

## How to Dockerize PEDAT app:

### *Step 1: Create Docker file contains:*

```
# Use the official lightweight Python image.
# https://hub.docker.com/_/python
FROM python:3.9
# Allow statements and log messages to immediately appear in the Knative logs
ENV PYTHONUNBUFFERED True
EXPOSE 8080
# Copy local code to the container image.
ENV APP_HOME /app
WORKDIR $APP_HOME
COPY . ./
# Install production dependencies.
RUN pip install -r requirements.txt
# Run the web service on container startup. Here we use the gunicorn
# webserver, with one worker process and 8 threads.
# For environments with multiple CPU cores, increase the number of workers
# to be equal to the cores available.
# Timeout is set to 0 to disable the timeouts of the workers to allow Cloud Run to handle instance scaling.
CMD streamlit run --server.port 8080 --server.enableCORS false dash_beta.py
```

### *Step 2: Build the Docker Image:*

```
>> docker build -t pedat .
```

Here, -t pedat assigns the name "PEDAT" to your Docker image. The "." at the end of the command denotes that the Dockerfile is in the current directory.

### *Step 3: Verify the Image Creation:*

After the build process is complete, verify that the image is created by listing all Docker images:

```
>> docker images
```

### *Step 4: Run the Docker Container:*

To start a container from your image, use the following command:

```
>> docker run -p 8080:8080 pedat
```

### *Step 5: Push to a Container Registry (like Docker Hub):*

```
>> docker tag pedat yourusername/pedat
>> docker push yourusername/pedat
```