Regen Analytics App

Rafid Mahbub

1 Introduction

The Regen Analytics App, hereby referred to as 'the app', is a web application developed by a team of volunteers at DataKind in partnership with Regen Organics. The primary goal of this application is to provide Regen staff and ground team with an analytics dashboard that can be used to make more informed and data-driven business decisions. This manual aims to provide a very detailed description of how to run the app on a local environment, its various functionalities and notes on data interpretation. The workings of the app are based on the initial research phase of the project (please click on the GitHub link appearing in the footnote to be directed to the project repository).[1] As of writing this manual, the app is still in the development phase (`regen_app:v1.0.0-alpha`) with more features to be incorporated after testing carried out by the involved parties.

2 Running the app

Barring cloud deployment, the app is meant to run as Docker containers. Hence, users who wish to operate the app will required a running version of Docker installed on their PCs. For ease of use, we recommend installing Docker Desktop application, which has a simple graphical user interface (GUI), enabling users to monitor images and containers. This can be downloaded from https://docs.docker.com/desktop/ and is available for all major operating systems.

After installing Docker, the app's image needs to be pulled from an online repository. The image can be pulled from Docker Hub via

```
docker pull rmahbub503/regen_app:v1
```

Now, we are ready to build the image. For this, open the Docker Desktop app and click the **Terminal** button on the GUI (or use the default Terminal if you are running MacOS or Command Prompt if using Windows OS). Then execute the following command –

```
docker build -t <image_name:image_tag> .
```

where `<image_name:image_tag>` can be any chosen name. The `.` at the end of the command will build the image on your current directoy. This can be changed at the user's discretion. After the image is built, the app can be run as 'containers' as follows –

```
docker run --env-file .env.docker -p 8000:8000 <image_name:image_tag>
```

The `.env.docker` is an file that contains API keys, passwords and other authentication items necessary for the smooth running of the app. Once the Docker container is run, the app can be accessed from `0.0.0.0:8000` by Cntrl + click on Windows OS or Cmd + click on MacOS.

[1] Link to research project repository: https://github.com/RM503/DataKind_Geospatial.

3 Inside the app