Assignment 2

Part I: Handle Geographical dataset, Dual-axis Map

- Note: Data description can be found in WORLDBANKSBUX2015DATADESC_HW2.xlsx
- 1. Extract the attached Excel file called WORLDBANKSBUX2015_HW2.xlsx into a Tableau workbook. Exclude all records for which ROLLUP=1. (I.e, Keep only those records for which ROLLUP=0.) Create a Symbol Map in a separate worksheet that depicts GDP per Capita by the size of a circle and Life Expectancy (for ALL) by the color of the circle. For color use the Green-Gold palette. Create a filter that excludes all countries whose Life Expectancy value is missing or null. Edit the Size of the circles to increase the size at the smallest end of the range of GDP per Capita values.
- 2. Create a filled map that depicts GDP per Capita by the color of each country. Use the Red-Blue Diverging palette, centered on 20,000. Overlay (dual-axis) a Circle that depicts Life Expectancy (ALL) by Size. Create a Filter in the worksheet that excludes all countries that do not have at least 1 Starbucks store.

Part II: Handle time series, animation

- Note: Data description can be found in WORLDBANKINDSDATADESC_HW2.xlsx
- 1. Extract the attached Excel file called WORLDBANKINDS.xlsx into a new Tableau workbook. Exclude all records for which ROLLUP=1. (I.e, Keep only those records for which ROLLUP=0.)
- 2. Create a line graph that shows GDP per Capita by Year. Set Country Code as the color variable. Create a filter that excludes all countries with population less than 100 million. Deal appropriately with any Tableau messages about Null values.
- 3. On a seond worksheet generate a plot of Life Expectancy (for all) against GDP per Capita. Change each axis to logarithm scale. Set the minimum value of each axis to 40. Set Year as the Page variable. Set the size of each country circle by Population. Color the circles in the plot by Country Code. Set the Page panel to Loop Playback. Set the playback loop to Show History of all data points with both Marks and Trail for the last 3 periods.

Part III: Calculation field, animation

- 1.Connect a new Tableau session to the file DJI 1900-2017 HW2.csv.
- 2. Create calculated fields that transform Value from radial coordinates to Cartesian coordinates (Remember, X=Value*cosine(Radians) and Y=Value*sine(Radians).)
- 3. Create an animated Spiral Line Graph for Dates=1/1/2010-12/31/2015. Create pages by date (days of year)***. Color the graph so that the change in color indicates the progression of time in the graph (by years).
- 7. Submit both Parts in separate .twbx files on Blackboard.

- ***Optional: Create pages by date pairs (e.g., for 01/02/2010, the date pair could be "01/01/2010<->01/02/2010").