**MONITOR\_URL**

1. **Clone the repo** : git clone <https://github.com/nitukiran23/Monitor_url.git>
2. **Build an image from Dockerfile** : docker build -t python-app .
3. **To run the image locally on Docker Desktop** :

* docker network create -d overlay --attachable my-attachable-overlay
* docker run -d -p 8000:8000 --name url-monitor --network=my-attachable-overlay python-app

Port 8000 needs to be exposed as this is the port where python app is injecting metrics into Prometheus.

1. **Start Prometheus on Docker Desktop** :

docker run -d -p 9090:9090 --name prom --network=my-attachable-overlay --expose=8000 -v Monitor\_url/prometheus.yml:/etc/prometheus/prometheus.yml prom/Prometheus

1. **Access the metrices ingested by app** : Hit localhost:8000/metrics to view the metrics as below :

Text

Description automatically generated

1. **Start Grafana** :

docker run -d -p 3000:3000 --name url-monitor --network=my-attachable-overlay grafana/grafana-enterprise

1. **View Grafana Dashboard :** After adding Prometheus as data source in Grafana, create a dashboard using below queries as shown in image :

Chart

Description automatically generated

1. **Unit test result for python app** :

Graphical user interface

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1. **Deploy to Kubernetes** : kubectl apply -f deployments.yaml