Modern NLP

Based on Deep Learning and Language models.
Day 2 Afternoon

Alexandre Gazagnes

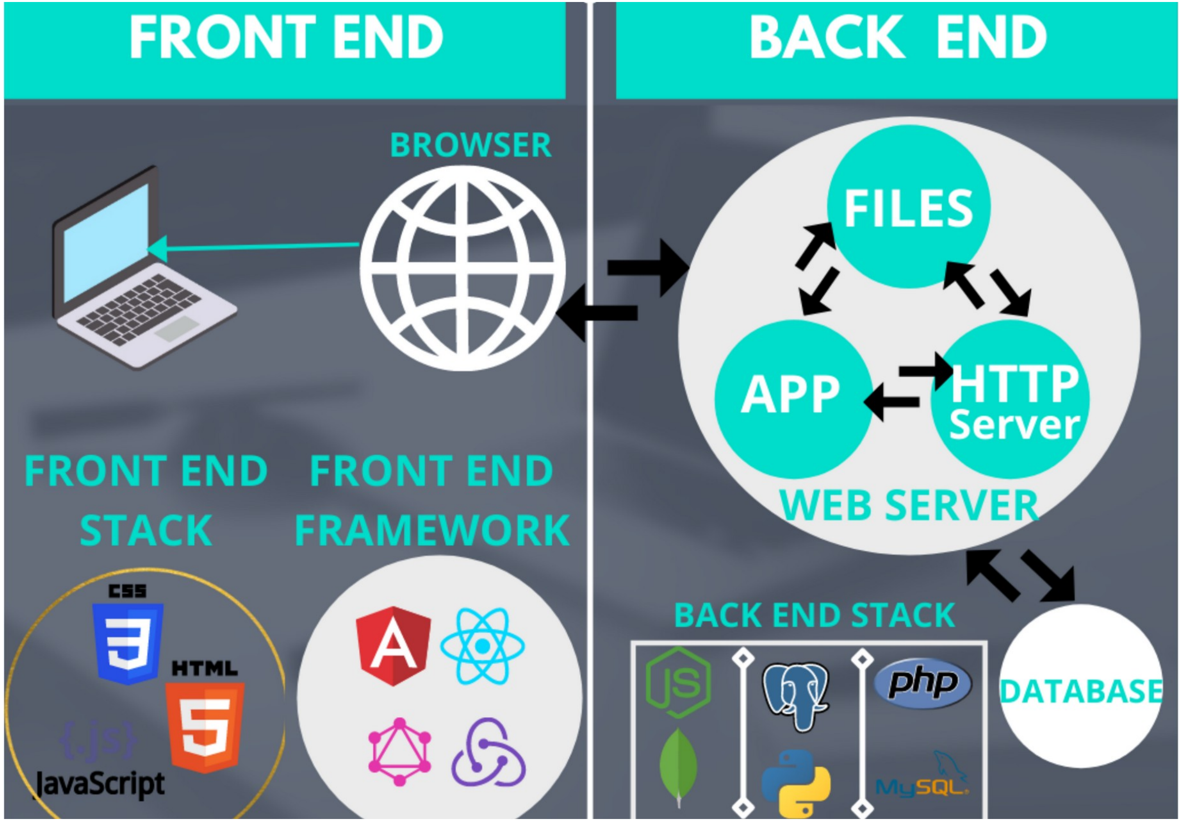
2nd Day

1. Morning (~ 2h)
    - Smallest remainder of Day 1
    - King – Man + Woman
    - Using advanced embedding techniques

2. Afternoon (~ 4h)
    - Gentle introduction to delivery API + front End
    - Transfert learning
    - Fine Tuning

First … Let’s Talk !

Back vs Front ?



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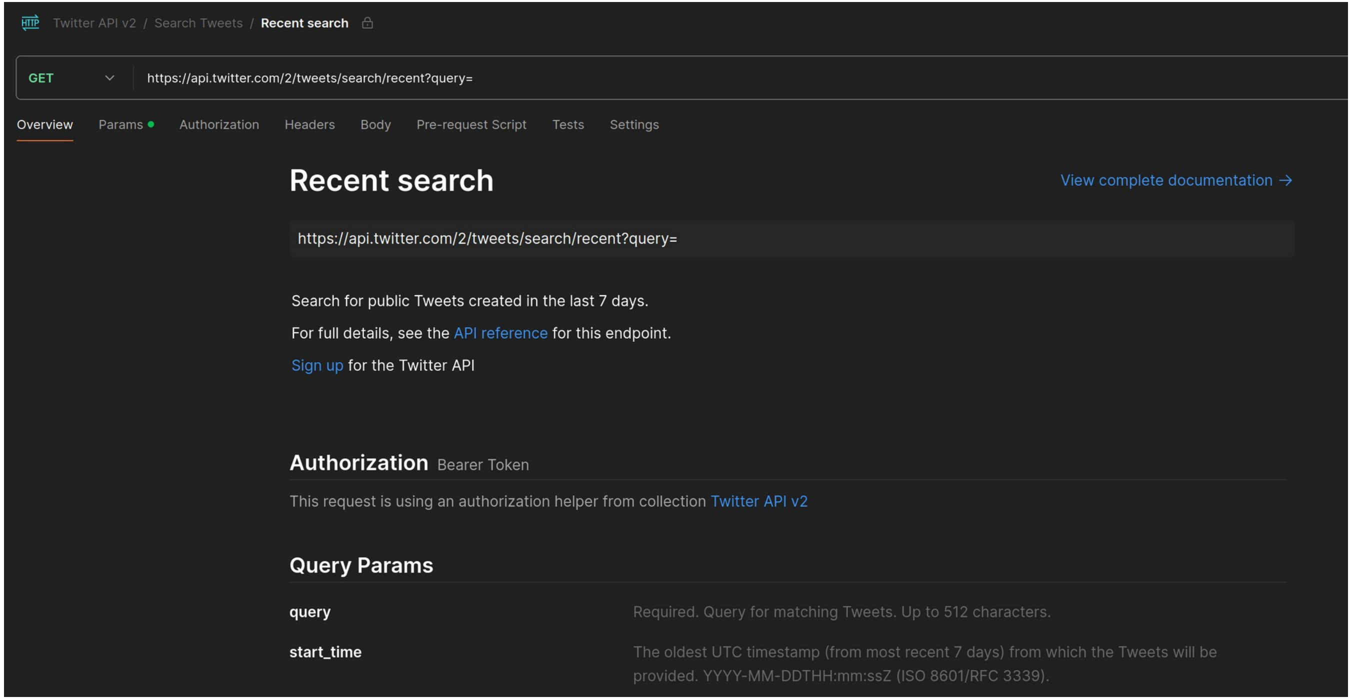
What is Back-End / API ?



Twitter API v2 / Search Tweets / Recent search
GET
Overview
Params
Authorization
Headers
Body
Pre-request Script
Tests
Settings
View complete documentation →

https://api.twitter.com/2/tweets/search/recent?query=

Recent search

https://api.twitter.com/2/tweets/search/recent?query=

Search for public Tweets created in the last 7 days.

For full details, see the API reference for this endpoint.

Sign up for the Twitter API

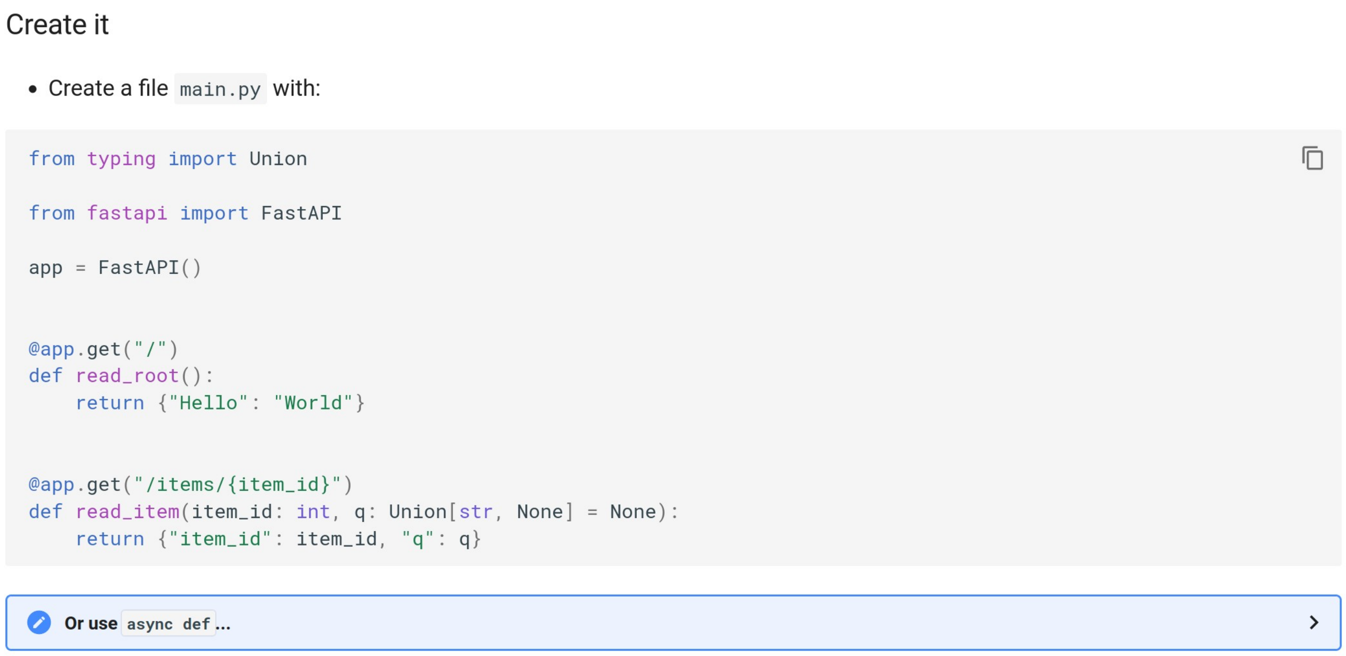
Authorization Bearer Token

This request is using an authorization helper from collection Twitter API v2

Query Params

query	Required. Query for matching Tweets. Up to 512 characters.
start_time	The oldest UTC timestamp (from most recent 7 days) from which the Tweets will be provided. YYYY-MM-DDTHH:mm:ssZ (ISO 8601/RFC 3339).

Fast API



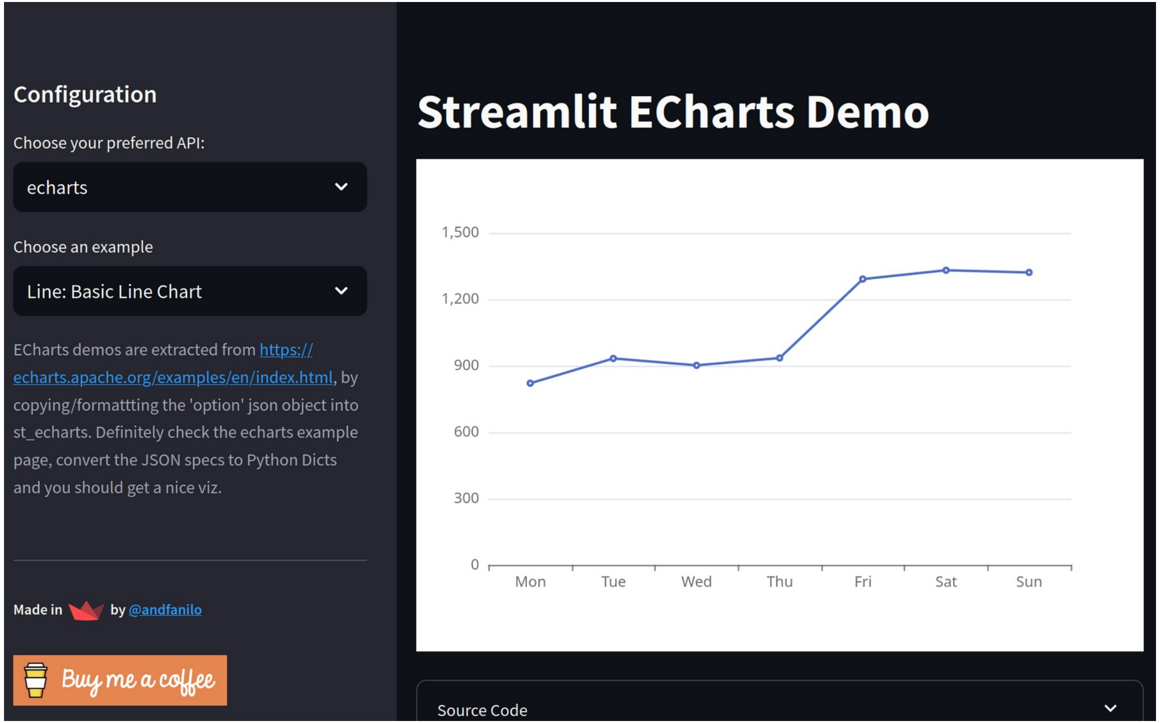
Create it

- Create a file `main.py` with:

```
from typing import Union

from fastapi import FastAPI

app = FastAPI()


@app.get("/")
def read_root():
    return {"Hello": "World"}


@app.get("/items/{item_id}")
def read_item(item_id: int, q: Union[str, None] = None):
    return {"item_id": item_id, "q": q}
```

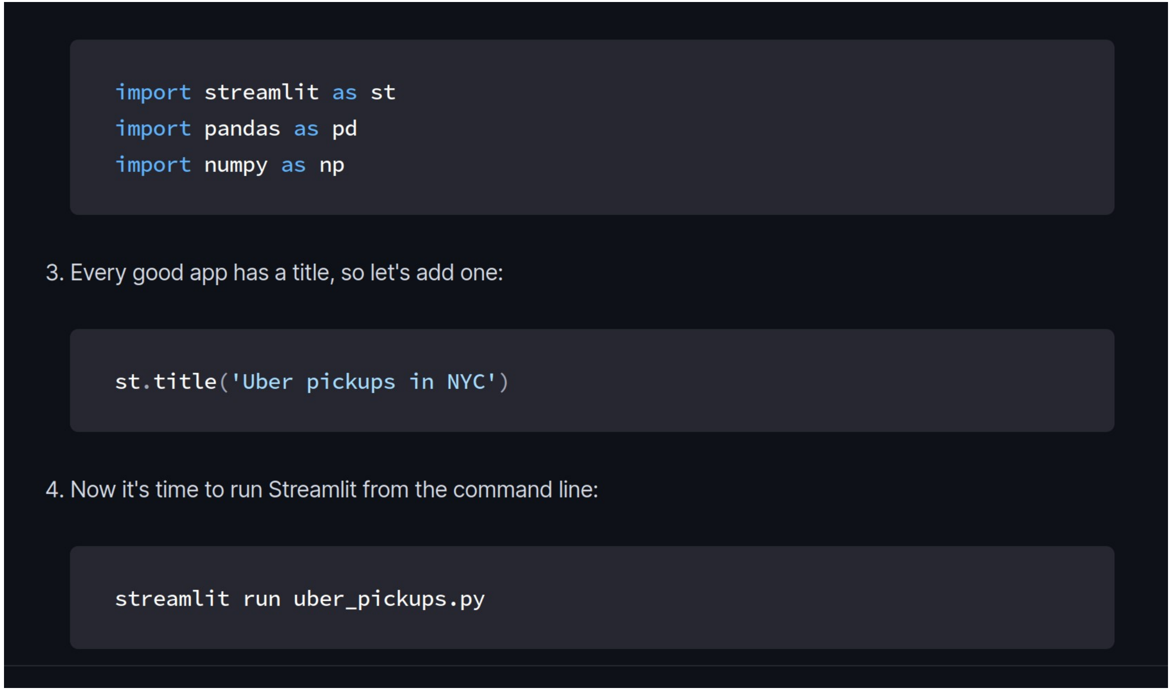
Or use `async def`...

What is Front End



ECharts demos are extracted from https://echarts.apache.org/examples/en/index.html, by copying/formattting the 'option' json object into st_echarts. Definitely check the echarts example page, convert the JSON specs to Python Dicts and you should get a nice viz.

Streamlit



```
import streamlit as st
import pandas as pd
import numpy as np
```

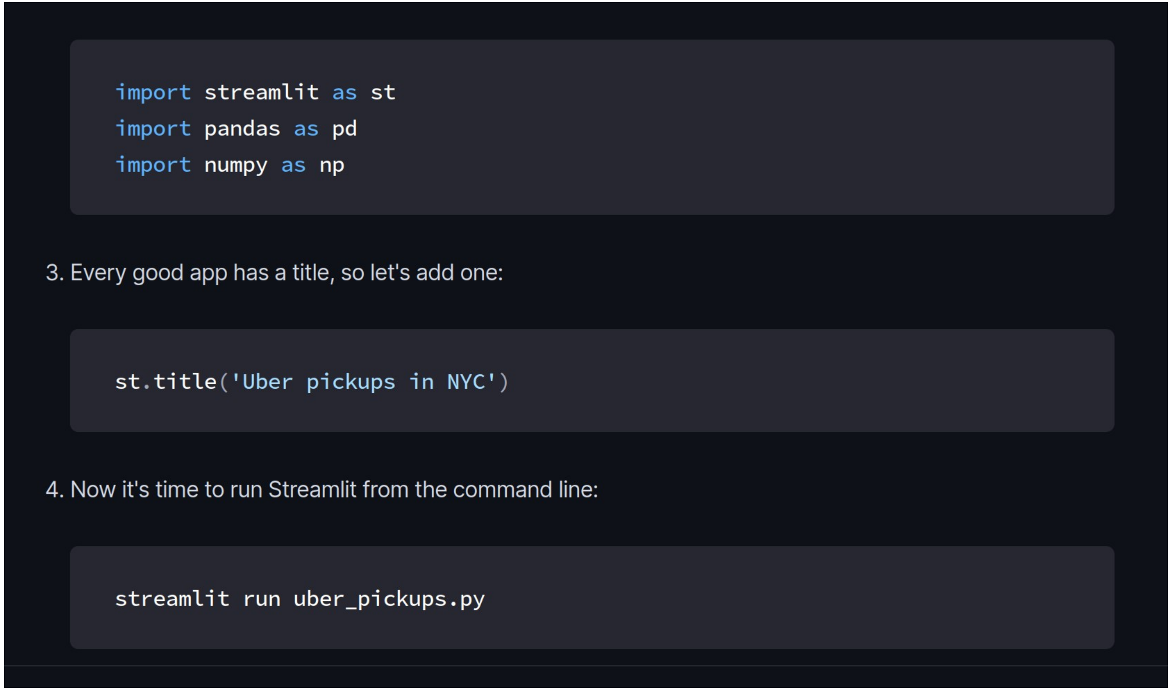
3. Every good app has a title, so let's add one:

```
st.title('Uber pickups in NYC')
```

4. Now it's time to run Streamlit from the command line:

```
streamlit run uber_pickups.py
```

Streamlit



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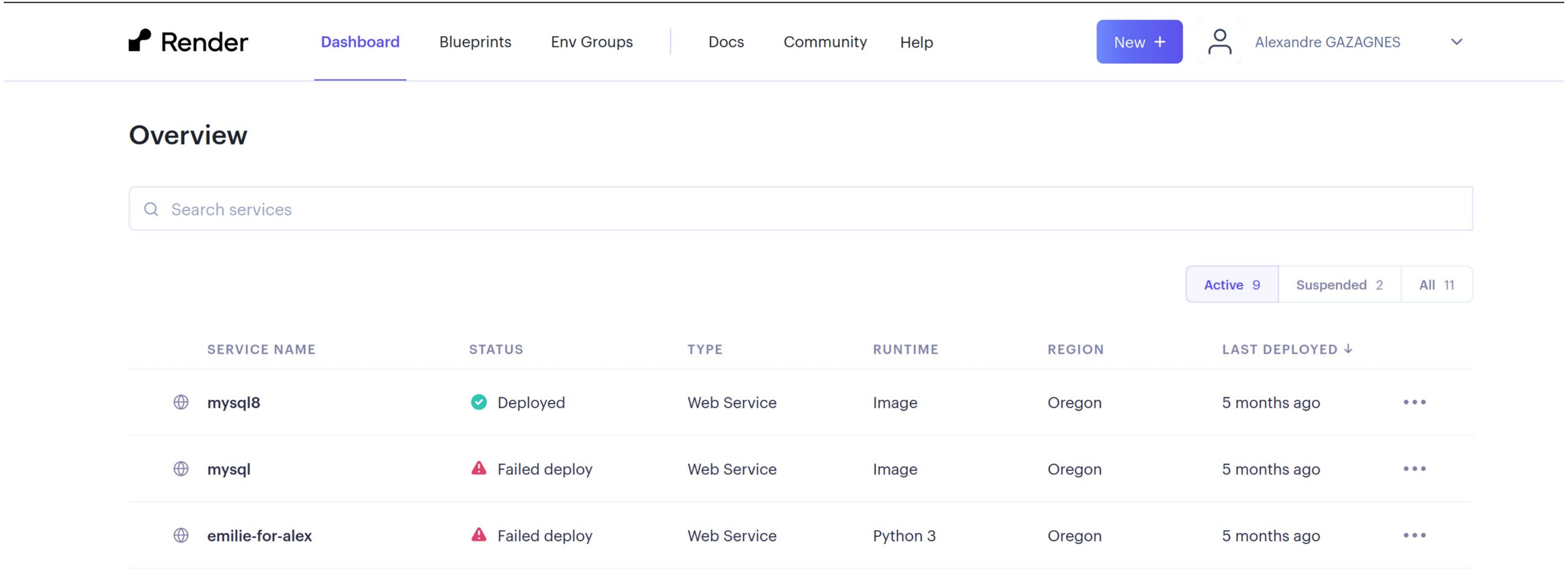
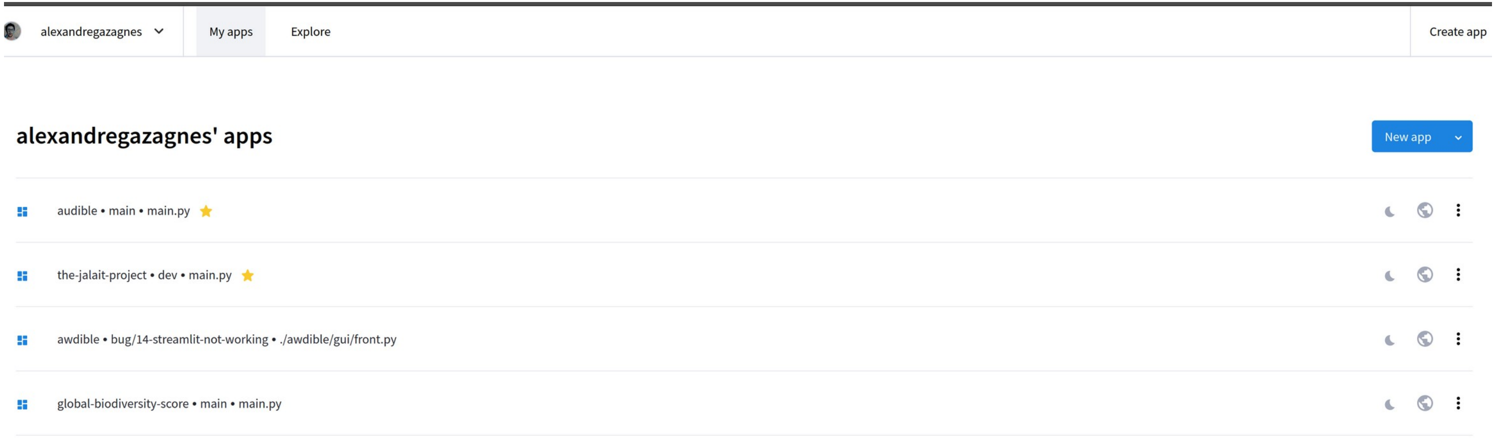
Production Back



Overview

SERVICE NAME	STATUS	TYPE	RUNTIME	REGION	LAST DEPLOYED ↓
mysql8	✓ Deployed	Web Service	Image	Oregon	5 months ago
mysql	⚠ Failed deploy	Web Service	Image	Oregon	5 months ago
emilie-for-alex	⚠ Failed deploy	Web Service	Python 3	Oregon	5 months ago

Production Front



alexandregazagnes' apps

- audible • main • main.py ⭐
- the-jalait-project • dev • main.py ⭐
- awdible • bug/14-streamlit-not-working • ./awdible/gui/front.py
- global-biodiversity-score • main • main.py

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Practice !

(FreeStyle ;))

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