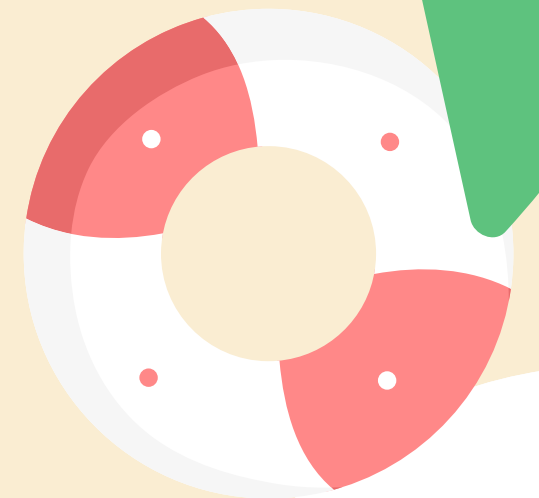


PYTHON PROJECT: VACATION PLANNER

'SUNNY SIDE UP' APP

BY MAHNI, MARTA, SEMA



INTRODUCTION

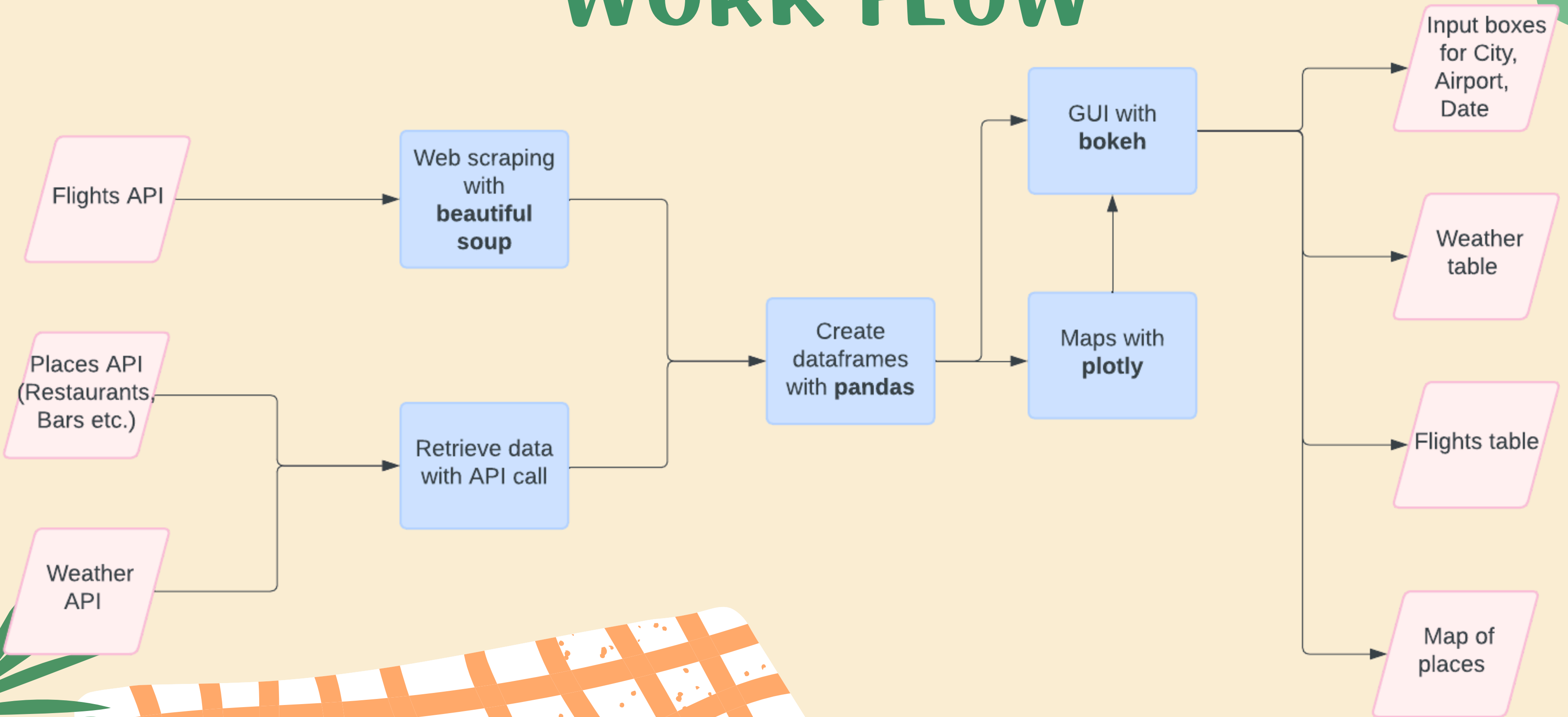
Task: Create a vacation planning app

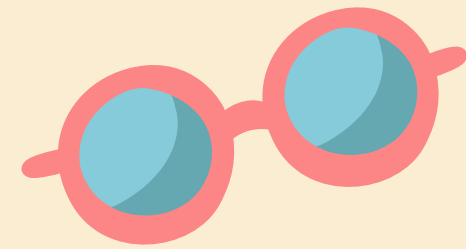
- Vacationing for 7 days
- Tropical destination
- Want to explore clubs, restaurants, bars
- Weather forecast
- Flight details

Aims:

- User inputs city & airport, chooses dates and flight details are shown
- User can see a map of bars & main airports, as well as a table of the weather forecast & flight details

WORK FLOW






HOW LLMS WERE USED

- OpenAI's ChatGPT:
 - First time creating GUI - became familiar with the Bokeh library
 - Connecting the API data and analysis with GUI
 - Researched best API for weather and places
- DeepAI:
 - To generate the logo



PROGRESS - GUI



Holidays by Sunny Side Up

City:
Athens ▼

Airport:
ATH ▼

Select a date range:
2024-06-09 to 2024-06-15

Discover this city

Best week based on high temperature: Athens, starting from 2024-06-09 with average temp 30.7°C.

Best week based on low humidity: Crete, starting from 2024-06-09 with average humidity 23.9%.

Best week based on low wind speed: Athens, starting from 2024-06-09 with average wind speed 14.7 kph.

#	City	Date	Temperature	Humidity	Condition	Wind Speed
0	Athens	2024-06-06	27.3	40	Patchy rain nea	13
1	Athens	2024-06-07	26.4	48	Patchy rain nea	23.8

IF FOOTAGE IS NOT WORK, TRY THIS

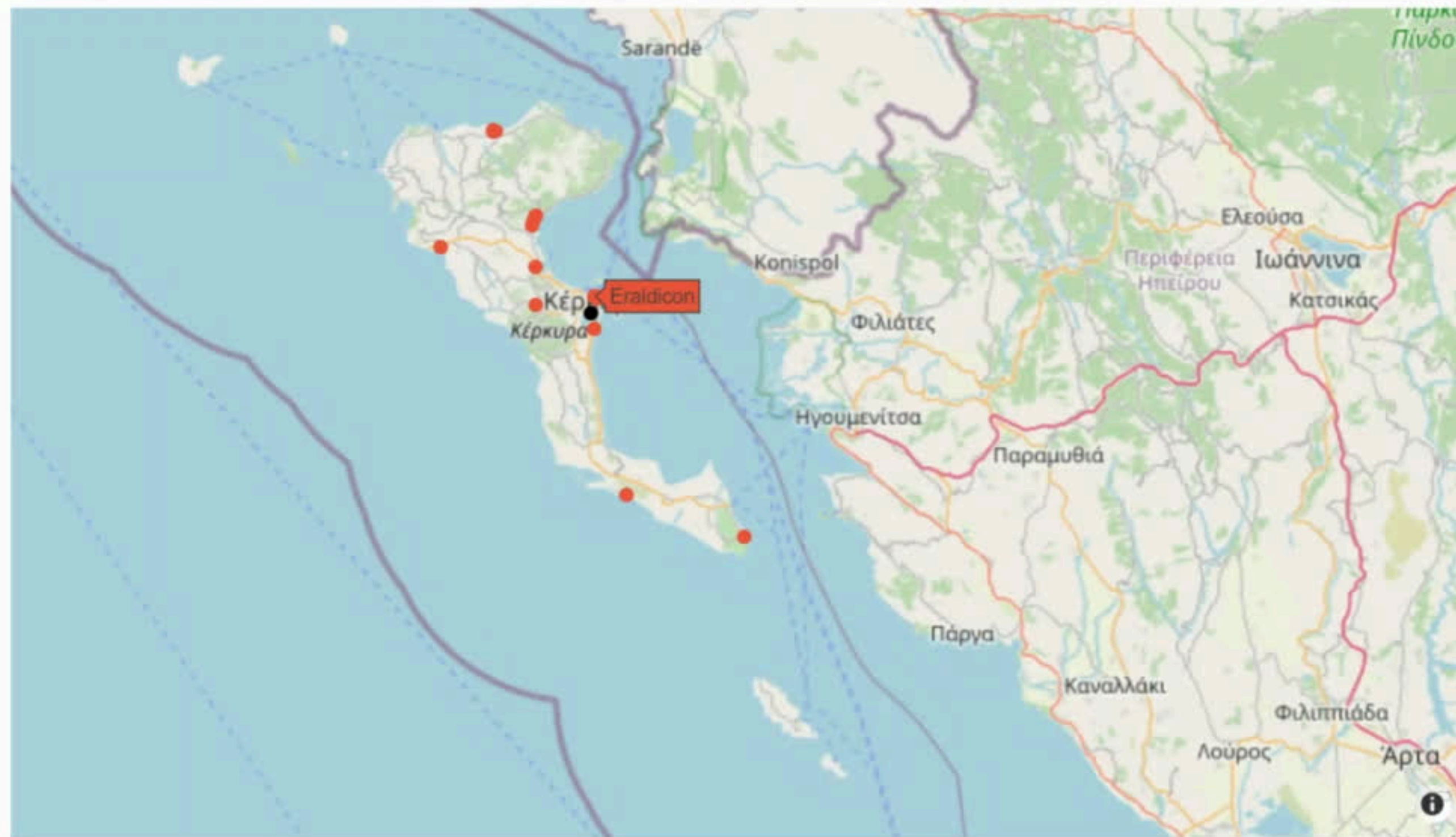
LINK:

<https://www.canva.com/design/DAGHWDTTXNG/UBDET2QUTUVHUCZFFRQLD>

[Q/EDIT?](#)

[UTM_CONTENT=DAGHWDTTXNG&UTM_C
AMPAIGN=DESIGNSHARE&UTM_MEDIUM
=LINK2&UTM_SOURCE=SHAREBUTTON](#)

PROGRESS – PLACES API MAP



- View
- Athens, Greece
 - Corfu Island, Greece
 - Heraklion, Crete, Greece
 - Zakynthos, Ionian Islands, Greece
 - Mykonos, Cyclades, Greece

PROGRESS – INTERACTIVITY

jupyter SunnySideUp Last Checkpoint: 54 minutes ago

File Edit View Run Kernel Settings Help

Trusted

JupyterLab Python 3 (ipykernel)

display(inputs, flight_details_output, weather_output)

BokehJS 3.3.4 successfully loaded.

Select CityLondon

Select AirportLondon Airport

Select Date13 / 06 / 2024

Get Flights

	DepartureAirport	ArrivalAirport	DepartureTime	ArrivalTime	Duration(hours)	PriceWithCurrency
0	MAD	BCN	07:30	08:55	01:25	51.17 EUR
1	MAD	BCN	15:10	16:35	01:25	51.17 EUR
2	MAD	BCN	21:35	22:50	01:15	51.67 EUR


	city	date	temp	humidity	condition	wind_speed
0	Barcelona	2024-06-06	23.4	58	Sunny	20.5
1	Barcelona	2024-06-07	23.5	55	Sunny	17.6

***WITH A DIFFERENT DATA SET AS OUR WEATHER API DID NOT HAVE DATA ON GREEK FLIGHTS**


CONCLUSIONS

- Overall, we needed more time to integrate the API data with the GUI
 - Our GUI works with 'manually' created lists and dictionaries but not very well with the data that we fetched through web scraping / API calls..
- Needed to self learn GUI as well as APIs
 - There are many frameworks such as Tkinter, Flask, Bokeh etc with their own mechanisms
 - More time is needed to become more familiar and make a well-informed decision on which framework is best


LESSONS LEARNED & REFLECTIONS



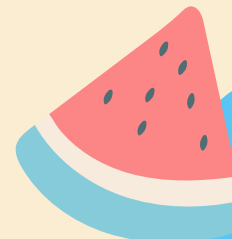
Start with a smaller scope (i.e. omit flight details until later)



Integrate the APIs and GUI section by section



Update your Jupyter Notebook (or make sure your group are all on the same version)



With more time we could potentially:
properly connect the API data with the GUI, add historical weather data/extended forecasts, optimise the data fetching, make the interface more visually appealing



THANK YOU

Questions!

