# READ_ME

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## Jupyter Notebook Docker Container

This repository contains a Docker image for running a Jupyter Notebook with Python and to read in the
***taxonomic_data.csv*** and perform the following tasks:

1. Calculate total species count for each taxonomic phylum and the average species count per species
   within each phylum. Write the results to *csv* files.

2. Generate a bar chart showing the total species count for each phylum.

## How to Build and Run

1. **Build the Docker Image**:

```
docker build -t jupyter-notebook-image .
```

2. **Run the Docker Image**:

```
docker run -p 8888:8888 jupyter-notebook-image
```

3. **Access the Jupyter Notebook**:

Open a browser and go to http://127.0.0.1:8888 to access the Jupyter Notebook.