

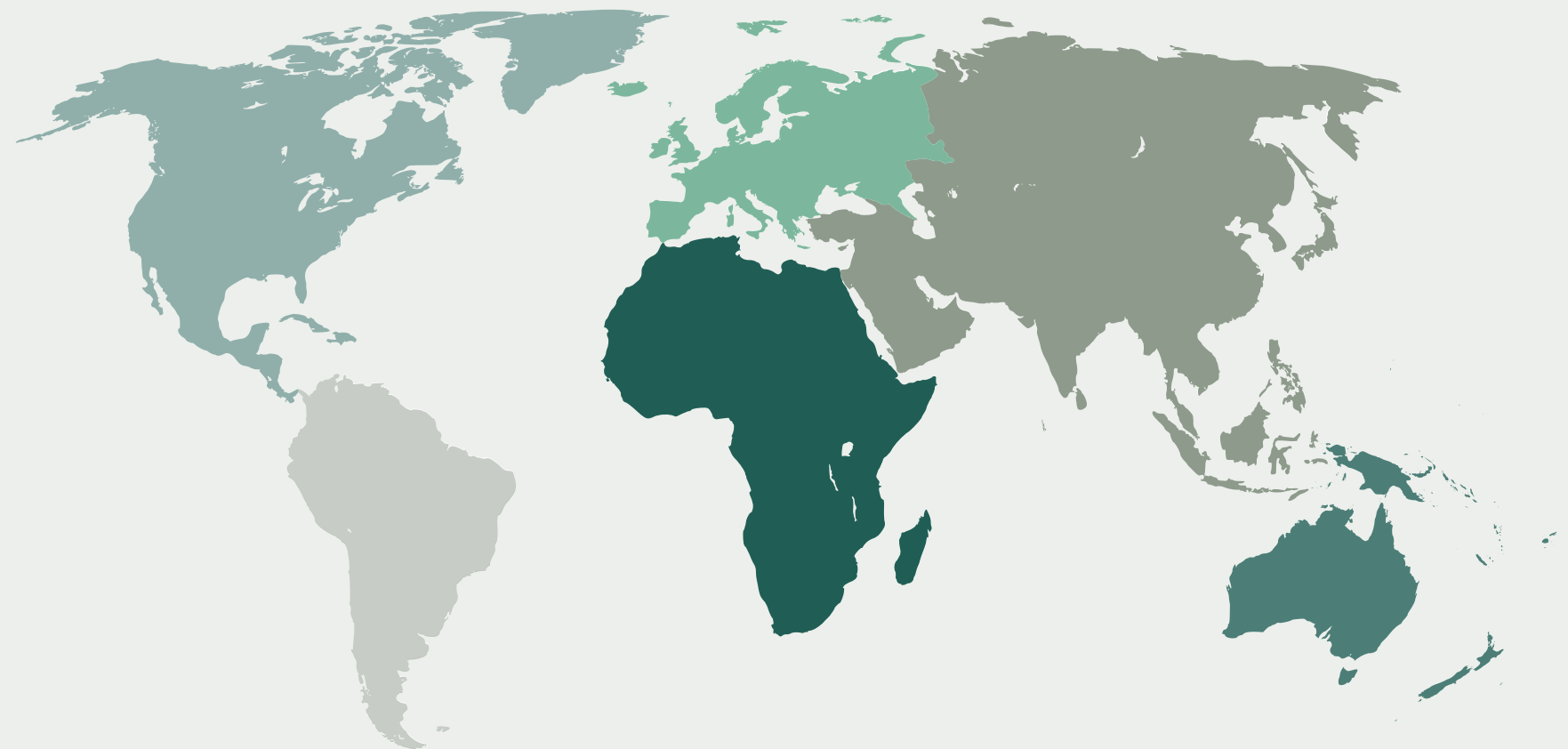


World Tour Planner

IRONHACK
FINAL PROJECT

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OVERVIEW

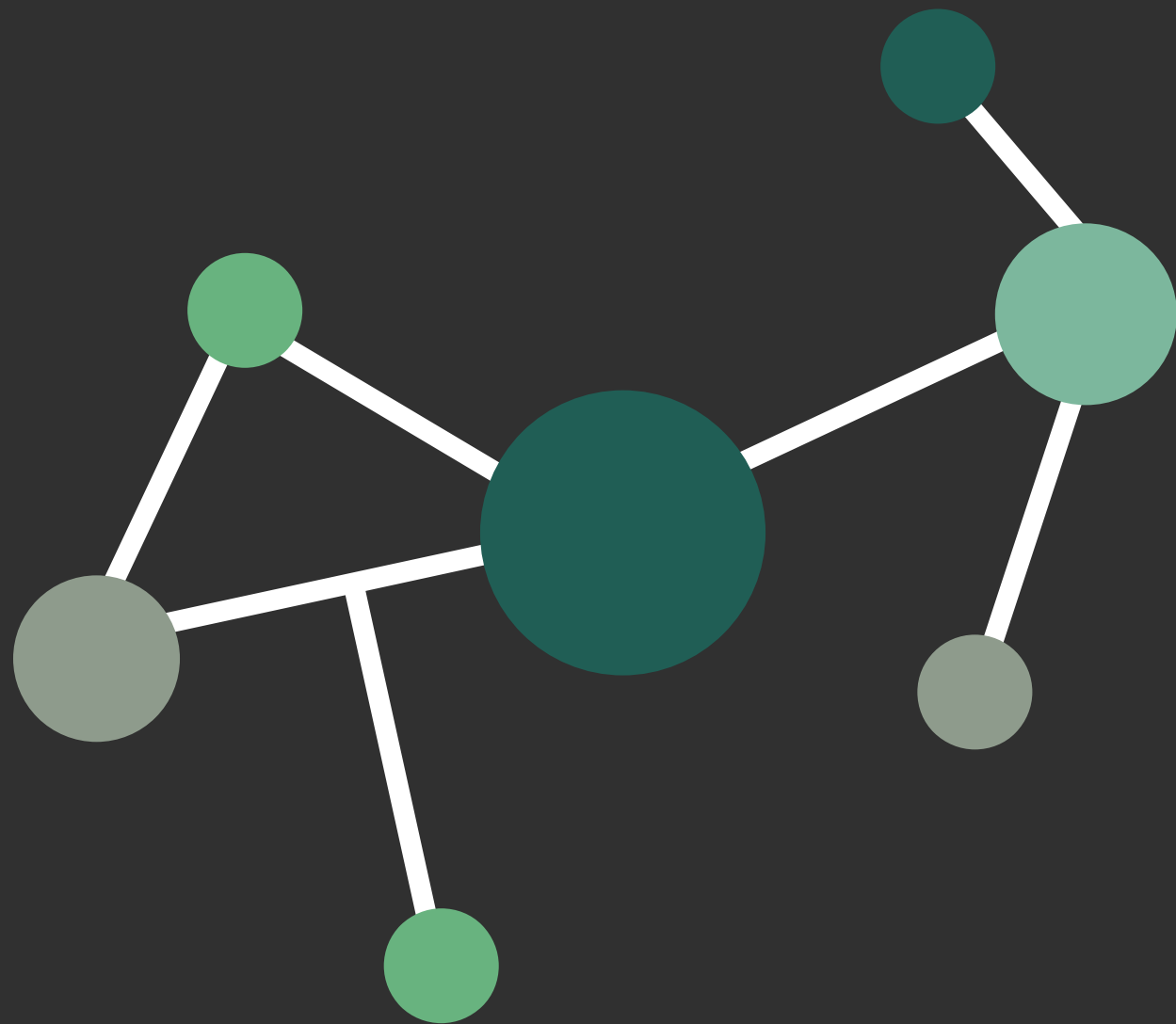


Create an app to find the optimal route to travel around the world via six continents.

Given:

- DEPARTURE AIRPORT
- CITIES TO VISIT
- START DATE

NETWORK GRAPH



ACQUISITION

I obtained two databases from **Openflights.org**:

- AIRPORTS
- ROUTES

CLEAN

I cleaned both dataframes, added information and merged them to get relevant data

CREATE A NETWORK GRAPH

- LATITUDE & LONGITUDE
- CONTINENT
- DISTANCE BETWEEN AIRPORTS

How to find the best route?

CHOOSE AIRPORTS

Take only the airports that are in the continents that the route has not yet passed

APPEND AND REMOVE

Add upcoming stops and remove airports on those continents

GET DISTANCES

Calculate distances to all selected airports

SORT AND SELECT

Sort the 50 nearest airports and selecting the route with the fewest stops



LAST STEPS

PLOT ROUTE INTO A MAP

Plot the route with all
the stops on a world
map



SCRAPE FLIGHT PRICES

Scrape all flights
through kayak.es to get
the best prices



SHOW RESULTS IN STREAMLIT

Show the final results in
the Streamlit app to
make it interactive

