------------------------- UNIT TESTS -------------------------

Product Name: Data Visualization

Team Name: Visualizing Climate Change

Date: March 21, 2019

Note: This document contains details provided by each team member about the module and the functional testing they have done.

-------------------------------Morgan Trotter-------------------------------

EC: Play button correctly plays the timeline of CO2 emissions
- Test Cases: clicking the play button
- Expected Outcome: The graph updates while the timeline is automatically going forward

EC: Inputting year with characters other than numbers
- Test Cases: {"abc", "!@#+,.>"}
- Expected Outcome:Does not allow inputs other than numbers

EC: Inputting year outside its range
- Test Cases:[1000, 999999]
- Expected Outcome:displays invalid inputs

EC: ToolTip correctly display data
- Test Cases:hovering over each bubble
- Expected Outcome:Tooltip is displayed correctly

-------------------------------Eric Rong-------------------------------

EC: Sunburst Tooltips displays correctly
- Test Cases:Hover over each section
- Expected Outcome: The tooltip is correctly displayed in each hover

EC: Dragging the slider changes the graph correctly

- Test Cases: Dragging and selecting the slider to a specific time
- Expected Outcome: The Sunburst correctly updates its data to show the visualizations

EC: Clicking on sunburst sections zooms in and correctly display visualization

- Test Cases: clicking in sections and subsections
- Expected Outcome: The graph zooms in and zooms out as expected as correctly displaying data

EC: Source Links link to correct page

- Test Cases:clicking on each link
- Expected Outcome:All links go to the correct page

--------------------------------Steve Chan-------------------------------

EC: Temperature Bars displaying correct temperatures on hover

- Test Case: Hovering over the bar using cursor
- Expected Outcome: Tooltip correctly shows temperature in spot where the mouse hovers

EC: Using arrow keys changes the years of the country and updates the data

- Test Cases: Using left and right arrow keys to go to a specific year
- Expected Outcome: The graph's years changes and the data updates with the year without showing the previous year's data

EC: Changing countries by using the dropdown menu

- Test Cases: Click on the dropdown menu and selecting another country to view
- Expected Outcome: Updates the graph to show the new country's data without showing old data from the previous country

EC: Keeping the titles of year and country updated with change

- Test Cases: Selecting a different country from the dropdown menu and changing years using the arrow keys

- Expected Outcome: Title for year changes with use of arrow keys and is reset to 2014 when changing to a different country. Country title changes when changing to a different country using the dropdown menu.

--------------------------------David Krieger--------------------------------

EC: Dragging the slider changes the data for year, temperate, co2, and energy consumption

- Test Cases: Use cursor to drag and drop into the desired year
- Expected Outcome: Choropleth updates the data to the desired year

EC: Changing year changes the choropleths colors

- Test Cases: Drag and change the year using the slider
- Expected Outcome: The color of the choropleth changes depending on year and data

EC: Country's tooltip displays the data

- Test Cases: Hovering over the country using the cursor
- Expected Outcome: Displays the data for the country during that year