VacationPy

Starter Code to Import Libraries and Load the Weather and Coordinates Data

```
In [1]:  # Dependencies and Setup
         import hvplot.pandas
         import pandas as pd
         import json
         import requests

         # Import API key
         from api_keys import geoapify_key
```

```
In [2]:  # Load the CSV file created in Part 1 into a Pandas DataFrame
         city_data_df = pd.read_csv("../output_data/cities.csv")

         # Display sample data
         city_data_df.head()
```

Out[2]:

	City_ID	City	Lat	Lng	Max Temp	Humidity	Cloudiness	Wind Speed	Country
0	0	bredasdorp	-34.5322	20.0403	16.22	77	100	3.24	ZA
1	1	adamstown	-25.0660	-130.1015	22.48	76	100	7.10	PN
2	2	iskateley	67.6803	53.1512	-16.10	95	16	3.13	RU
3	3	east london	-33.0153	27.9116	20.52	83	0	5.14	ZA
4	4	tiksi	71.6872	128.8694	-34.15	98	42	3.08	RU

Step 1: Create a map that displays a point for every city in the `city_data_df` DataFrame. The size of the point should be the humidity in each city.

```
In [3]:  %%capture --no-display

         # Configure the map plot
         city_map = city_data_df.hvplot.points(
             x="Lng",
             y="Lat",
```

```
        c="Humidity",
        hover_cols=["City"],
        colormap="plasma",
        title="City Map with Humidity",
        xlabel="Longitude",
        ylabel="Latitude",
        size="Humidity",
        frame_width=600,
        frame_height=400,
        tiles="OSM",
        geo=True
)

# Display the map
city_map
```

Out[3]:

Step 2: Narrow down the `city_data_df` DataFrame to find your ideal weather condition

In [4]:
```
# Narrow down cities that fit criteria and drop any results with null values
fit_city_data_df = city_data_df[
    (city_data_df["Max Temp"] >= 20) & (city_data_df["Max Temp"] <= 30) &
    (city_data_df["Wind Speed"] < 5) & (city_data_df["Cloudiness"] < 20)
]
# Drop any rows with null values
drop_city_data = fit_city_data_df.dropna()

# Display sample data
drop_city_data.head()
```

Out[4]:

	City_ID	City	Lat	Lng	Max Temp	Humidity	Cloudiness	Wind Speed	Country
6	6	port elizabeth	-33.9180	25.5701	21.29	78	0	3.60	ZA
46	46	takoradi	4.8845	-1.7554	26.97	85	14	3.14	GH
70	70	sao jose da coroa grande	-8.8978	-35.1478	25.58	77	12	3.57	BR
81	81	lihue	21.9789	-159.3672	22.77	78	0	1.54	US
82	82	cartagena	10.3997	-75.5144	25.79	89	0	1.54	CO

Step 3: Create a new DataFrame called `hotel_df`.

In [5]:
```
# Use the Pandas copy function to create DataFrame called hotel_df to store the cit
hotel_df = city_data_df.copy()
```

```
# Add an empty column, "Hotel Name," to the DataFrame so you can store the hotel fo
hotel_df["Hotel Name"] = ""

# Display sample data
hotel_df.head()
```

Out[5]:

	City_ID	City	Lat	Lng	Max Temp	Humidity	Cloudiness	Wind Speed	Country
0	0	bredasdorp	-34.5322	20.0403	16.22	77	100	3.24	ZA
1	1	adamstown	-25.0660	-130.1015	22.48	76	100	7.10	PN
2	2	iskateley	67.6803	53.1512	-16.10	95	16	3.13	RU
3	3	east london	-33.0153	27.9116	20.52	83	0	5.14	ZA
4	4	tiksi	71.6872	128.8694	-34.15	98	42	3.08	RU

Step 4: For each city, use the Geoapify API to find the first hotel located within 10,000 metres of your coordinates.

In [6]:
```python
# Set parameters to search for a hotel
radius = 10000
params = {
    "radius": radius,
    "categories": "tourism,accommodation",
    "apiKey": geoapify_key
}

# Print a message to follow up the hotel search
print("Starting hotel search")

# Iterate through the hotel_df DataFrame
for index, row in hotel_df.iterrows():
    # get latitude, longitude from the DataFrame
    lat = row["Lat"]
    lon = row["Lng"]

    # Add filter and bias parameters with the current city's latitude and longitude
    params["filter"] = f"circle:{lon},{lat},{radius}"
    params["bias"] = f"proximity:{lon},{lat}"

    # Set base URL
    base_url = "https://api.geoapify.com/v2/places"


    # Make and API request using the params dictionaty
    response = requests.get(base_url, params=params)

    # Convert the API response to JSON format
    name_address = response.json()
```

```python
    # Grab the first hotel from the results and store the name in the hotel_df Data
    try:
        hotel_df.loc[index, "Hotel Name"] = name_address["features"][0]["properties
    except (KeyError, IndexError):
        # If no hotel is found, set the hotel name as "No hotel found".
        hotel_df.loc[index, "Hotel Name"] = "No hotel found"

    # Log the search results
    print(f"{hotel_df.loc[index, 'City']} - nearest hotel: {hotel_df.loc[index, 'Ho

# Display sample data
hotel_df
```

```
Starting hotel search
bredasdorp - nearest hotel: Victoria Hotel
adamstown - nearest hotel: No hotel found
iskateley - nearest hotel: No hotel found
east london - nearest hotel: No hotel found
tiksi - nearest hotel: Арктика
campos belos - nearest hotel: No hotel found
port elizabeth - nearest hotel: Waterford Hotel
jamestown - nearest hotel: Robert H. Jackson Center
blackmans bay - nearest hotel: No hotel found
morondava - nearest hotel: Hotel Sharon Menabe
thompson - nearest hotel: Thompson Inn
gisborne - nearest hotel: No hotel found
grytviken - nearest hotel: Guano Factory
summerside - nearest hotel: Comme Chez Vous
tolanaro - nearest hotel: Hôtel Mahavokey
anna regina - nearest hotel: Damon Monument
olonkinbyen - nearest hotel: Moon surface viewpoint
lompoc - nearest hotel: Alano Club
chonchi - nearest hotel: Centenario
sirjan - nearest hotel: خانه معلم سيرجان
margaret river - nearest hotel: No hotel found
nova vicosa - nearest hotel: Baleia Jubarte
yinchuan - nearest hotel: 鼓楼
albany - nearest hotel: No hotel found
port blair - nearest hotel: Circuit House
puerto ayora - nearest hotel: Tuneles de Lava
college - nearest hotel: Circle of Flags
udachny - nearest hotel: Вилюй
ubari - nearest hotel: جكو العظمى
edinburgh of the seven seas - nearest hotel: Sea View
ribeira grande - nearest hotel: Quinta das Bunganvílias
vorgashor - nearest hotel: No hotel found
pamandzi - nearest hotel: Gite Le Madina
alaghsas - nearest hotel: SOS GAZ
constantia - nearest hotel: Ioan N. Roman
mount pearl - nearest hotel: Greenwood Lodge
leava - nearest hotel: Fia fia
dalandzadgad - nearest hotel: Хан Уул буудал
yurga - nearest hotel: Цитадель
iqaluit - nearest hotel: Frobisher Inn
vilyuchinsk - nearest hotel: Алексеевский парк
west island - nearest hotel: My Island Home
port-aux-francais - nearest hotel: Tour météo
hammerfest - nearest hotel: No hotel found
isafjordur - nearest hotel: Sjómannastyttan
ushuaia - nearest hotel: Apart Hotel Aires del Beagle
takoradi - nearest hotel: Hillcrest
kodiak - nearest hotel: Russian Heritage Inn
carutapera - nearest hotel: No hotel found
la'ie - nearest hotel: La'ie Social Hall
yellowknife - nearest hotel: No hotel found
tanumah - nearest hotel: No hotel found
fale old settlement - nearest hotel: Old Hospital
zhangjiakou - nearest hotel: 商务宾馆
hushitai - nearest hotel: No hotel found
```

fort mcmurray - nearest hotel: Nomad Hotel and Suites
lebu - nearest hotel: Los filtros
kapit - nearest hotel: Clock Tower
st. john's - nearest hotel: No hotel found
anadyr - nearest hotel: No hotel found
acarau - nearest hotel: No hotel found
flying fish cove - nearest hotel: Christmas Island Lodge
bethel - nearest hotel: No hotel found
bismarck - nearest hotel: Radisson Hotel Bismarck
mto wa mbu - nearest hotel: Best View Lodge
santa terezinha - nearest hotel: Pousada Santa Terezinha
rio gallegos - nearest hotel: Amérian Río Gallegos Apart & Suites
kangding - nearest hotel: Yong Zhu Motel
talnakh - nearest hotel: Горняк
puerto natales - nearest hotel: Hostal Dorotea
sao jose da coroa grande - nearest hotel: Pousada Rota dos Corais
waitangi - nearest hotel: Centennial and War Memorial Hall
la mira - nearest hotel: Monumento a Lázaro Cárdenas
bardai - nearest hotel: No hotel found
ilulissat - nearest hotel: Best Western Plus Hotel Ilulissat
gadzhiyevo - nearest hotel: No hotel found
kasongo - nearest hotel: No hotel found
alpena - nearest hotel: No hotel found
pangody - nearest hotel: Победа!
nemuro - nearest hotel: お宿エクハシ
mstera - nearest hotel: No hotel found
lihue - nearest hotel: Statue of Dr. Jose Rizal y Mercado
cartagena - nearest hotel: airbnb
quatre cocos - nearest hotel: Horisun
port mathurin - nearest hotel: Compagnie des Artisans Rodriguais
nogliki - nearest hotel: Кладбище кораблей
pangkalan brandan - nearest hotel: Taman Bahagia
calvinia - nearest hotel: Hantam Huis
myronivka - nearest hotel: Мирон Зелений
aasiaat - nearest hotel: No hotel found
sitka - nearest hotel: No hotel found
labrador city - nearest hotel: Carol Inn
abilene - nearest hotel: No hotel found
susuman - nearest hotel: No hotel found
boa vista - nearest hotel: Aipana Plaza Hotel
mongo - nearest hotel: Résidences du Programme FIDA
sechura - nearest hotel: Maximus Inn
laguna - nearest hotel: Holiday Inn Express & Suites
chibougamau - nearest hotel: Auberge chez Nancy
badger - nearest hotel: Hotel North Pole
miranda do douro - nearest hotel: Hotel Parador Santa Catarina
hermanus - nearest hotel: Aloe House
wailua homesteads - nearest hotel: No hotel found
porbandar - nearest hotel: Sudama Mandir
balabac - nearest hotel: Jonathan's Guesthouse
laikit, laikit ii (dimembe) - nearest hotel: Gapura Selamat Datang Desa Dimembe
san luis de la loma - nearest hotel: No hotel found
renon - ritten - nearest hotel: Linde
fort st. john - nearest hotel: Fort St. John Motor Inn
san antonio de pale - nearest hotel: No hotel found
whitehorse - nearest hotel: The Beez Kneez Bakpakers Hostel

port isabel - nearest hotel: Charles Champion
rio grande - nearest hotel: Hotel Vila Moura Executivo
kristiansund - nearest hotel: Flygende måser
klyuchi - nearest hotel: Памятник воинам
punta arenas - nearest hotel: No hotel found
port sudan - nearest hotel: Ranya Hotel
holma - nearest hotel: No hotel found
pangoa - nearest hotel: No hotel found
longyearbyen - nearest hotel: No hotel found
hamilton - nearest hotel: SAR Memorial
jabal os saraj - nearest hotel: Engineer Mansour Home
katsuura - nearest hotel: No hotel found
kayangel - nearest hotel: No hotel found
formosa - nearest hotel: Hotel Hostal del Rey
qandala - nearest hotel: Qandala
keflavik - nearest hotel: Núpan Deluxe
cabo san lucas - nearest hotel: Comfort Rooms
brisas de zicatela - nearest hotel: Casa de Olas
al badari - nearest hotel: 1929
parnamirim - nearest hotel: Pousada Santana
roma - nearest hotel: Fort Stanwix
ca mau - nearest hotel: Tượng đài Thành phố Cà Mau
enewetak - nearest hotel: No hotel found
nova sintra - nearest hotel: Miradouro MiraBeleza
ta'izz - nearest hotel: قرية جمالة
petropavlovsk-kamchatsky - nearest hotel: No hotel found
codrington - nearest hotel: Codrington Windfarm Viewing Area
invercargill - nearest hotel: Homestead Villa Motel
howard springs - nearest hotel: Darwin Boomerang Motel and Caravan Park
bulgan - nearest hotel: No hotel found
uturoa - nearest hotel: Old fishing traps
figuig (centre) - nearest hotel: Auberge Communale de Figuig نزل فكيك البلدي
taltal - nearest hotel: Locomotora Kitson Meyer N°59 a petróleo
holualoa - nearest hotel: Kona Hotel
namibe - nearest hotel: Pensão Delta do Deserto
papatowai - nearest hotel: No hotel found
utrik - nearest hotel: No hotel found
nuuk - nearest hotel: No hotel found
trindade - nearest hotel: No hotel found
salekhard - nearest hotel: No hotel found
talitsa - nearest hotel: Хостел
kuta - nearest hotel: Ida Hotel Bali
borogontsy - nearest hotel: No hotel found
cill airne - nearest hotel: Southern Health Board
payyannur - nearest hotel: Hotel passport
pandan - nearest hotel: No hotel found
georgetown - nearest hotel: Page 63 hostel
jinka - nearest hotel: No hotel found
kijang - nearest hotel: 기장 장관청
afaahiti - nearest hotel: Omati Lodge
dauphin - nearest hotel: Dauphin Inn Express
bouza - nearest hotel: No hotel found
zima - nearest hotel: No hotel found
yanbu - nearest hotel: Broken Jar
langtang - nearest hotel: No hotel found
nagqu - nearest hotel: Naqu Hotel

```
axim - nearest hotel: Fort Santo Antonio
egilsstadir - nearest hotel: Sólbrekka 16 Guesthouse
gizo - nearest hotel: Rekona Lodge
qaqortoq - nearest hotel: 60* North Greenland
montepuez - nearest hotel: Complexo Messalo
bontang - nearest hotel: Okra Leaf Guest House Syariah
xai-xai - nearest hotel: Casa Xaixai
klobuck - nearest hotel: No hotel found
san ignacio rio muerto - nearest hotel: No hotel found
arraias - nearest hotel: Hotel Japão
sinabang - nearest hotel: Padepokan I Am Jhon
south hedland - nearest hotel: The Lodge
nyrob - nearest hotel: Свято-Никольский родник
ruthin - nearest hotel: Park Place Hotel
remire-montjoly - nearest hotel: No hotel found
tokmok - nearest hotel: маг.нурмат
sangsong-ni - nearest hotel: Yangdok County
um jar al gharbiyya - nearest hotel: No hotel found
tovarkovo - nearest hotel: No hotel found
argo - nearest hotel: Κωνσταντίνος Πανανάς
amga - nearest hotel: No hotel found
akureyri - nearest hotel: No hotel found
bilibino - nearest hotel: No hotel found
twin falls - nearest hotel: No hotel found
manfalut - nearest hotel: Pyramid of Khui
kahror pakka - nearest hotel: No hotel found
villa ojo de agua - nearest hotel: La Bonita
sur - nearest hotel: Sur Hotel
avarua - nearest hotel: Central Motel
alice springs - nearest hotel: Aurora Alice Springs
lazaro cardenas - nearest hotel: Hotel Sol del Pacífico
vorkuta - nearest hotel: Вертолёт
rajapur - nearest hotel: No hotel found
polyarnyy - nearest hotel: Алые паруса
gornyye klyuchi - nearest hotel: В. И. Ленина
beira - nearest hotel: Pousada Moderna
edam - nearest hotel: Damhotel Edam
kudymkar - nearest hotel: No hotel found
embarcacion - nearest hotel: Punta Norte
kingston - nearest hotel: Aphrodite Hotel
bato - nearest hotel: Lake Bato Viewpoint
willowmore - nearest hotel: No hotel found
portland - nearest hotel: Green Man of Portland
coronel du graty - nearest hotel: Monumento al Agricultor
faya-largeau - nearest hotel: Rond point
coquimbo - nearest hotel: No hotel found
springbok - nearest hotel: Monument Koppie
luderitz - nearest hotel: Hansa Haus
la rinconada - nearest hotel: No hotel found
itoman - nearest hotel: No hotel found
vershino-darasunskiy - nearest hotel: No hotel found
berezovskiy - nearest hotel: Памятник Шахтерскому труду
atafu village - nearest hotel: No hotel found
tual - nearest hotel: Suita
poronaysk - nearest hotel: Ветеранам ВОВ от молодежи Поронайского гор. округа 2015г.
stanley - nearest hotel: South Moor Colliery (Louisa Pits)
```

kohlu - nearest hotel: No hotel found
al mijlad - nearest hotel: No hotel found
parang - nearest hotel: Mario Fish & Crab dealer
timbuktu - nearest hotel: Rene Caille House
anloga - nearest hotel: Lumana House
ancud - nearest hotel: Mural Ancud
sao tome - nearest hotel: Hotel Baia
luorong - nearest hotel: No hotel found
pisco - nearest hotel: No hotel found
semey - nearest hotel: Церковная школа
ulsteinvik - nearest hotel: Quality Hotel Ulstein
chernyshevskiy - nearest hotel: Чернышевский
aykhal - nearest hotel: No hotel found
yelan' - nearest hotel: Памятник ВОВ
morehead city - nearest hotel: Bask Hotel Big Rock Landing, Trademark Collection by
Wyndham
angaur state - nearest hotel: No hotel found
marsh harbour - nearest hotel: D's Guest House
manacapuru - nearest hotel: Novo Hotel
ust-nera - nearest hotel: Памятник жертвам трассы «Колыма»
hawaiian paradise park - nearest hotel: No hotel found
ghat - nearest hotel: قلعة غات
tsiombe - nearest hotel: Androy
carnarvon - nearest hotel: Dwyers Leap
zunyi - nearest hotel: 遵义会议会址
bandundu - nearest hotel: Majestik Hotel
suihua - nearest hotel: No hotel found
sydney - nearest hotel: GPO Colonnade
sabang - nearest hotel: Hotel Montana
vilyuysk - nearest hotel: No hotel found
asau - nearest hotel: Monumentul Eroilor
ivdel' - nearest hotel: Смотровая площадка
san jose de las lajas - nearest hotel: Réplica de La Columna de la Primera Iglesia
salinopolis - nearest hotel: Hotel Salinópolis
parkville - nearest hotel: Kelly's Pool Hall
taizhou - nearest hotel: 望海楼
murud - nearest hotel: Samrajgad
srandakan - nearest hotel: Pantai Kwaru
kodinsk - nearest hotel: Ангара
kenai - nearest hotel: Beluga Lookout Hotel
mersrags - nearest hotel: No hotel found
sosnovo-ozerskoye - nearest hotel: Озёрная
nabire - nearest hotel: AMA Associated Mission Aviation
san patricio - nearest hotel: First United Methodist Church of Sinton
illizi - nearest hotel: No hotel found
ust'-ilimsk - nearest hotel: Обелиск
shiqi - nearest hotel: 京华世纪酒店
newman - nearest hotel: Hamlet Motel
pervomayskoye - nearest hotel: Памятник Лалаянцу
praia da vitoria - nearest hotel: Salles
saldanha - nearest hotel: No hotel found
yuzhno-kurilsk - nearest hotel: Памятник советскому десанту, высадившемуся в сентябр
е 1945 года
el calafate - nearest hotel: Posada Karut Josh
zlatna - nearest hotel: Vila Sandra
morro bay - nearest hotel: Ascot Suites

```
lensk - nearest hotel: No hotel found
twon-brass - nearest hotel: KC Hotel
les cayes - nearest hotel: No hotel found
luwuk - nearest hotel: No hotel found
port shepstone - nearest hotel: Whale Deck - Umtentweni Conservancy
crane - nearest hotel: William Carey Crane
usogorsk - nearest hotel: Г. Димитрову
glace bay - nearest hotel: No hotel found
afif - nearest hotel: استراحة الفرسان
suoyarvi - nearest hotel: Комфорт
nikolayevsk-on-amure - nearest hotel: М. Горький
margate - nearest hotel: Drapers Windmill
glendive - nearest hotel: El Centro Motel
ampanihy - nearest hotel: Bungalows Sharron (Annexe)
happy valley-goose bay - nearest hotel: No hotel found
embrun - nearest hotel: A la mémoire des morts pour la défense de la patrie 1870-187
1
zaranj - nearest hotel: قلعه محمد
balqash - nearest hotel: No hotel found
pirot - nearest hotel: Гали апартамани
callao - nearest hotel: Casa Píos
mpika - nearest hotel: Luswepo lodge
kerikeri - nearest hotel: Kerikeri Homestead Motel
collie - nearest hotel: Federal Hotel
kalmunai - nearest hotel: Saji new food
sisimiut - nearest hotel: Sømandshjemmet
khandyga - nearest hotel: Апельсин
tura - nearest hotel: No hotel found
wynyard - nearest hotel: Wynyard Hotel
mount isa - nearest hotel: travellers haven
port lincoln - nearest hotel: YHA Port Lincoln
bodaybo - nearest hotel: НОЙ
simanggang - nearest hotel: Mega Inn
marrakesh - nearest hotel: No hotel found
lidzbark warminski - nearest hotel: No hotel found
castillos - nearest hotel: Hostel Mi Vieja
santa ana - nearest hotel: Yost Theater
kideksha - nearest hotel: No hotel found
cervantes - nearest hotel: Oficina Histórica de Vicente Blasco Ibáñez
aberdeen - nearest hotel: Leonardo Hotel Aberdeen
floro - nearest hotel: No hotel found
mildura - nearest hotel: Chaffey Motor Inn
trujillo - nearest hotel: Hostal Ayacucho
berdigestyakh - nearest hotel: Памятник воинам-землякам
nelson bay - nearest hotel: Port Stephens Motel
naze - nearest hotel: ビジネス旅館畠山
ebon - nearest hotel: No hotel found
port alfred - nearest hotel: No hotel found
hotan - nearest hotel: Hua Yi International Hotel (accepts foreigners)
north shore - nearest hotel: No hotel found
rengasdengklok - nearest hotel: No hotel found
raton - nearest hotel: Budget Host Inn
auki - nearest hotel: Hilltop Guesthouse
lorengau - nearest hotel: Seeadler Bay Hotel
new norfolk - nearest hotel: No hotel found
paita - nearest hotel: Victor's
```

el triunfo - nearest hotel: Hosteria El Pechiche
mtambile - nearest hotel: SMZ Hoteli Ya Mkoani
saipan - nearest hotel: Lavista
korla - nearest hotel: Silver Star Hotel
touros - nearest hotel: No hotel found
ocean shores - nearest hotel: The Siren of Discovery Inn & Suites
san sebastian de la gomera - nearest hotel: Burrito La Gomera
yatou - nearest hotel: No hotel found
laojunmiao - nearest hotel: No hotel found
tazovsky - nearest hotel: Тазовчанка
conde - nearest hotel: Paladino
nacala - nearest hotel: Indico Apart Hotel 2
galle - nearest hotel: Ms Zouh's House
greenville - nearest hotel: The Cupola
hasaki - nearest hotel: 大新旅館
munford - nearest hotel: No hotel found
talara - nearest hotel: Hospedaje El Aypate
vadso - nearest hotel: Scandic Vadsø
kez - nearest hotel: No hotel found
quzhou - nearest hotel: 东方桥庵里
damghan - nearest hotel: هتل جهانگردی دامغان
gulf shores - nearest hotel: Beachside Resort
road town - nearest hotel: No hotel found
midvagur - nearest hotel: No hotel found
emerald - nearest hotel: Emerald Executive Apartments
santanyi - nearest hotel: Santanyí
leh - nearest hotel: Kang Lha Chen
igarka - nearest hotel: Погибшим во Второй Мировой войне
merizo village - nearest hotel: Spanish Convent
sarapul - nearest hotel: No hotel found
rabaul - nearest hotel: No hotel found
quellon - nearest hotel: Monumento a Loncos Mapuches
colonia - nearest hotel: Rommni Jg. 1925
karkira - nearest hotel: Maison des Jeunes
mazatlan - nearest hotel: Mona Inn
santiago de compostela - nearest hotel: Cidade Vella
ola - nearest hotel: В. И. Ленину
swift current - nearest hotel: Memorial Cenotaph
palikir - national government center - nearest hotel: NICHO Marine Park
weno - nearest hotel: Japanese War Memorial
nikel - nearest hotel: No hotel found
bodo - nearest hotel: No hotel found
ratnagiri - nearest hotel: Thiba Sunset Point
tocache - nearest hotel: Hotel España
tchintabaraden - nearest hotel: Sabre de la paix de Tchintabaraden
timmins - nearest hotel: Flamingo Motel
papao - nearest hotel: France Lorraine Mere
palmer - nearest hotel: Palmer Center Common And Schoo
beyneu - nearest hotel: Railway Hostel
galesong - nearest hotel: POROS LIMBUNG
kismayo - nearest hotel: shibiin
mazara del vallo - nearest hotel: Ipogeo di San Bartolomeo
strelka - nearest hotel: No hotel found
ayr - nearest hotel: St Johns Tower
lillehammer - nearest hotel: Sigrid Undset
belogradchik - nearest hotel: Dalia

```
minot - nearest hotel: Plaza Scandinavia
selfoss - nearest hotel: Gesthús
kone - nearest hotel: Pacifik Appartels
turabah - nearest hotel: قلعة شنقل
constitucion - nearest hotel: Hostal Alameda
olyokminsk - nearest hotel: No hotel found
darwin - nearest hotel: Street Art
aghstafa - nearest hotel: Nesiboglu Otel
eydhafushi - nearest hotel: Dhooni Finolhu Guesthouse
al ghayzah - nearest hotel: فندق تاج العرب
kailua-kona - nearest hotel: Kona Seaside Hotel
arawa - nearest hotel: Gold Dust Inn
marsa alam - nearest hotel: Blue House Hotel
kiruna - nearest hotel: No hotel found
lake city - nearest hotel: Old Spanish Trail from Madison to Lake City (1919)
lock haven - nearest hotel: Clinton County Civil War Monument
neelankarai - nearest hotel: sha
al kharijah - nearest hotel: Kharga Hotel
covilha - nearest hotel: SportHotel
luganville - nearest hotel: No hotel found
sao paulo de olivenca - nearest hotel: No hotel found
tshabong - nearest hotel: No hotel found
praia - nearest hotel: Casa Sodadi
iwanai - nearest hotel: ホテルいのう
gorodets - nearest hotel: Самолёт Ан-2
kirakira - nearest hotel: No hotel found
yashkul' - nearest hotel: Верблюжая ферма
labytnangi - nearest hotel: Семь лиственниц
avanigadda - nearest hotel: No hotel found
scarborough - nearest hotel: Ivy Dene
palitana - nearest hotel: Shrinathji
tamanrasset - nearest hotel: فندق الأمان
dudinka - nearest hotel: Исследователи таймыра
nueva gerona - nearest hotel: Casa Claudia
vila velha - nearest hotel: Sítio Histórico da Prainha
sarrat - nearest hotel: Jose Rizal Monument
marquette - nearest hotel: Jackson Mine Monument
magadan - nearest hotel: Мемориальная квартира В. А. Козина
kavieng - nearest hotel: Kavieng Hotel
rocha - nearest hotel: José Gervasio Artigas
tyukalinsk - nearest hotel: Победы
ta`u - nearest hotel: Tau Airport
hats'avan - nearest hotel: Tolors Churche
babu - nearest hotel: No hotel found
saint-philippe - nearest hotel: Domaine du Vacoa
caleta de carquin - nearest hotel: Atlantic
bandarbeyla - nearest hotel: No hotel found
buta - nearest hotel: Hôtel Rubi
bydgoszcz - nearest hotel: Stare Miasto
mount gambier - nearest hotel: Comfort Inn The Lakes
manaure - nearest hotel: hotel palaima
machico - nearest hotel: Runway Spotter
nar'yan-mar - nearest hotel: Стелла Заполярный район
isola di capo rizzuto - nearest hotel: No hotel found
khorixas - nearest hotel: iGowati Country Hotel and Lodge
bechar - nearest hotel: Hôtel Madania
```

muroto-misakicho - nearest hotel: ファミリーロッジ旅籠屋
bugana - nearest hotel: No hotel found
west bay - nearest hotel: Bonnie's Arch
cumana - nearest hotel: Hotel Regina
kili - nearest hotel: No hotel found
alofi - nearest hotel: Stone Villas
harper - nearest hotel: William VS Tubman Monument
severo-yeniseyskiy - nearest hotel: No hotel found
phongsali - nearest hotel: Old Chinese Quarter
marshall - nearest hotel: Wyndham Garden Lake-Guntersville
thinadhoo - nearest hotel: No hotel found
mili - nearest hotel: No hotel found
mpulungu - nearest hotel: Nkhupu Lodge
mao - nearest hotel: Claustre del Carme
dondukovskaya - nearest hotel: No hotel found
al burayqah - nearest hotel: No hotel found
mayya - nearest hotel: Гостиница
toktogul - nearest hotel: Токтогул С.
tauste - nearest hotel: La Casa de la Cámara
sola - nearest hotel: No hotel found
diawara - nearest hotel: Maison
alibag - nearest hotel: Chirag executive
broome - nearest hotel: No hotel found
essaouira - nearest hotel: Bab Moulay Youssef
minab - nearest hotel: منازل مسکونی پزشکان
labuan - nearest hotel: Labuan Avenue Hotel
rongelap - nearest hotel: No hotel found
howrah - nearest hotel: Statue of Bholsnsth Chskraborty
horta - nearest hotel: The Cedars House
yutz - nearest hotel: No hotel found
long beach - nearest hotel: Westin
randudongkal - nearest hotel: Pohon Kembar
rikaze - nearest hotel: 日喀则烈士纪念碑
zarate - nearest hotel: Naciones Hotel
arraial do cabo - nearest hotel: No hotel found
nieuw amsterdam - nearest hotel: Fort Nieuw Amsterdam
island harbour - nearest hotel: PS Ryde (rusting hulk)
belmonte - nearest hotel: No hotel found
salinas - nearest hotel: The Traveler's Hotel
kinablangan - nearest hotel: Poo Sand Bar Departure Area
parauna - nearest hotel: Estátua de Cristo Redentor
viedma - nearest hotel: Edgardo Castello
chunskiy - nearest hotel: Мемориал МВД
le lavandou - nearest hotel: Le Terminus
altai - nearest hotel: Altai hotel 40000-100000T
kabalo - nearest hotel: No hotel found
neyshabur - nearest hotel: باغ امین اسلامی
geraldton - nearest hotel: Esplanade
nchelenge - nearest hotel: Petra Lodge
randers - nearest hotel: No hotel found
kyzyl-suu - nearest hotel: кафе суусая
shalya - nearest hotel: No hotel found
kerema - nearest hotel: No hotel found
mogocha - nearest hotel: No hotel found
saline - nearest hotel: No hotel found
dapaong - nearest hotel: La Residenze

i-n-salah - nearest hotel: شيخ عبد القادر الجيلالي
mezhdurechenskiy - nearest hotel: No hotel found
kuwait city - nearest hotel: Gulf Rose Hotel
kamensk-ural'skiy - nearest hotel: Земля
hagere hiywet - nearest hotel: Ambo Ethiopia Hotel
cananea - nearest hotel: Monumento a la Madre
taksimo - nearest hotel: No hotel found
fort meade - nearest hotel: Candlewood Suites
puerto baquerizo moreno - nearest hotel: Hostal D Estrellita
nieuw nickerie - nearest hotel: Hotel Pak Hap
brak - nearest hotel: جزيرة براك
vila franca do campo - nearest hotel: Bento de Góis
mil'kovo - nearest hotel: Нумера
panama city beach - nearest hotel: Shores of Panama
tadine - nearest hotel: Plage de roche
luza - nearest hotel: Ленин
gwadar - nearest hotel: گوادر پرانا قلعہ
jining - nearest hotel: 太白楼
bandar seri begawan - nearest hotel: Qing Yun
turpan - nearest hotel: Oriental
rabo de peixe - nearest hotel: Pico do Refugio
arkhangel'sk - nearest hotel: Дом П.Н. Гринфельдта (1913)
meadow lakes - nearest hotel: No hotel found
al jumum - nearest hotel: قلعة دخان
usinsk - nearest hotel: Памятник книге УПТ
lagoa - nearest hotel: Casa da Madrinha
cidreira - nearest hotel: Concha Acústica
bamboo flat - nearest hotel: Stewartganj Creek
savanna-la-mar - nearest hotel: No hotel found
filipstad - nearest hotel: No hotel found
acoua - nearest hotel: Marches d'Acoua
korhogo - nearest hotel: No hotel found
jaciara - nearest hotel: Pousada Rosa dos Ventos
lerwick - nearest hotel: Islesburgh House Hostel
dawei - nearest hotel: ဘုန်းဆကီးပိုက္ကုန်း
tocopilla - nearest hotel: Moai
maraba - nearest hotel: Portobelo
aketi - nearest hotel: No hotel found
dunedin - nearest hotel: The Octagon
tangalle - nearest hotel: Malindu Homestay
north bondi - nearest hotel: No hotel found
okha - nearest hotel: Стелла Оха - город нефтяников
muynoq - nearest hotel: No hotel found
benghazi - nearest hotel: معرض بنغازي التجاري
port clinton - nearest hotel: Main Line (New York Central Railroad)
novodvinsk - nearest hotel: No hotel found
tamala - nearest hotel: No hotel found
vila do maio - nearest hotel: Forte
hongqiao - nearest hotel: No hotel found
nicoya - nearest hotel: Hotel marianela
north platte - nearest hotel: No hotel found
ulanhot - nearest hotel: 阿勒泰大酒店
kununurra - nearest hotel: No hotel found
nephi - nearest hotel: Pioneer Cabin
khamis mushait - nearest hotel: friend room
menongue - nearest hotel: No hotel found

```
karpinsk - nearest hotel: Павшим за власть Советов
daru - nearest hotel: Kuki
bahia honda - nearest hotel: No hotel found
hilo - nearest hotel: Dolphin Bay Hotel
mormugao - nearest hotel: Hotel Rukhmini
kutum - nearest hotel: No hotel found
giyani - nearest hotel: No hotel found
mumbwa - nearest hotel: La Hacienda
lae - nearest hotel: SIL Guest House
casas grandes - nearest hotel: Paquimé
talakan - nearest hotel: Якорь-памятник
nykobing falster - nearest hotel: Pige på bom
corowa - nearest hotel: Pfeiffer Wines
borkum - nearest hotel: Ferienhaus Kiewitt
pasuquin - nearest hotel: No hotel found
dazhou - nearest hotel: 凤凰楼
raduzhny - nearest hotel: Южная
odienne - nearest hotel: Hotel Frontière
canavieiras - nearest hotel: Coreto de Canavieiras
at taj - nearest hotel: فردق
pemba - nearest hotel: Hotel Rafael
bairnsdale - nearest hotel: Mercure Bairnsdale
hilton head island - nearest hotel: Shell Point
pemangkat - nearest hotel: No hotel found
sao jose do egito - nearest hotel: No hotel found
kapuskasing - nearest hotel: Advantage Motel
semera - nearest hotel: No hotel found
roses - nearest hotel: Ramblamar
hastings - nearest hotel: White Rock Hotel
```

Out[6]:

	City_ID	City	Lat	Lng	Max Temp	Humidity	Cloudiness	Wind Speed	Count
0	0	bredasdorp	-34.5322	20.0403	16.22	77	100	3.24	
1	1	adamstown	-25.0660	-130.1015	22.48	76	100	7.10	
2	2	iskateley	67.6803	53.1512	-16.10	95	16	3.13	
3	3	east london	-33.0153	27.9116	20.52	83	0	5.14	
4	4	tiksi	71.6872	128.8694	-34.15	98	42	3.08	
...	...	...	...	...	...	...	...	...	
580	580	sao jose do egito	-7.4789	-37.2744	21.57	75	16	2.30	
581	581	kapuskasing	49.4169	-82.4331	-12.95	85	100	4.12	
582	582	semera	11.5010	41.2010	22.79	47	82	4.53	
583	583	roses	42.2620	3.1769	9.50	58	29	7.60	
584	584	hastings	50.8552	0.5729	2.96	71	50	5.67	

585 rows × 11 columns

Step 5: Add the hotel name and the country as additional information in the hover message for each city in the map.

In [7]:
```
%%capture --no-display

# Configure the map plot
# Configure the map plot
hotel_city_map = hotel_df.hvplot.points(
    x="Lng",
    y="Lat",
    c="Humidity",
    hover_cols=["City", "Country", "Hotel Name"],
    colormap="plasma",
    title="City Map with Humidity and Hotel Information",
    xlabel="Longitude",
    ylabel="Latitude",
    size="Humidity",
    frame_width=600,
    frame_height=400,
    tiles="OSM",
```

```
        geo=True
)


# Display the map
hotel_city_map
```

Out[7]: