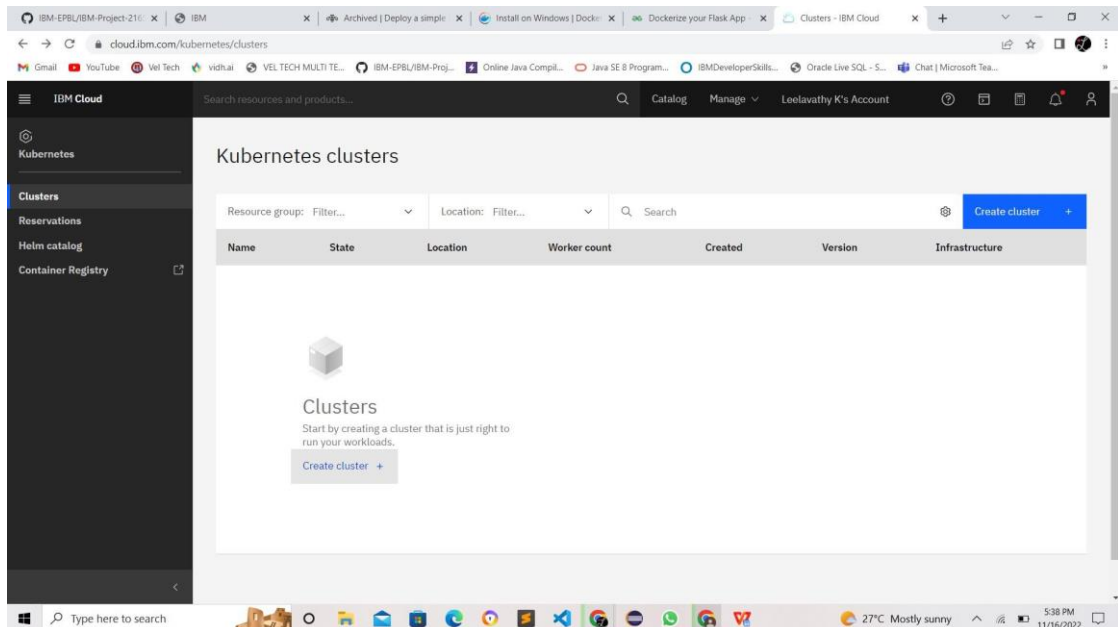
TEAM ID:PNT2022TMID22341

**STEP 1:** Sign in to your [IBM Cloud Dashboard](#)

**STEP 2:** Open IBM Kubernetes Service



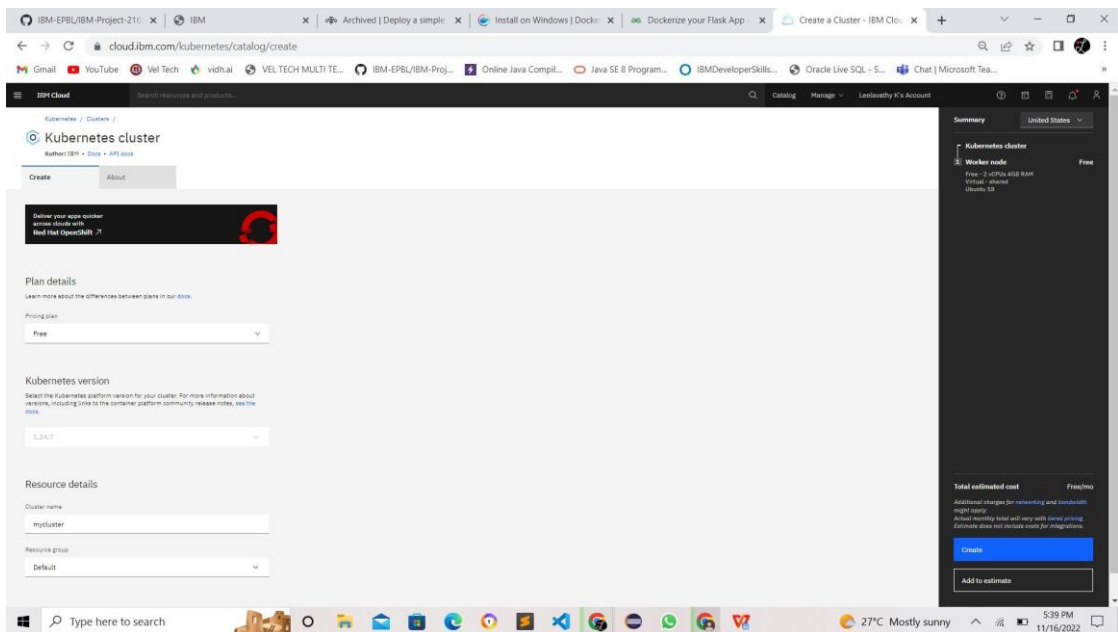
**STEP 3:** Click Create Cluster



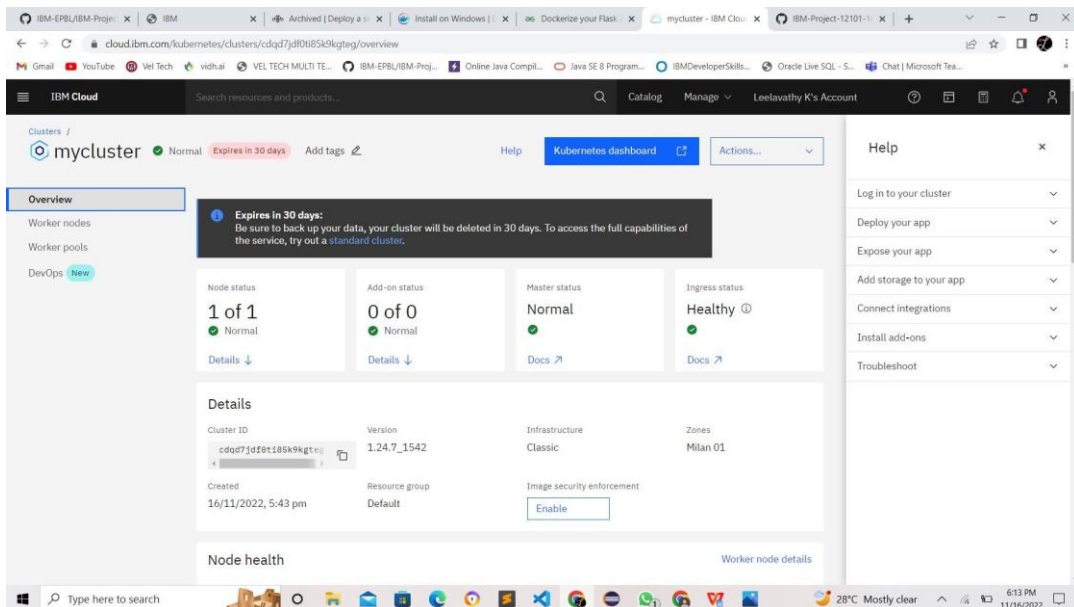
**STEP 4:** Select the Region where you want to deploy the cluster, type in a name for your cluster, then click Create Cluster.

**STEP 5:** Select the appropriate cluster type depending on your account.

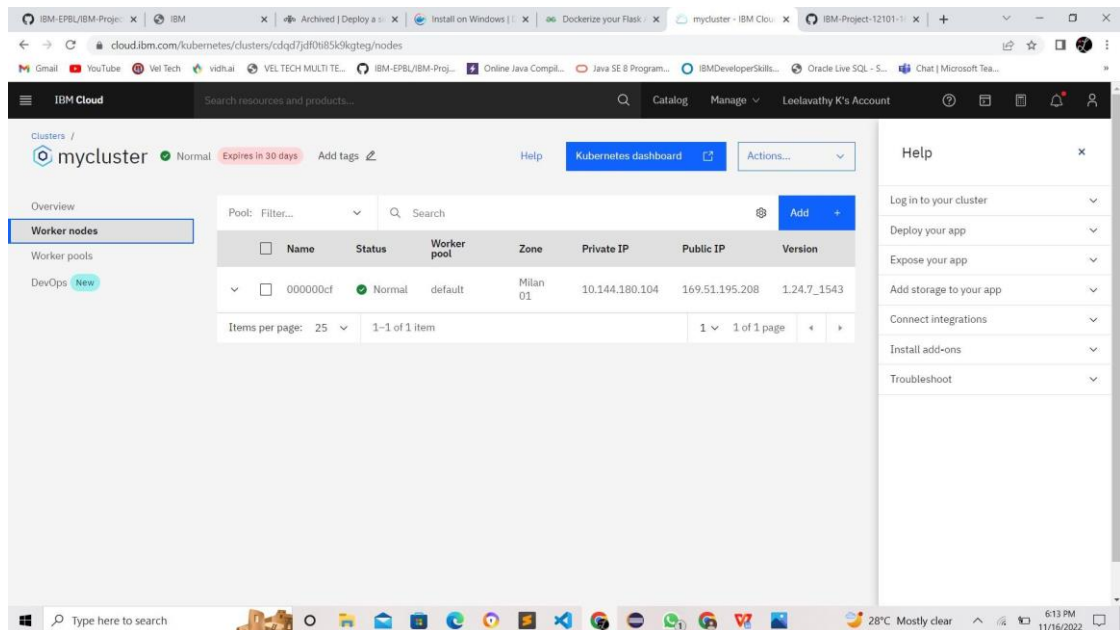
**STEP 6:** It takes some time for the cluster to get ready (around 30 minutes).



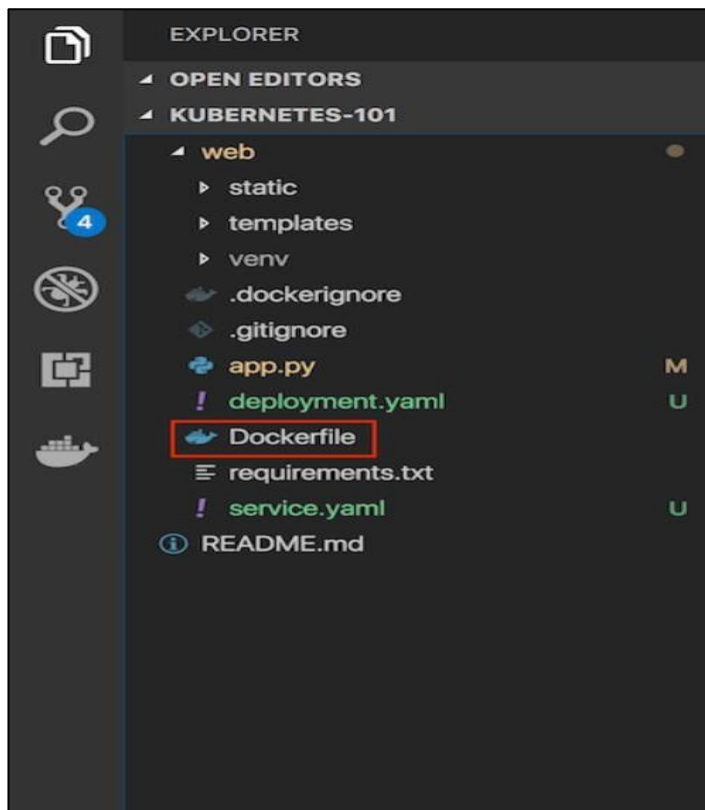
**STEP 7:** Once the cluster is ready, click on your cluster's name and you will be redirected to a new page with information about your cluster and worker node.

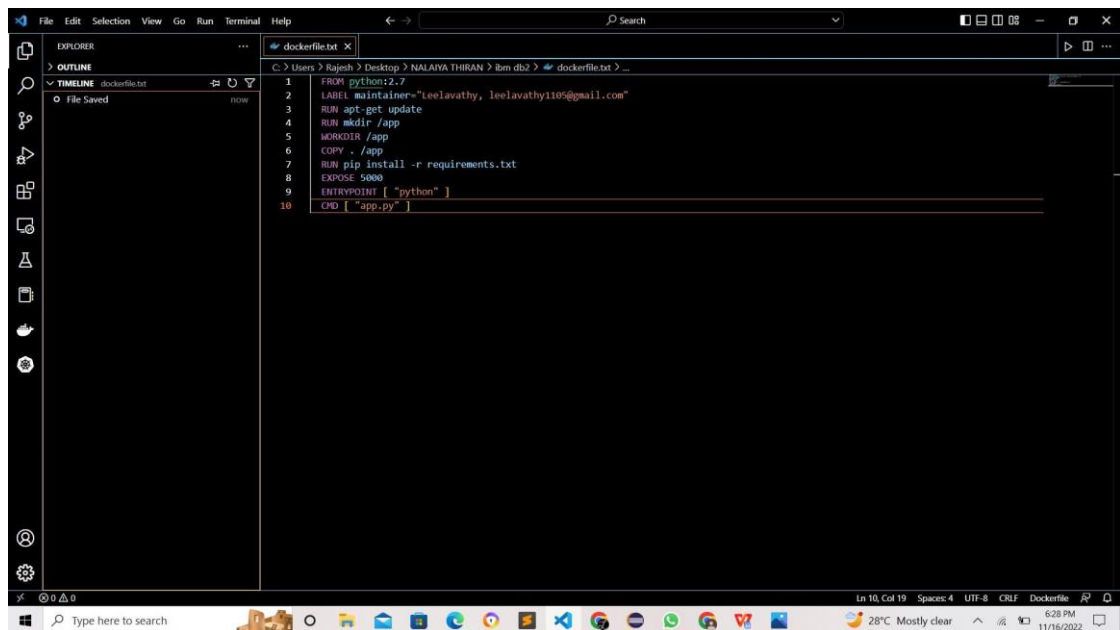


**STEP 8:** Click on the **Worker Nodes** tab to note the cluster's Public IP.



## CONTAINERIZE YOUR FLASK APPLICATION





```
1 FROM python:2.7
2 LABEL maintainer="leelavathy, leelavathy110@gmail.com"
3 RUN apt-get update
4 RUN mkdir /app
5 WORKDIR /app
6 COPY . /app
7 RUN pip install -r requirements.txt
8 EXPOSE 5000
9 ENTRYPOINT [ "python" ]
10 CMD [ "app.py" ]
```

## BUILD AN IMAGE FROM THE DOCKERFILE

Open the terminal and type this command to build an image from your Dockerfile: `docker build -t <image_name>:<tag> .` (note the period to indicate we're in our apps top level directory). For example: `docker build -t app:latest .`

After you build your image successfully, type: `docker run -d -p 5000:5000 app`

This command will create a container that contains all the application code and dependencies from the image and runs it locally.

