



AN INTERACTIVE DASHBOARD FOR SHANGHAI PROPERTY MANAGERS

LESLIE CARDONE

PROBLEM:

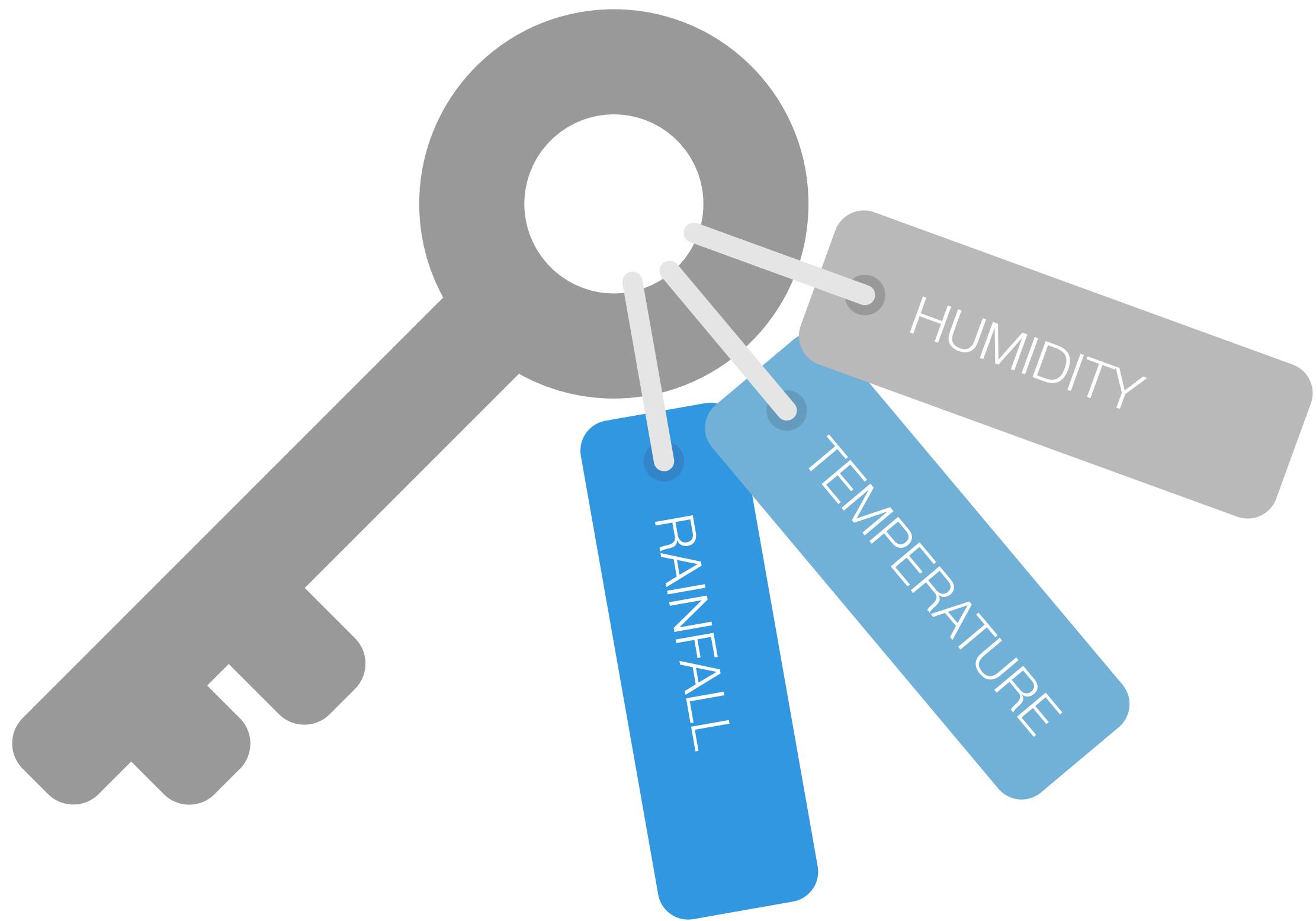
SHANGHAI IS HUMID



A photograph showing a dense cluster of palm trees and other tropical foliage growing from a large concrete structure, likely a water feature or artificial island, in a city setting. In the background, there are modern apartment buildings and a body of water.

**EXTREMELY
HUMID**

MOLD GROWTH



01

**HUMIDITY LEVELS
AS LOW AS 55%**

02

**TEMPERATURES AS
LOW AS 70 F**

03

**WATER LEAKS,
CONDENSATION, OR
FLOODING**

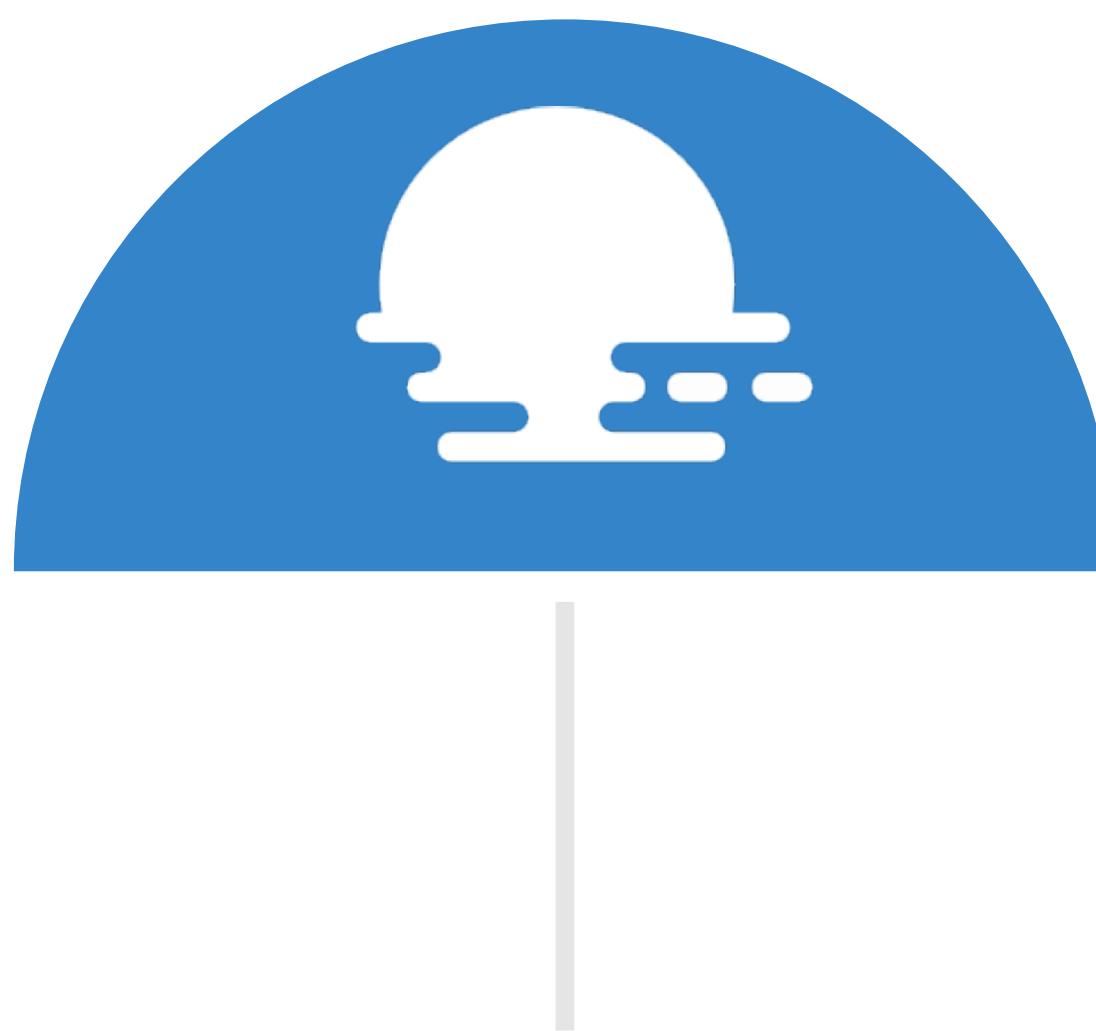


GOALS:

**CAPTURE WEATHER
DATA THROUGH
RESTFUL API CALLS**

**AUTOMATE A 24/7 ETL
PIPELINE**

**SERVE DATA FOR PUBLIC
CONSUMPTION WITH A
WEB APPLICATION**



OPEN WEATHER MAP

“Current Weather Data”

“One Call API”

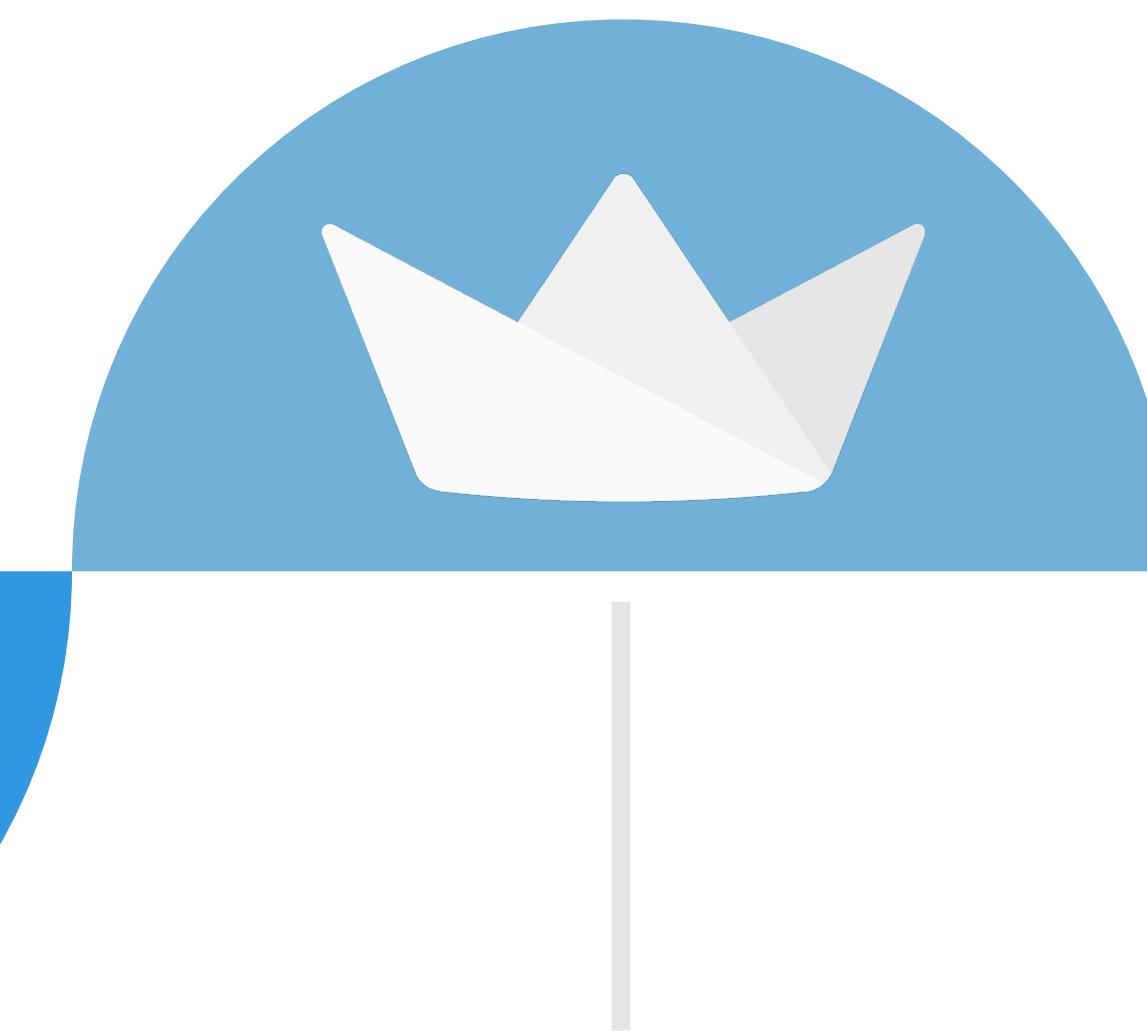
GOOGLE CLOUD PLATFORM

Functions

Scheduler

Secrets Manager

Firestore



STREAMLIT

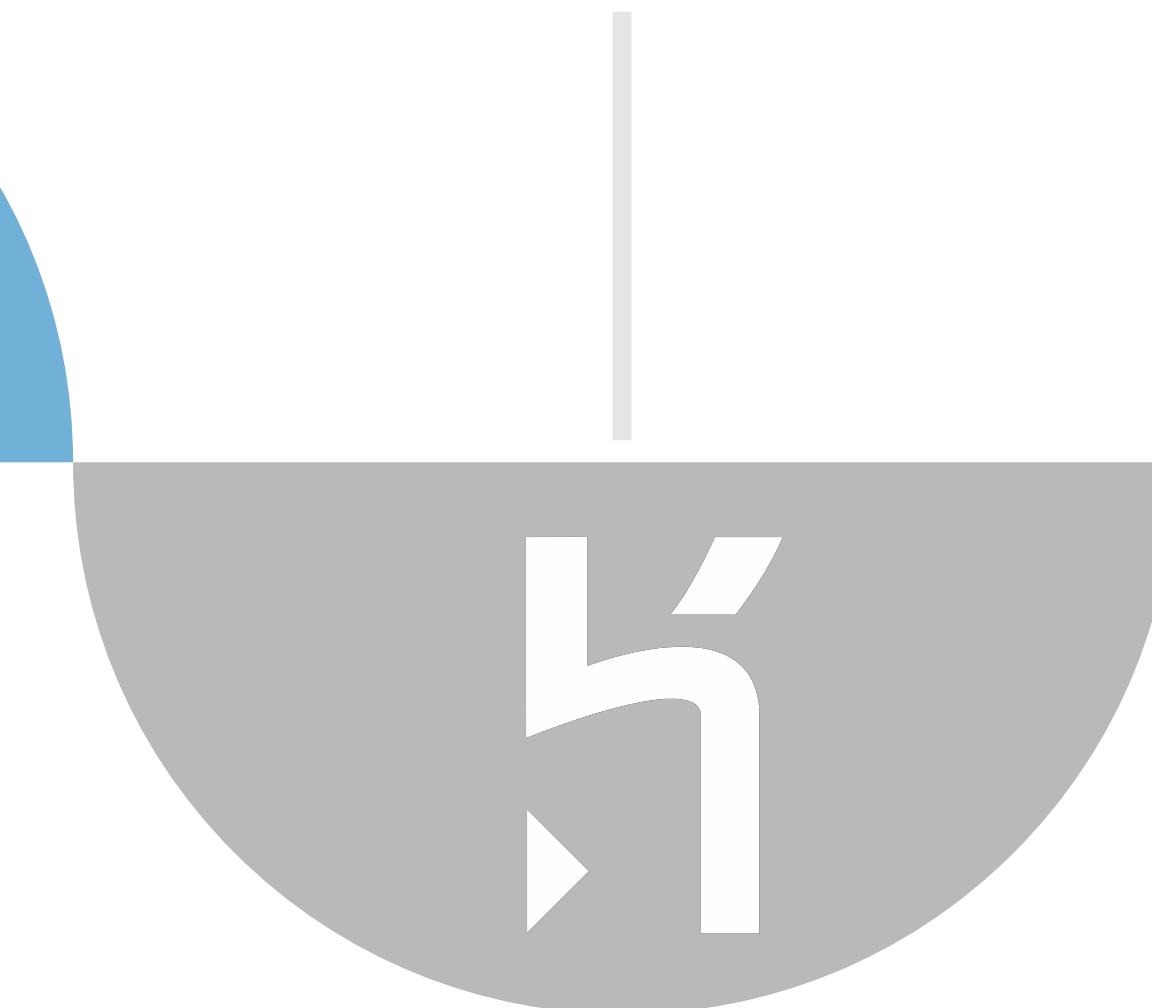
Python Client for Firestore

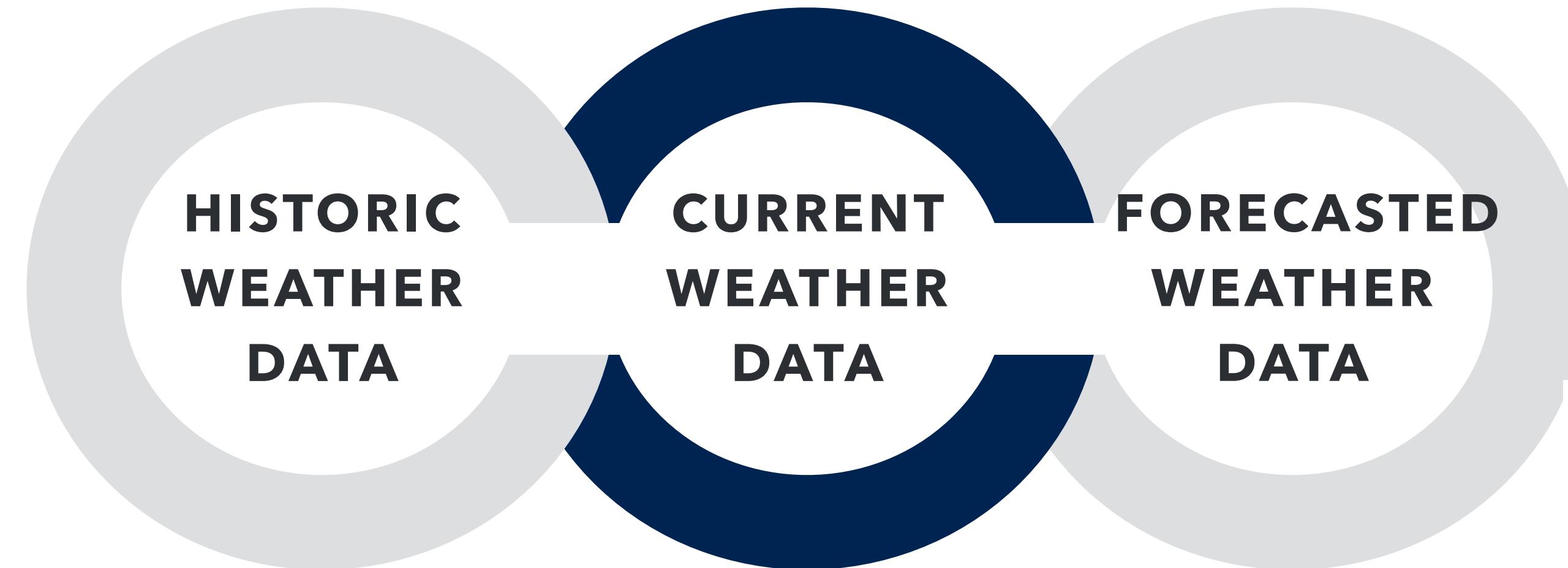
Pandas

Altair

HEROKU

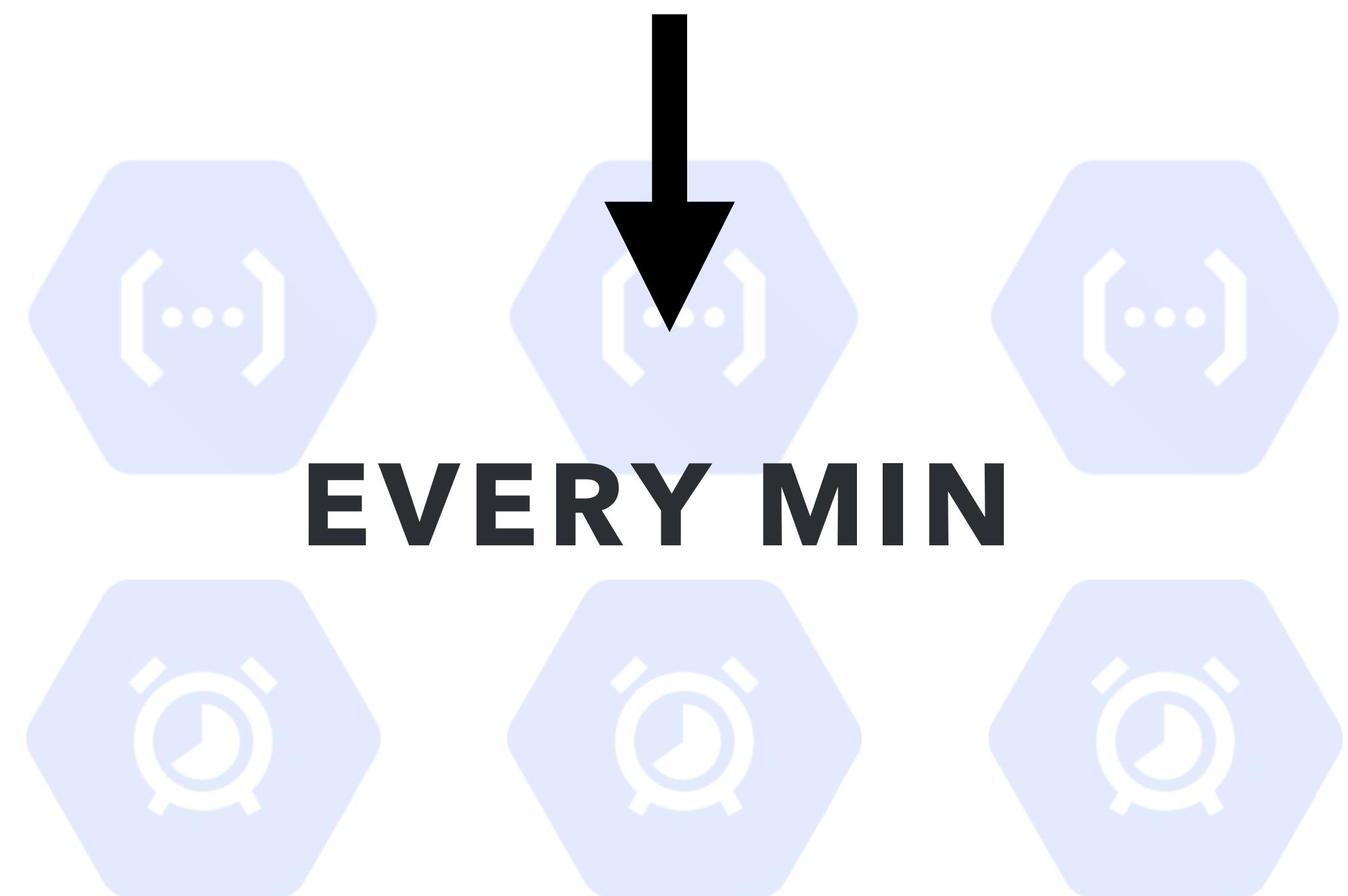
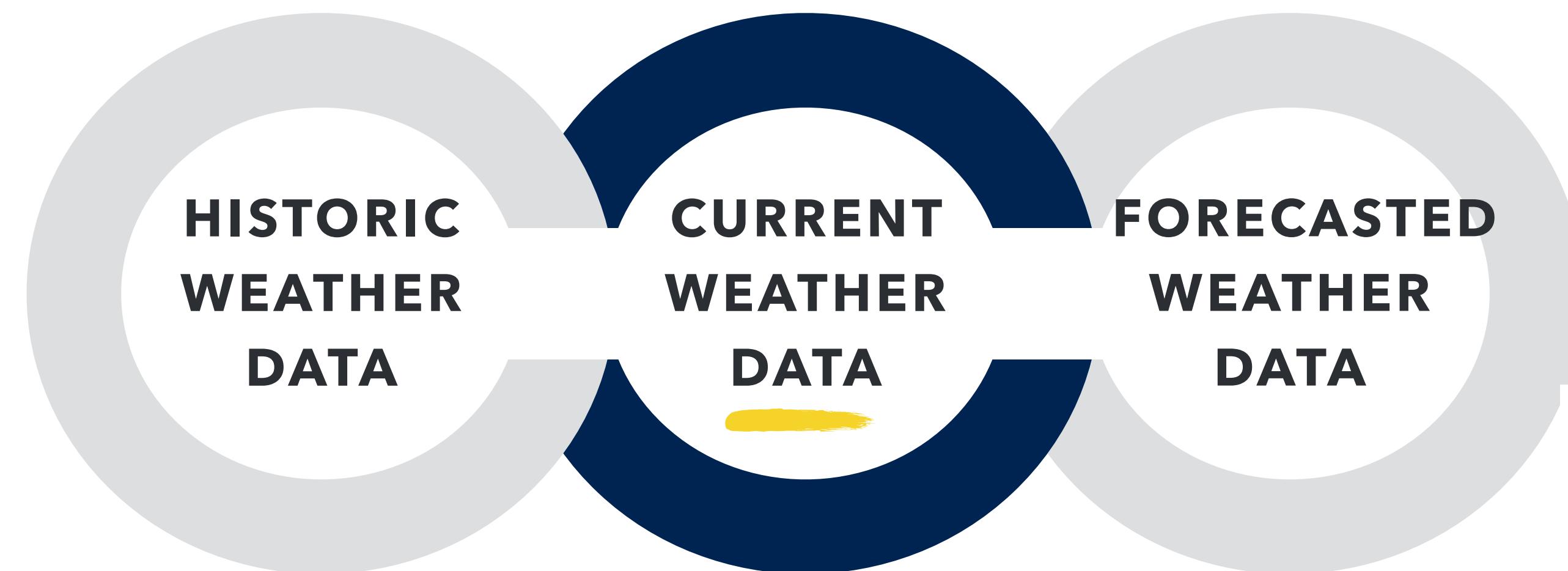
Deploy to cloud





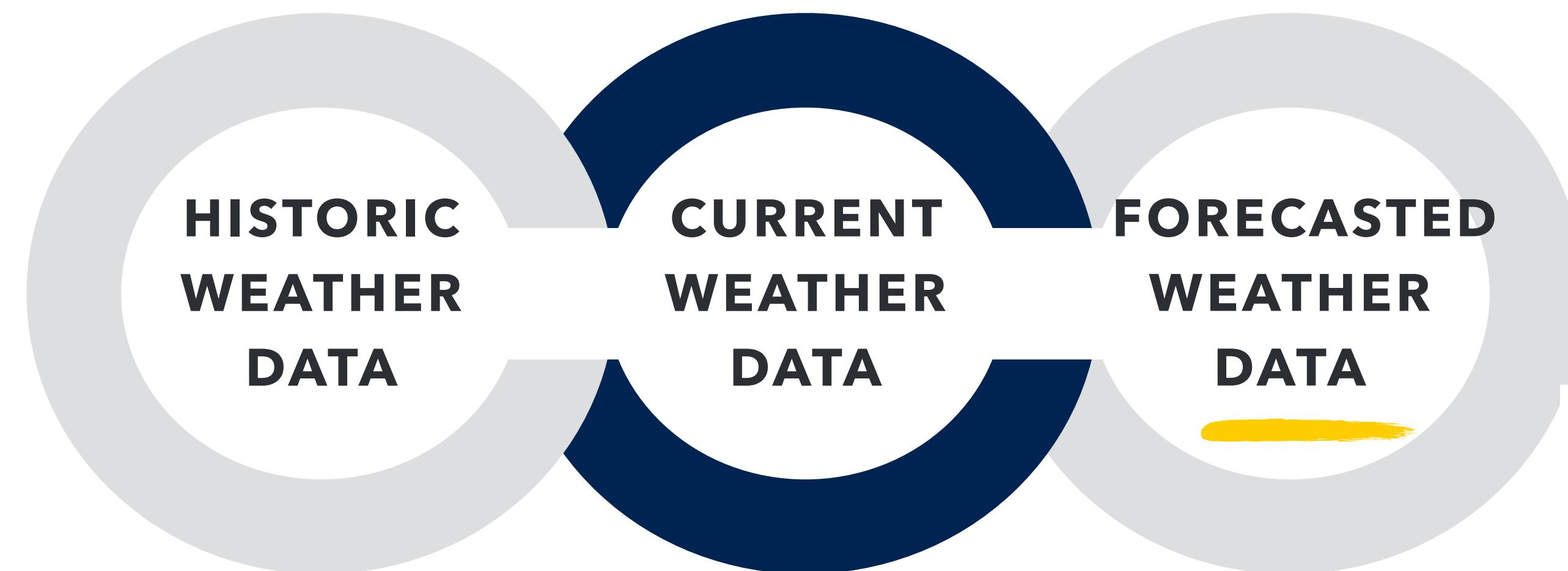
Cloud
Firestore



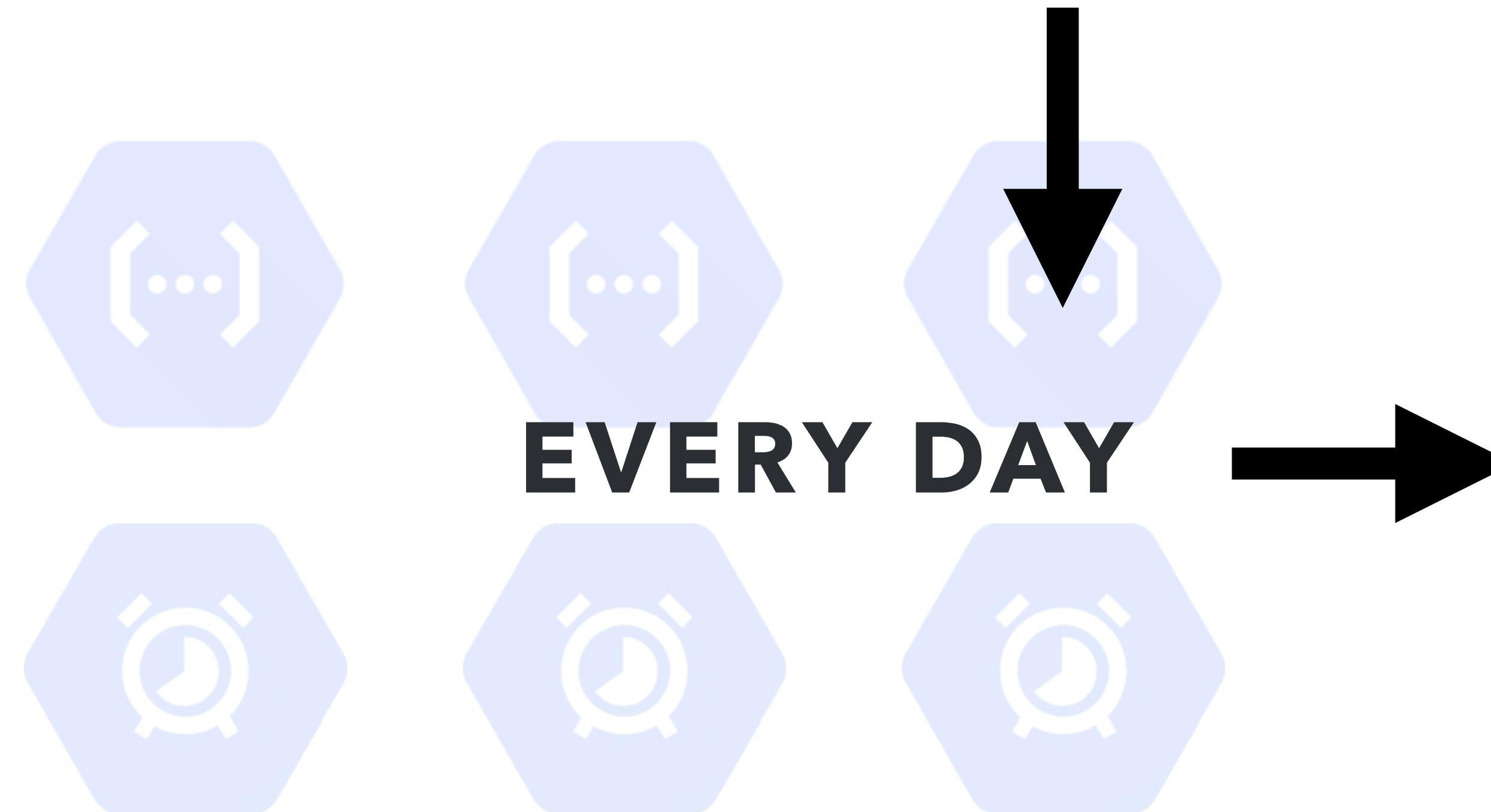


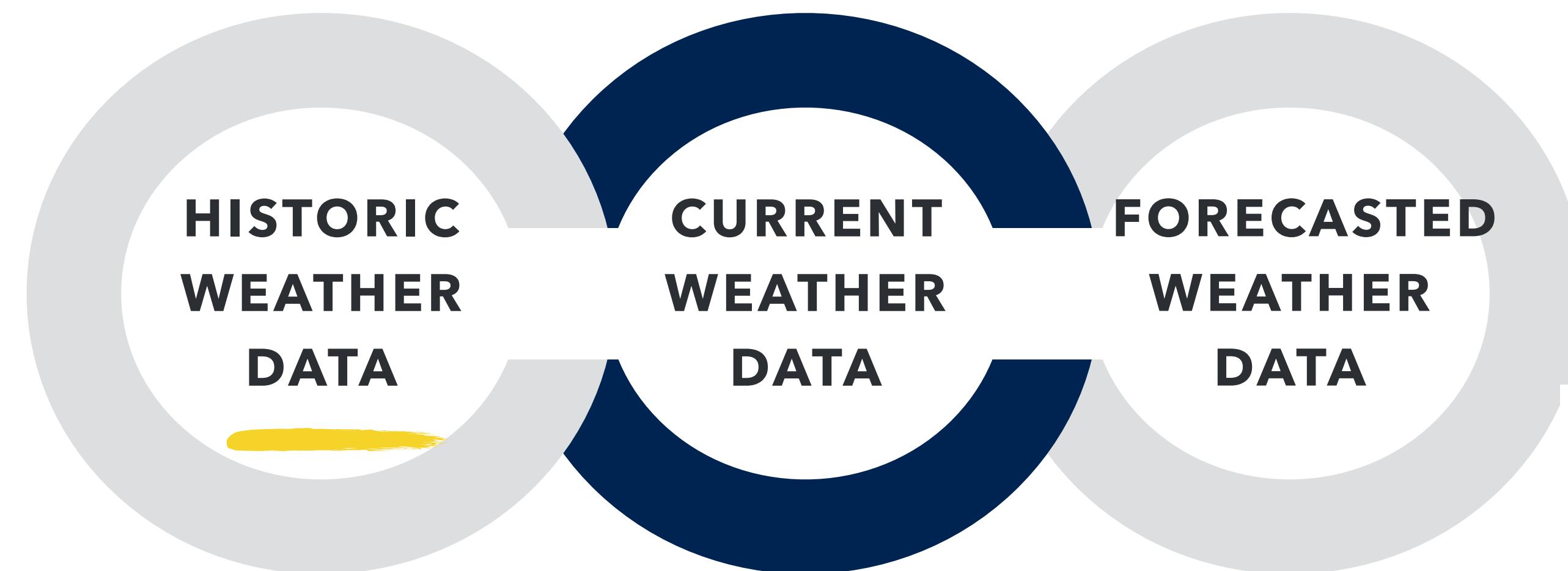
Cloud
Firestore





Cloud
Firestore





Cloud
Firestore





FUTURE WORK

- 1. MAKE CLOUD FUNCTIONS IDEMPOTENT**
- 2. INCLUDE FORECAST DATA**
- 3. CALCULATE TIME OVER 55% HUMIDITY AND 20 DEGREES CELSIUS**
- 4. TRANSLATE INTO MANDARIN**

THANK YOU!