

Project Development Phase

Delivery of Sprint - 4

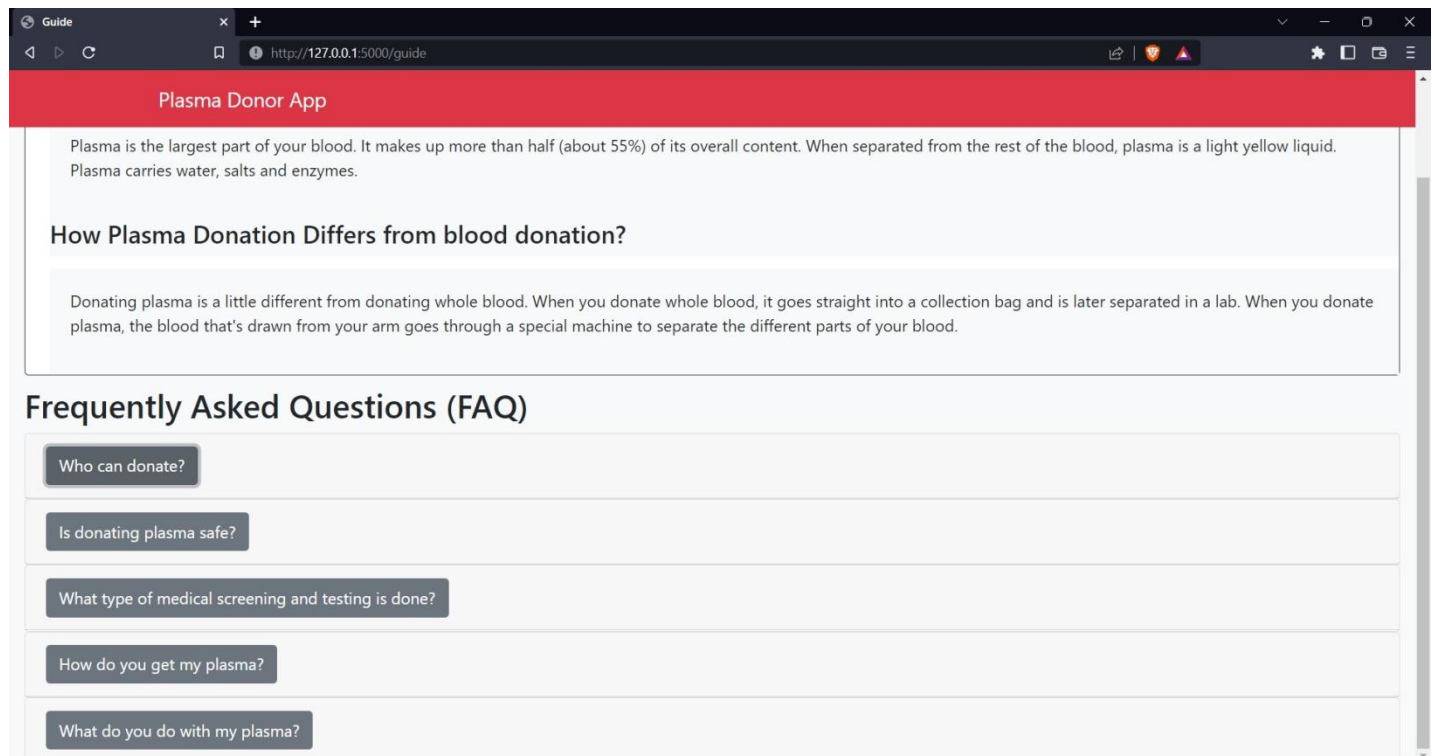
Date	19 November 2022
Team ID	PNT2022TMID37763
Project Name	Plasma Donor Application
Sprint	4

TEAM MEMBERS

ROLE	NAME	ROLL NO
TEAM LEADER	YUVARANI J	410119106071
TEAM MEMBER 1	ASWINI G	410119106004
TEAM MEMBER 2	POONGOTHAI K	410119106047
TEAM MEMBER 3	SRIMATHI S	410119106063

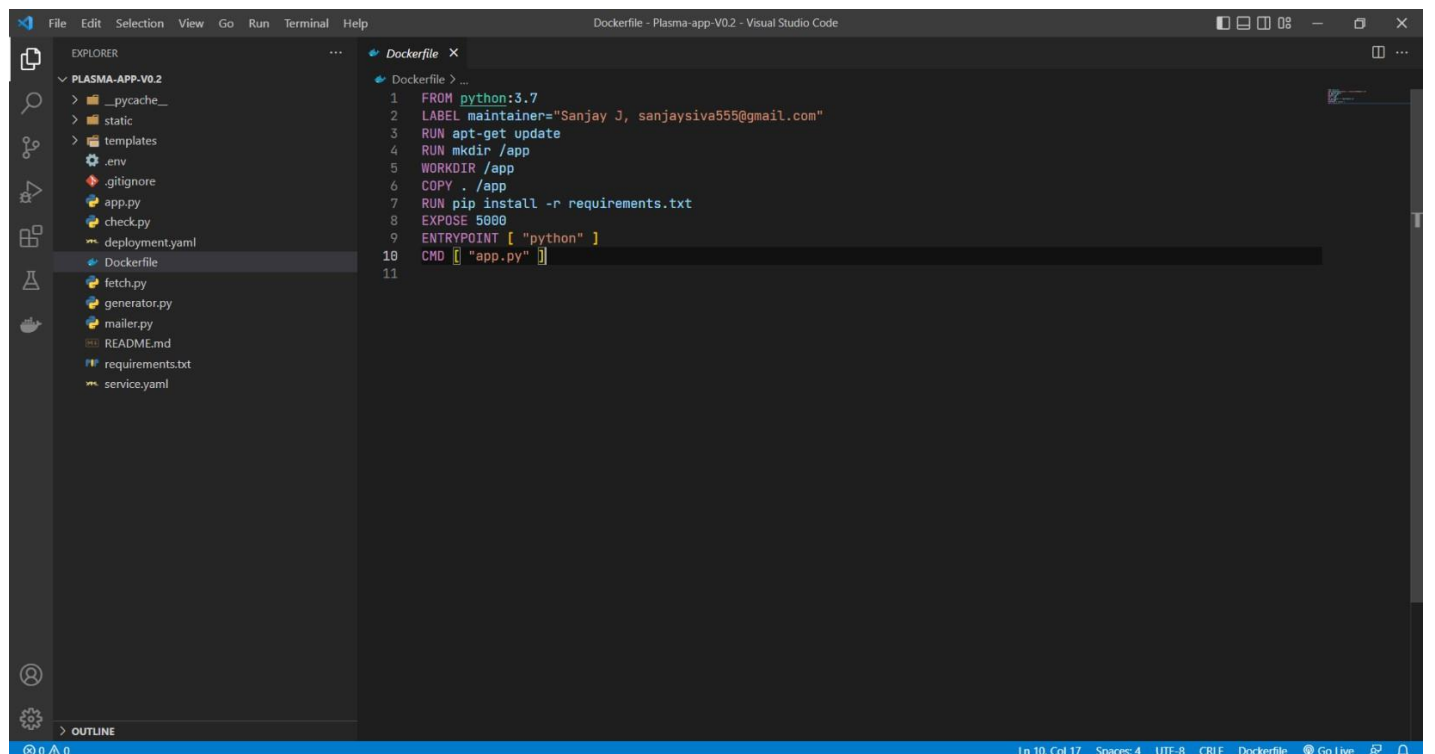
Progress – 1

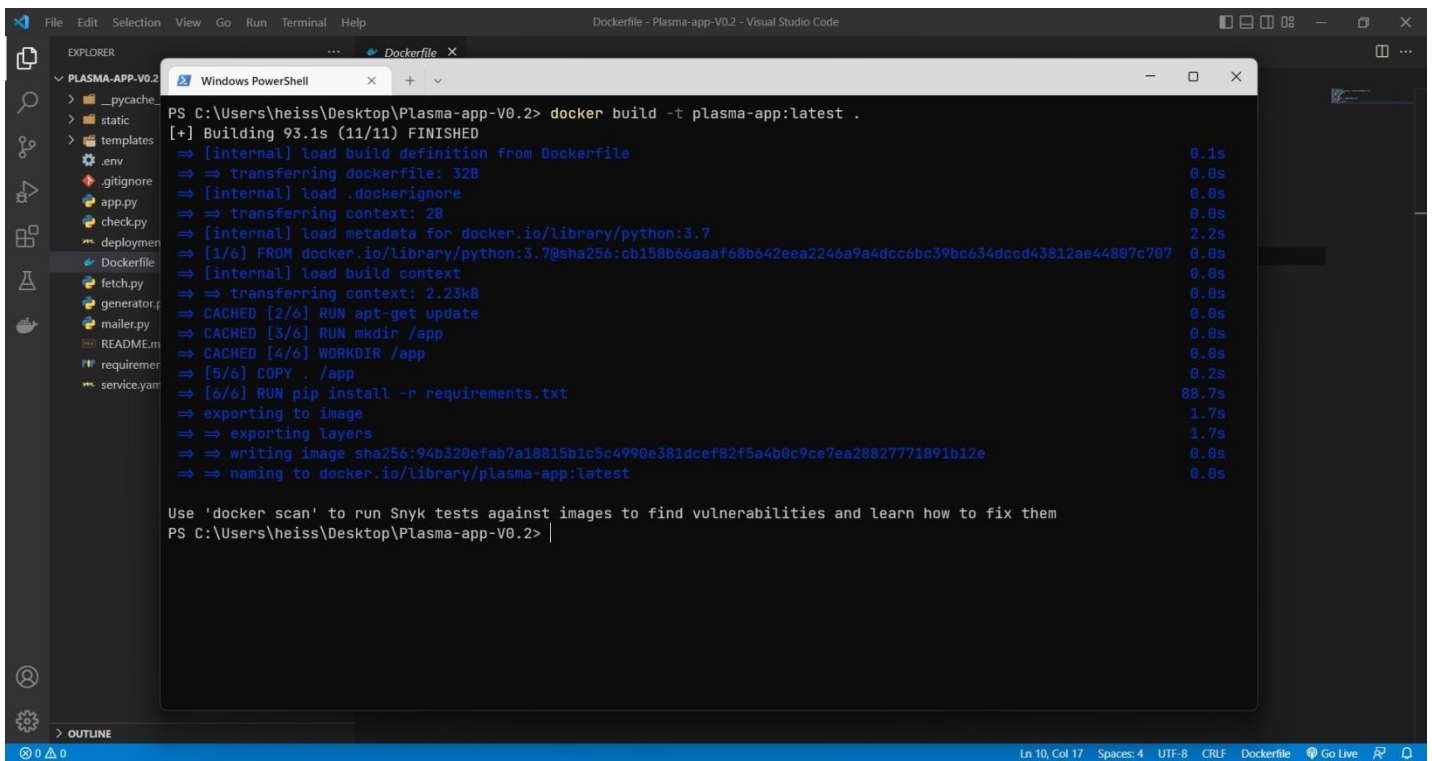
The guide section will contain the all the information needed by the users to know about the plasma donation



Progress 2

Building the Docker Image using the Docker file for Containerize the application



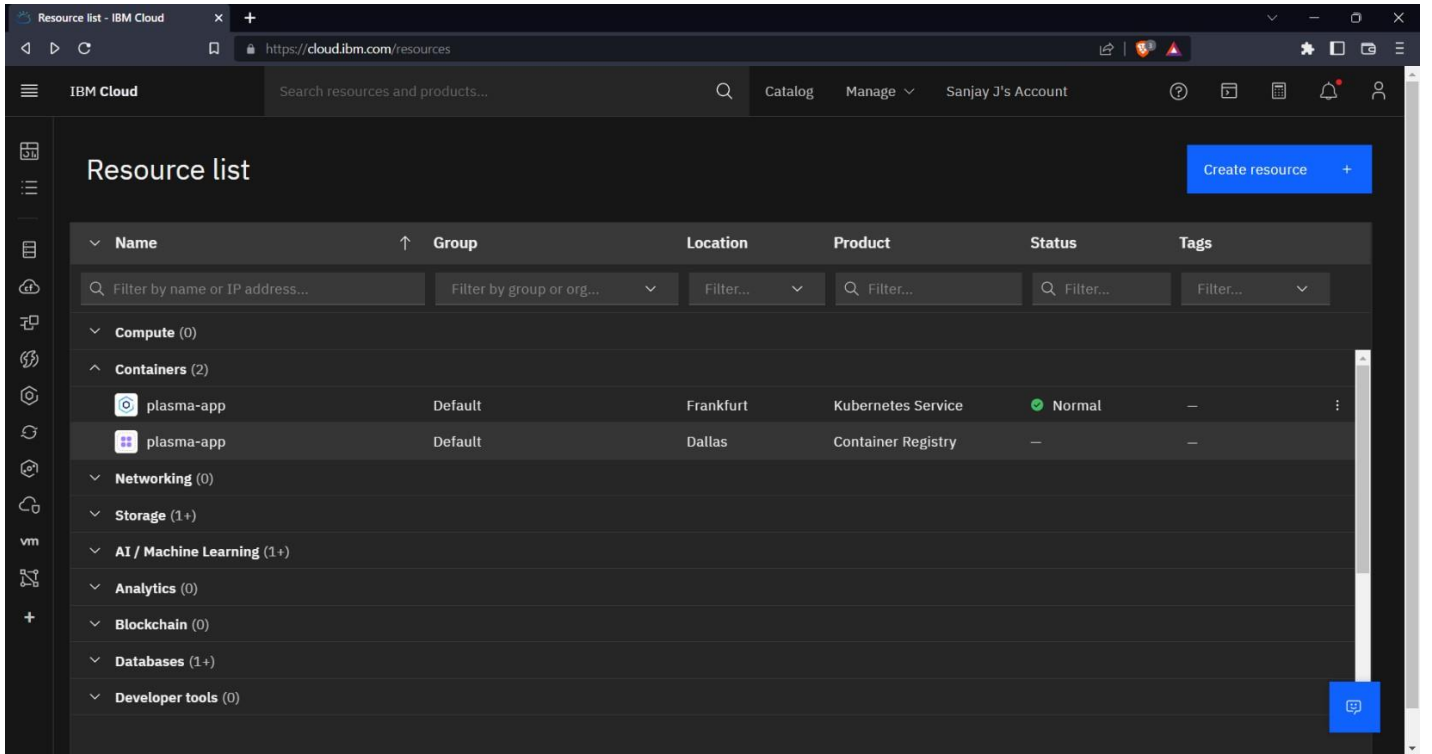


```
PS C:\Users\heiss\Desktop\Plasma-app-V0.2> docker build -t plasma-app:latest .
[+] Building 93.1s (11/11) FINISHED
=> [internal] load build definition from Dockerfile                                0.1s
=> => transferring dockerfile: 32B                                              0.0s
=> [internal] load .dockerignore                                                0.0s
=> => transferring context: 28                                                  0.0s
=> [internal] load metadata for docker.io/library/python:3.7                  2.2s
=> [1/6] FROM docker.io/library/python:3.7@sha256:cb158b66aaaf68b642eea2246a9a4dcc6bc39bc634dccc43812ae44807c707  0.0s
=> [internal] load build context                                              0.0s
=> => transferring context: 2.23kB                                             0.0s
=> CACHED [2/6] RUN apt-get update                                             0.0s
=> CACHED [3/6] RUN mkdir /app                                                0.0s
=> CACHED [4/6] WORKDIR /app                                                  0.0s
=> [5/6] COPY . /app                                                         0.2s
=> [6/6] RUN pip install -r requirements.txt                                  88.7s
=> exporting to image                                                         1.7s
=> => exporting layers                                                         1.7s
=> => writing image sha256:94b320efab7a18815b1c5c4990e381dcef82f5a4b0c9ce7ea28827771891b12e  0.0s
=> naming to docker.io/library/plasma-app:latest                             0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
PS C:\Users\heiss\Desktop\Plasma-app-V0.2>
```

Progress 3

Uploading the Image to the IBM Container registry.



IBM Cloud Container Registry - N x +

https://cloud.ibm.com/registry/namespaces

IBM Cloud

Search resources and products...

CatalogManageSanjay J's Account

Container Registry

Quick start

Namespaces1

Repositories1

Images1

Trash0

Settings

Namespaces

Location

Dallas

Viewing filtered namespaces

A filter is applied so that only the namespace plasma-app is included in the table.

Show all namespaces

Resource group: Filter...Search

Create +

<input type="checkbox"/>	Name	Resource group	Repository count	Image count	Retention policy	
<input checked="" type="checkbox"/>	plasma-app	Default	1	1	Retain all images	

Items per page: 251-1 of 1 item11 of 1 page

IBM Cloud Container Registry - R x +

https://cloud.ibm.com/registry/repos

IBM Cloud

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Container Registry

Quick start

Namespaces1

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Search

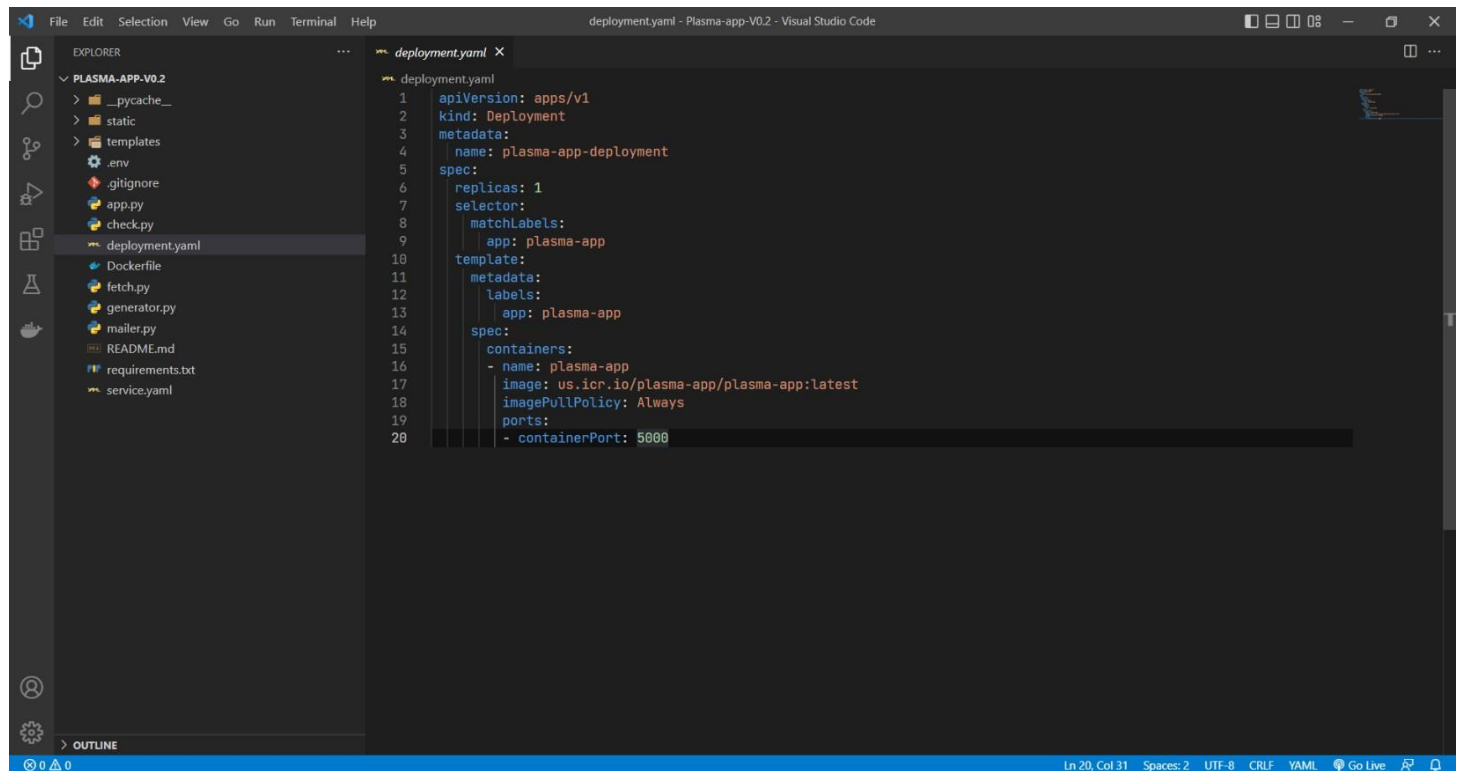
Create +

<input type="checkbox"/>	Name	Image count	Namespace	Last updated	
<input checked="" type="checkbox"/>	plasma-app us.icr.io/plasma-app/plasma-app	1	plasma-app	2 hours ago	

Items per page: 251-1 of 1 item11 of 1 page

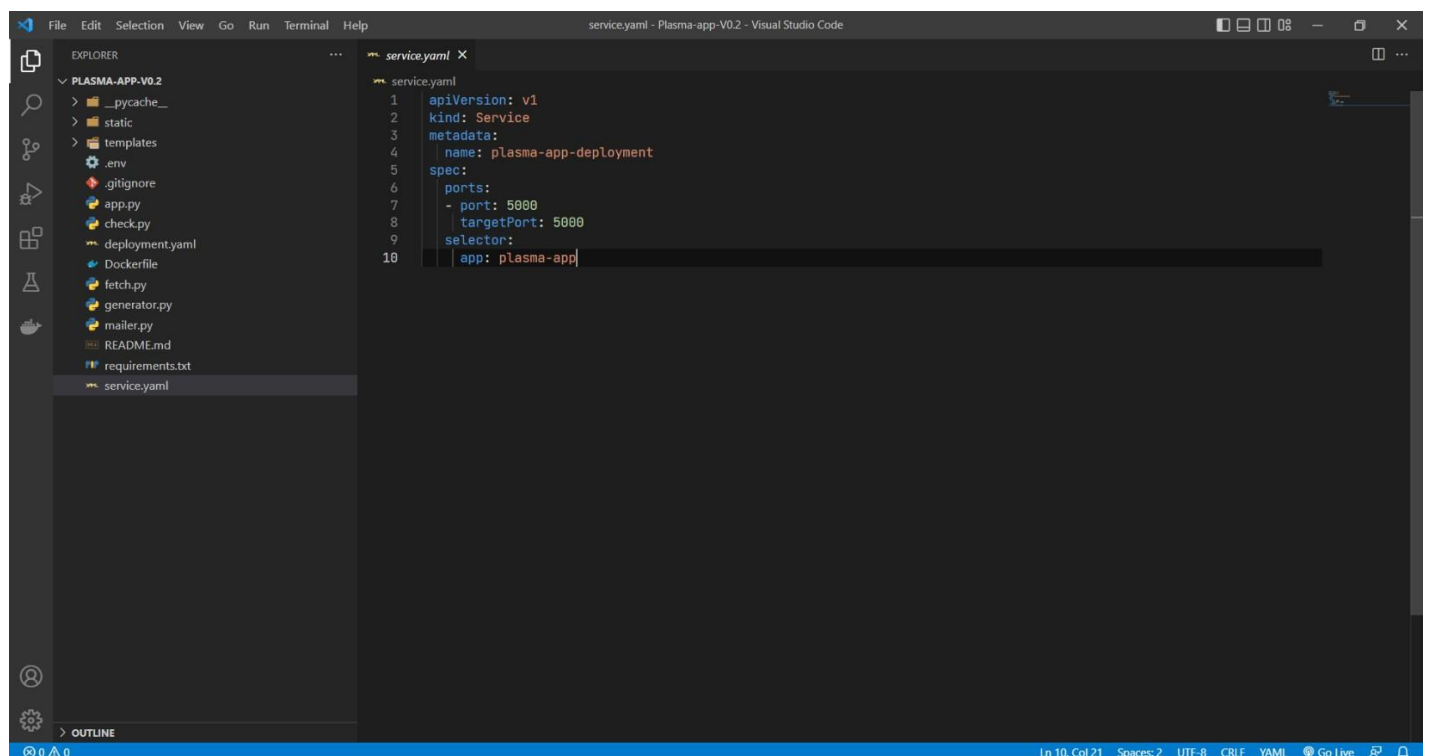
Progress 4

Deploy the image in Kubernetes cluster.



The screenshot shows the Visual Studio Code editor with the `deployment.yaml` file open. The Explorer sidebar on the left shows the project structure for `PLASMA-APP-V0.2`, including files like `__pycache__`, `static`, `templates`, `.env`, `.gitignore`, `app.py`, `check.py`, `deployment.yaml`, `Dockerfile`, `fetch.py`, `generator.py`, `mailer.py`, `README.md`, `requirements.txt`, and `service.yaml`. The `deployment.yaml` file is selected in the Explorer and its content is displayed in the main editor. The status bar at the bottom indicates the cursor is at line 20, column 31.

```
1  apiVersion: apps/v1
2  kind: Deployment
3  metadata:
4    name: plasma-app-deployment
5  spec:
6    replicas: 1
7    selector:
8      matchLabels:
9        app: plasma-app
10   template:
11     metadata:
12       labels:
13         app: plasma-app
14     spec:
15       containers:
16       - name: plasma-app
17         image: us.icr.io/plasma-app/plasma-app:latest
18         imagePullPolicy: Always
19         ports:
20         - containerPort: 5000
```



The screenshot shows the Visual Studio Code editor with the `service.yaml` file open. The Explorer sidebar on the left shows the project structure for `PLASMA-APP-V0.2`, including files like `__pycache__`, `static`, `templates`, `.env`, `.gitignore`, `app.py`, `check.py`, `deployment.yaml`, `Dockerfile`, `fetch.py`, `generator.py`, `mailer.py`, `README.md`, `requirements.txt`, and `service.yaml`. The `service.yaml` file is selected in the Explorer and its content is displayed in the main editor. The status bar at the bottom indicates the cursor is at line 10, column 21.

```
1  apiVersion: v1
2  kind: Service
3  metadata:
4    name: plasma-app-deployment
5  spec:
6    ports:
7    - port: 5000
8      targetPort: 5000
9    selector:
10      app: plasma-app
```

plasma-app - IBM Cloud

https://cloud.ibm.com/kubernetes/clusters/cdr4c5qf0ucaauc17jgg/overview

IBM Cloud Search resources and products... Catalog Manage Sanjay J's Account

Clusters / plasma-app Normal Expires in 30 days Add tags Help Kubernetes dashboard Actions...

Overview

Worker nodes
Worker pools
DevOps **New**

Expires in 30 days:
Be sure to back up your data, your cluster will be deleted in 30 days. To access the full capabilities of the service, try out a [standard cluster](#).

Node status
1 of 1
Normal
Details ↓

Add-on status
0 of 0
Normal
Details ↓

Master status
Normal
Docs ↗

Ingress status
Healthy ⓘ
Docs ↗

Details

Cluster ID	Version	Infrastructure	Zones
cd4c5qf0ucaauc17jgg	1.24.8_1544	Classic	Milan 01
Created	Resource group	Image security enforcement	
11/17/2022, 8:02 PM	Default	<input type="button" value="Enable"/>	

plasma-app - Kubernetes Dashboard

https://eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cdr4c5qf0ucaauc17jgg/service/#/workloads?namespace=default

kubernetes default Search

Workloads

Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage
Config Maps
Persistent Volume Claims
Secrets
Storage Classes
Cluster
Cluster Role Bindings

Workload Status

Running: 1
Deployments

Running: 1
Pods

Running: 1
Replica Sets

Deployments

Name	Images	Labels	Pods	Created ↑
plasma-app-deployment	us.icr.io/plasma-app/plasma-app:latest		1 / 1	46 minutes ago

--- Completed Sprint – 4 ---