GEOM90007
Assignment2

Summary

"Weather in Australia" provides an interactive and user-friendly interface to explore various weather metrics across Australian states and main cities. The interface uses a clean, design theme and features a navigation bar to switch between different tabs, which may include current weather conditions, maximum and minimum temperature trends, and an About tab for additional information.

Features:

1. **Navbar for Navigation**: The `navbarPage` function is used to create a top-level navigation bar, enabling easy switching between different functionalities (e.g. Weather_tab, MaxMin_Temp_tab, About_tab).

2. **Custom Theme**: The theme is set to "flatly" for a combined graph and visually pleasing look.

3. **Filtering**: The app allows for weather data to be filtered by state, making it more interactive and customizable. Using radio buttons and slidedown as a filter.

4. **Interactive Map**: The app features a leaflet map that updates based on the state selected. The map has two types of base layers: OpenStreetMap (OSM) and Stamen Toner so users can choose one preference. In addition there will be more graphs (information) showing up after you click on the marker.

5. **Markers**: Awesome markers are used to pinpoint cities on the map. These markers are cloud-shaped and coloured blue to indicate weather. There will be a popup box showing up after you click it and also graphs.

6. **Animate:** The Humidity graph will automatically switch between two different visualisations every 10 seconds. The first graph will display humidity levels at 9am, and the second will show humidity levels at 3pm. No user interaction is required; the transition between the two graphs will happen automatically.

Navigate through the tabs to explore different weather metrics. Use the dropdown menu to filter data by state and toggle the layer control to switch between different map styles.

Doing some basic data cleaning, remove the NA, calculate the mean in the dataset and aggregate data to long form to explore more possible data graphs.

An appendix:

I only use two data Weather.csv and City.csv to combine them together by the State and City. Doing some basic data cleaning, remove the NA, calculate the mean in the dataset and aggregate data to long form to explore more possible data graphs.

https://github.com/rfordatascience/tidytuesday/tree/master/data/2020/2020-01-07