Fall 2017

ACCT / MIS 6309 Business Data Warehousing

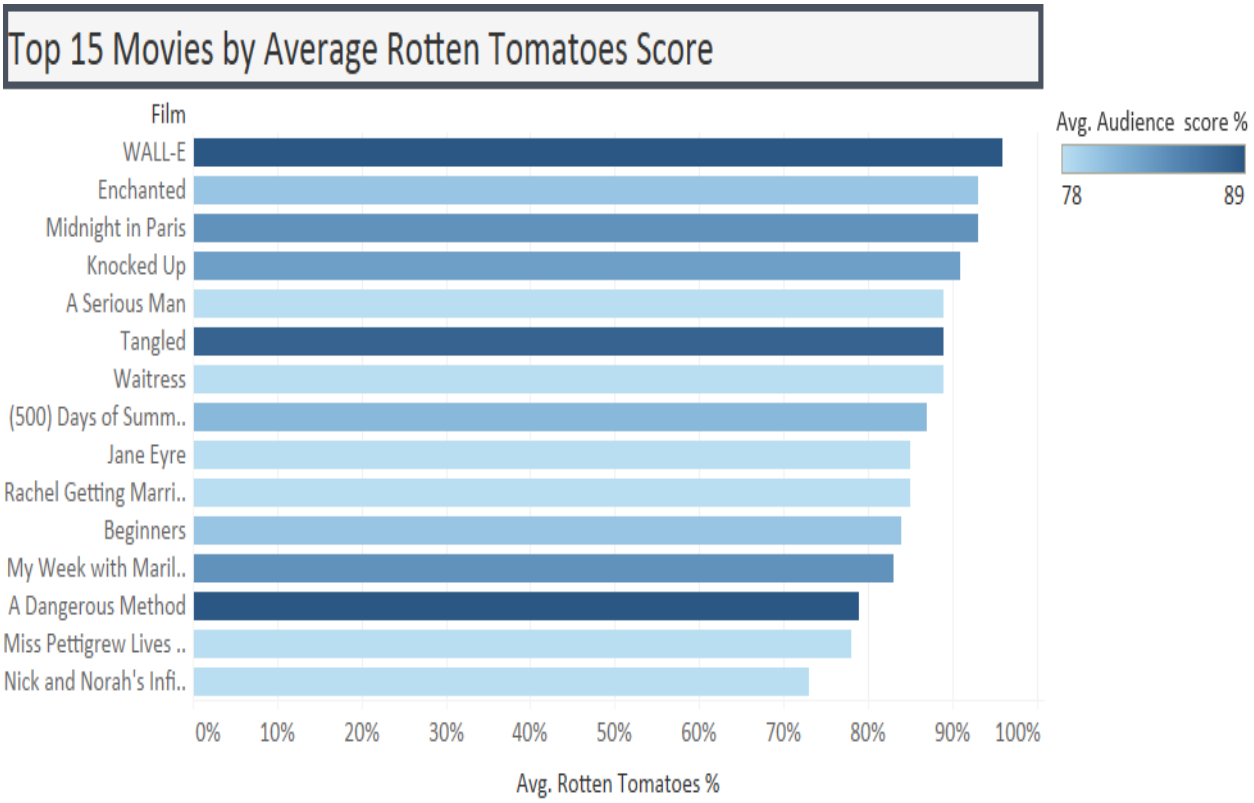
Lab #1

Data Visualization for Business Intelligence using Tableau

Prateek Rawat

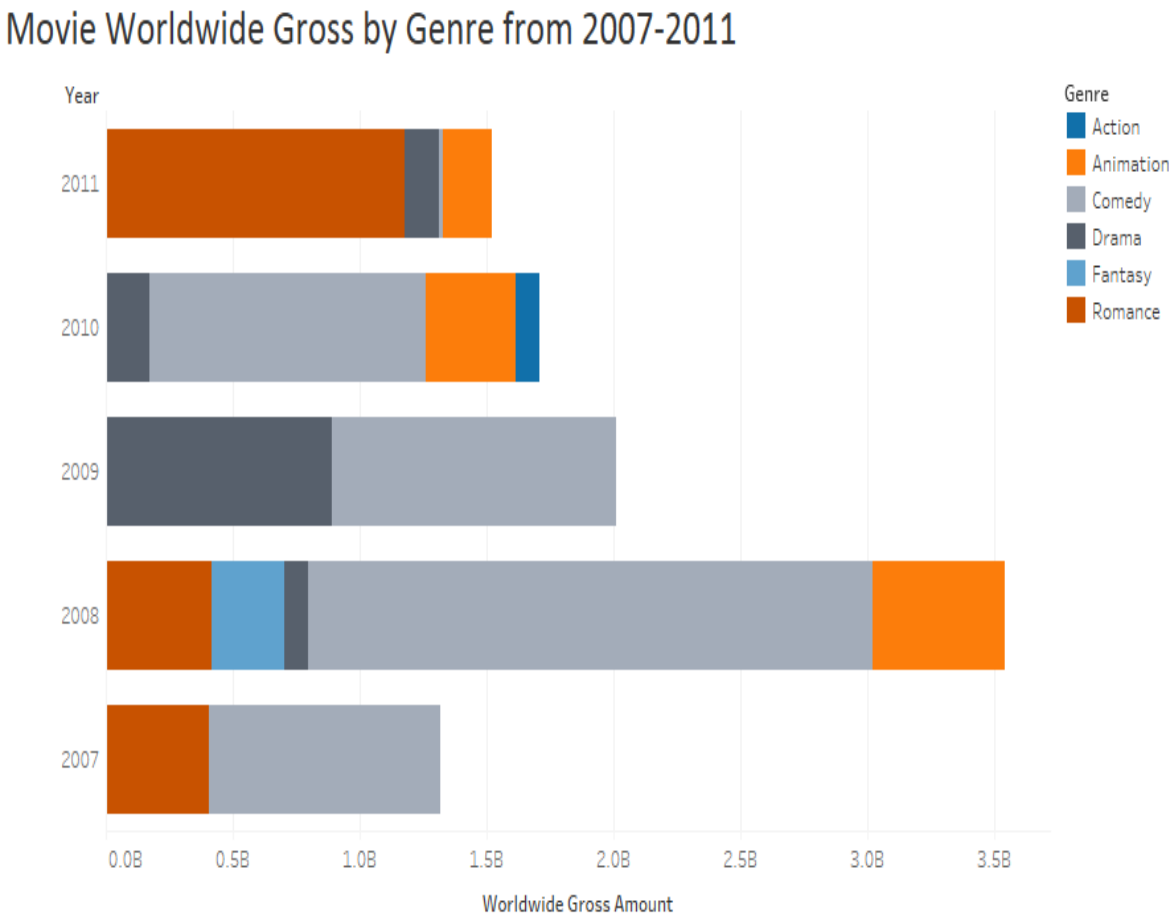
Chapter 1 – Basic Charts

Creating a Bar Chart



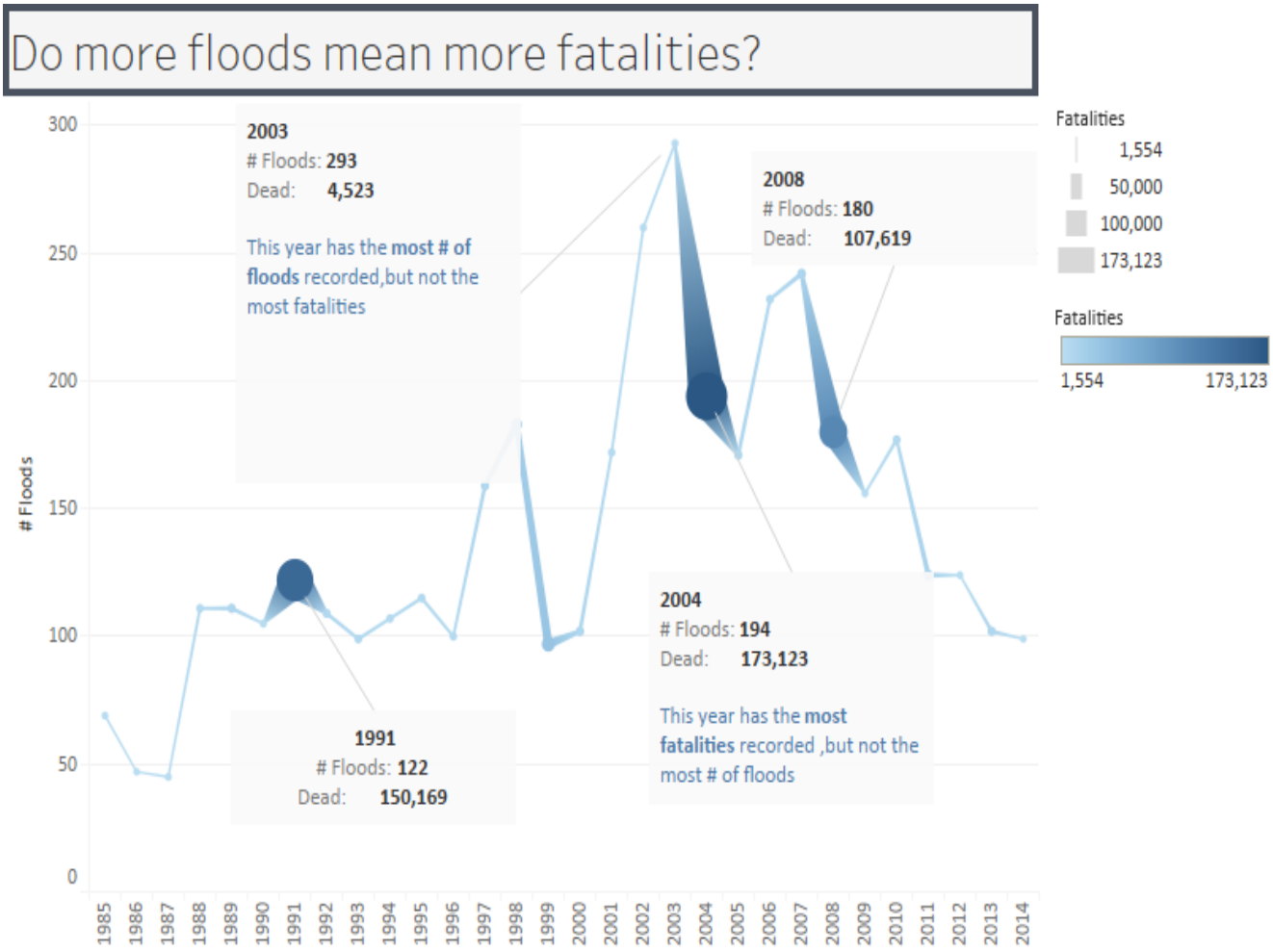
Chapter 1 – Basic Charts

Creating a Stacked Bar Chart



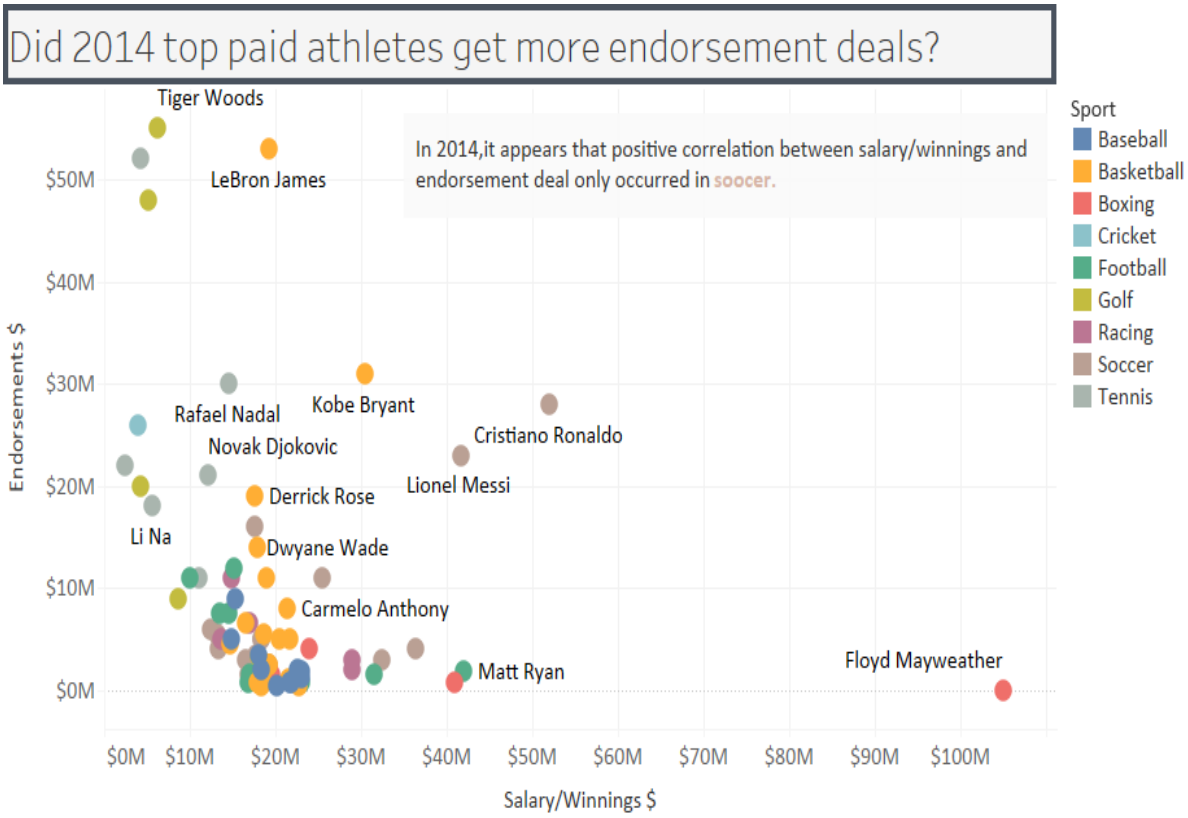
Chapter 1 – Basic Charts

Creating a line Chart



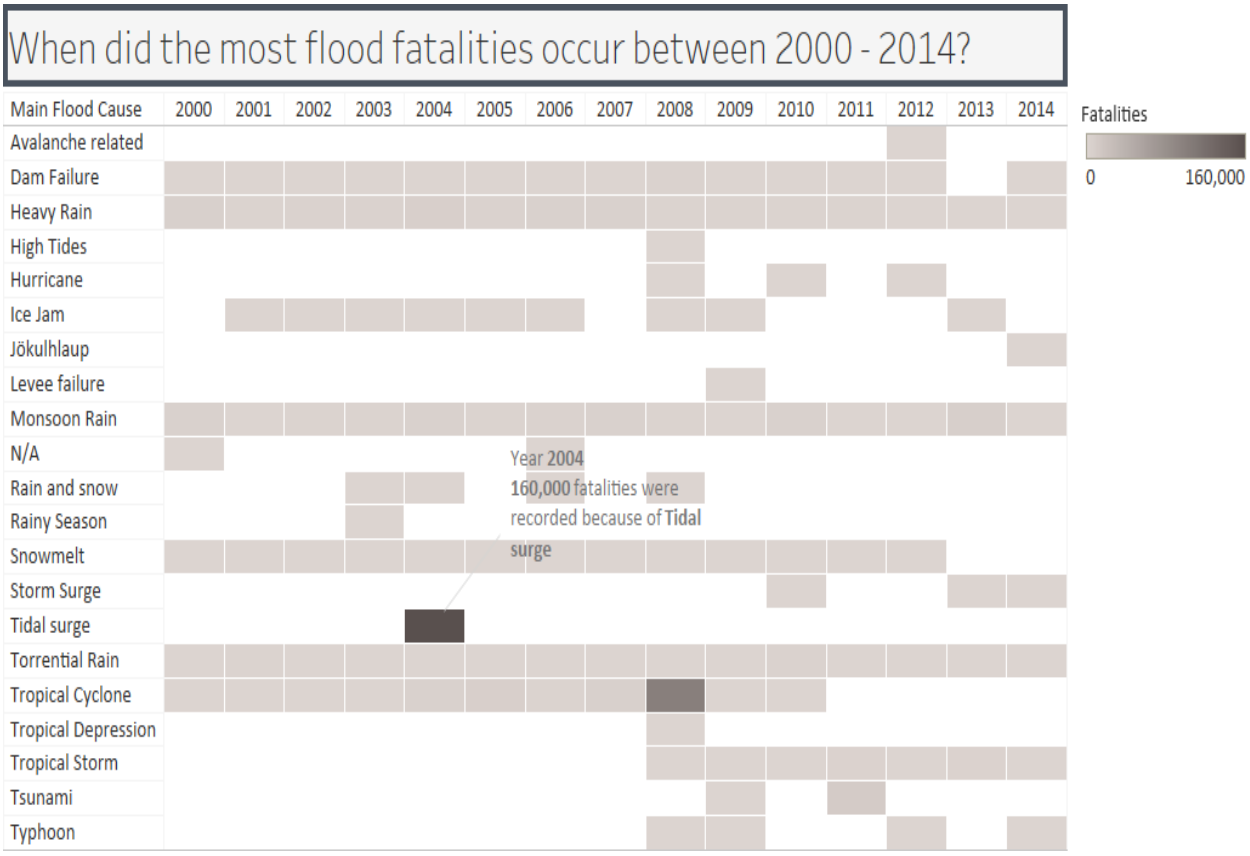
Chapter 1 – Basic Charts

Creating a Scatter Plot



Chapter 1 – Basic Charts

Creating a Heat Map



Chapter 1 – Basic Charts

Creating a Text Table

Top 20 Movies from 2007-2011 based on Worldwide Gross

Film	Year	Worldwide Gross A..	Audience score %	Avg. Rotten Tomat..	Avg. Profitability
The Twilight Saga: New Moon	2009	$709,820,000	78%	27%	14
Twilight: Breaking Dawn	2011	$702,170,000	68%	26%	6
Mamma Mia!	2008	$609,473,955	76%	53%	9
WALL-E	2008	$521,283,432	89%	96%	3
Sex and the City	2008	$415,253,258	81%	49%	7
Twilight	2008	$376,661,000	82%	49%	10
Tangled	2010	$355,080,000	88%	89%	1
Enchanted	2007	$340,487,652	80%	93%	4
The Proposal	2009	$314,700,000	74%	43%	8
Sex and the City 2	2010	$288,350,000	49%	15%	3
The Curious Case of Benjamin Button	2008	$285,431,000	81%	73%	2
High School Musical 3: Senior Year	2008	$252,044,501	76%	65%	23
It's Complicated	2009	$224,600,000	63%	56%	3
What Happens in Vegas	2008	$219,367,646	72%	28%	6
Knocked Up	2007	$219,001,261	83%	91%	7
Valentine's Day	2010	$217,570,000	54%	17%	4
Marley and Me	2008	$206,073,000	77%	63%	4
The Ugly Truth	2009	$205,300,000	68%	14%	5
Gnomeo and Juliet	2011	$193,967,000	52%	56%	5
He's Just Not That Into You	2009	$178,840,000	60%	42%	7
Grand Total		$6,835,473,705	1,451%	52%	7

Chapter 1 – Basic Charts

Creating a Highlight Table

Top 20 Movies from 2007-2011 based on Worldwide Gross

Film	Year	Worldwide Gross Amo..	Avg. Audience score %	Avg. Rotten Tomatoes %	Avg. Profitability
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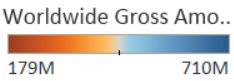
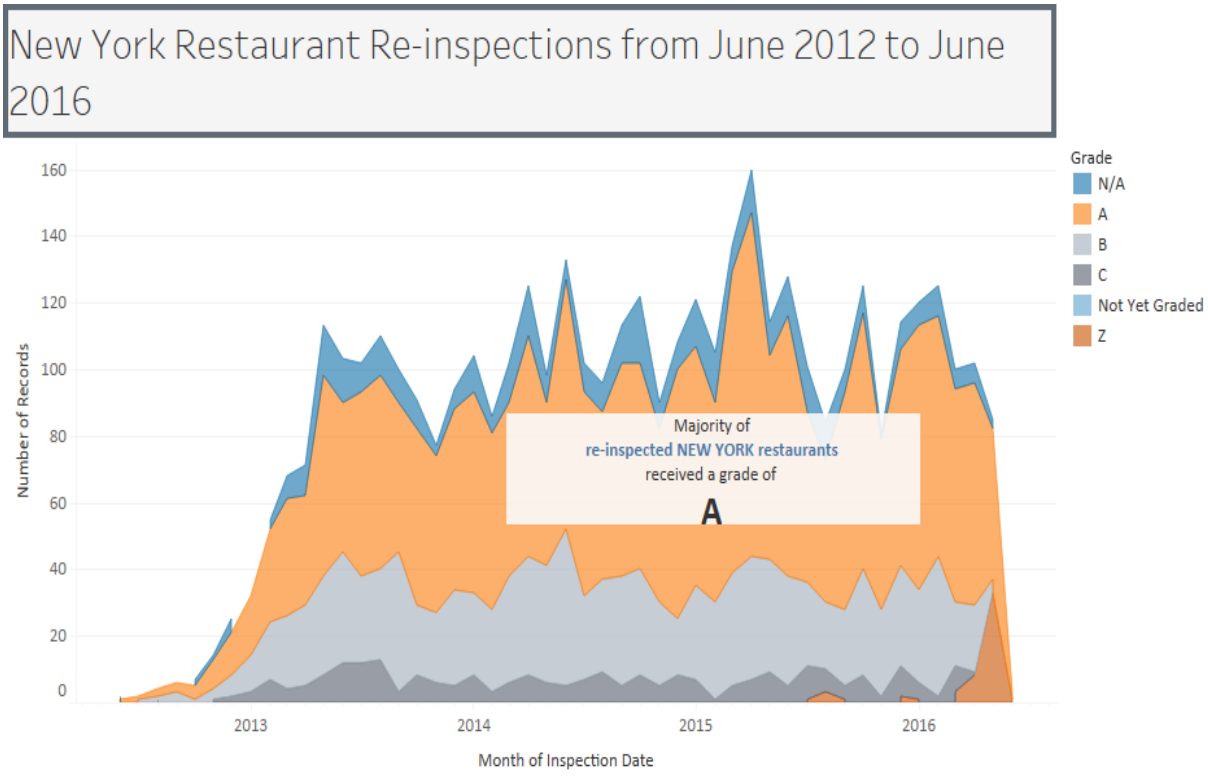


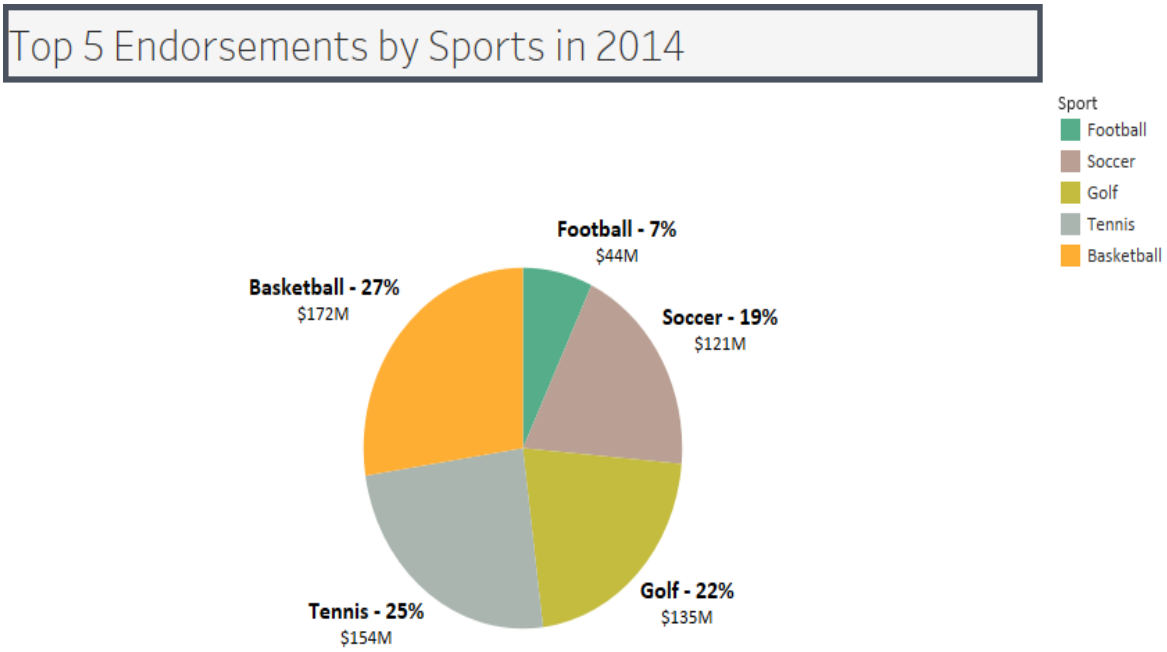
Chapter 1 – Basic Charts

Creating an Area Chart



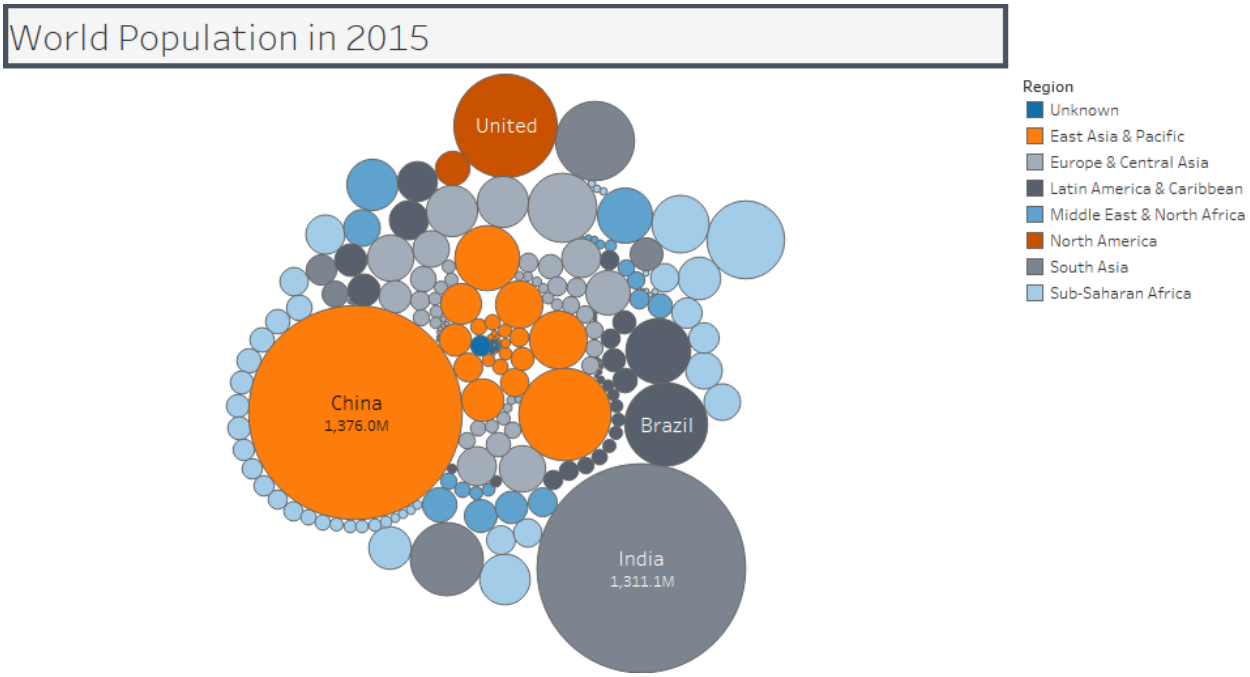
Chapter 1 – Basic Charts

Creating an Pie Chart



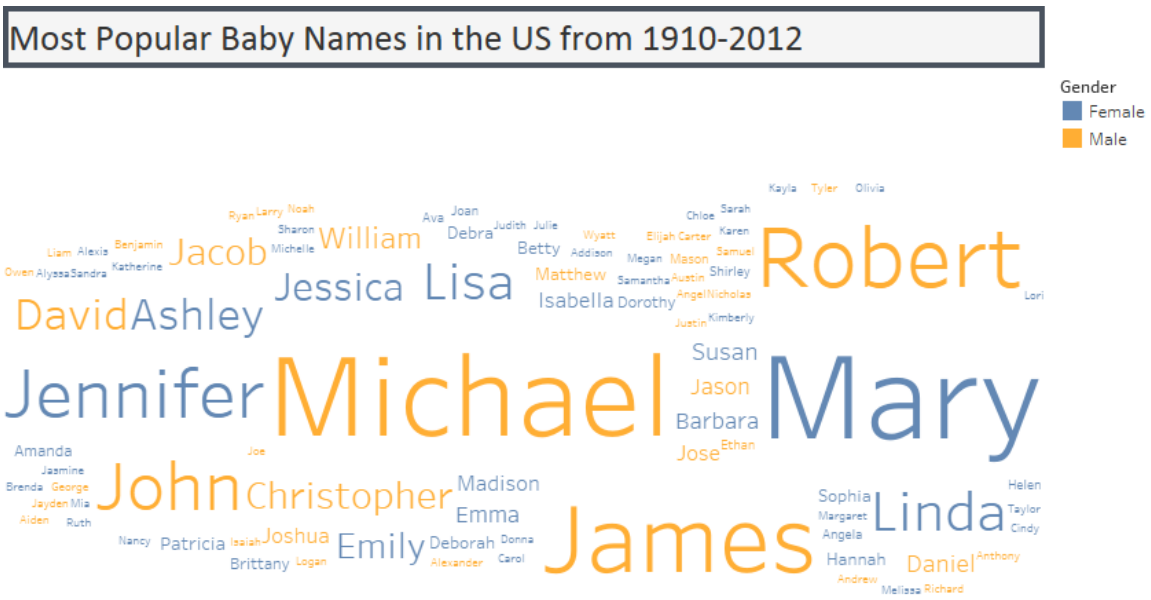
Chapter 1 – Basic Charts

Creating an Bubble Chart



Chapter 1 – Basic Charts

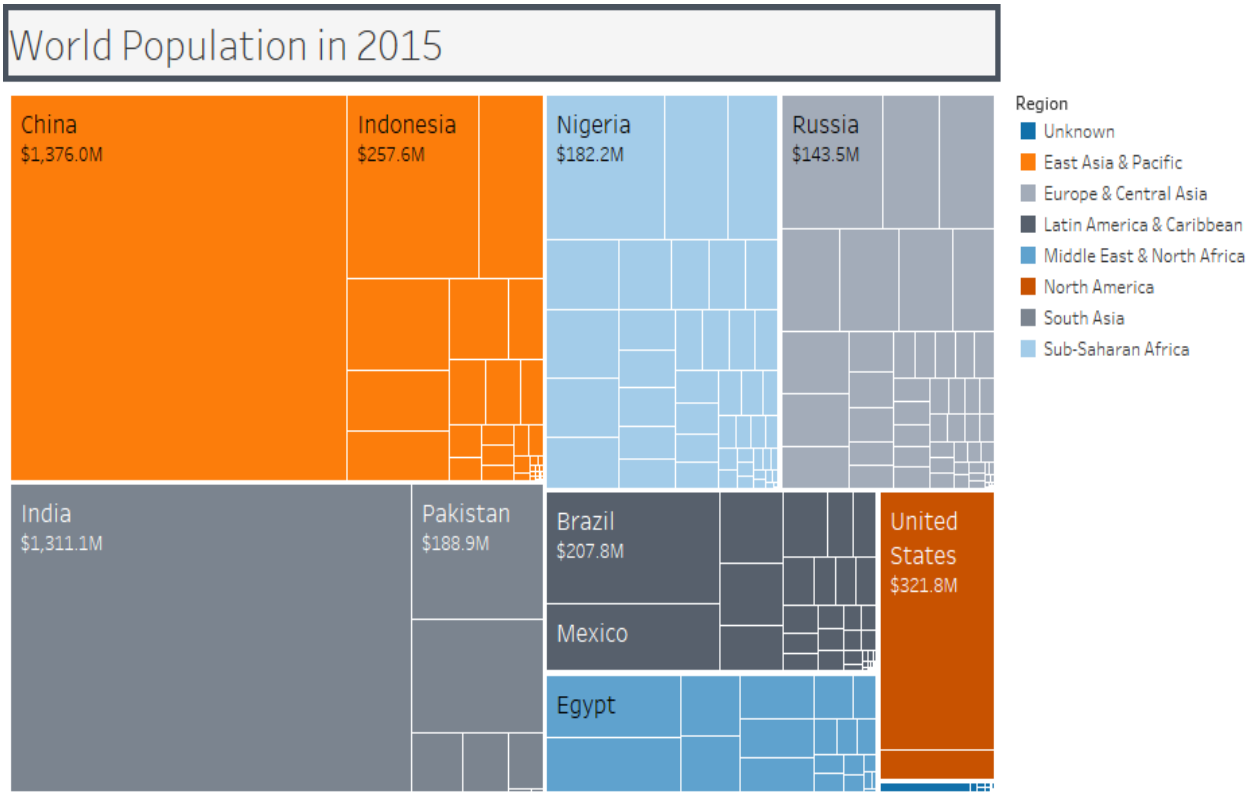
Creating an Word Cloud



I have used different font from the what has been mentioned in text book.

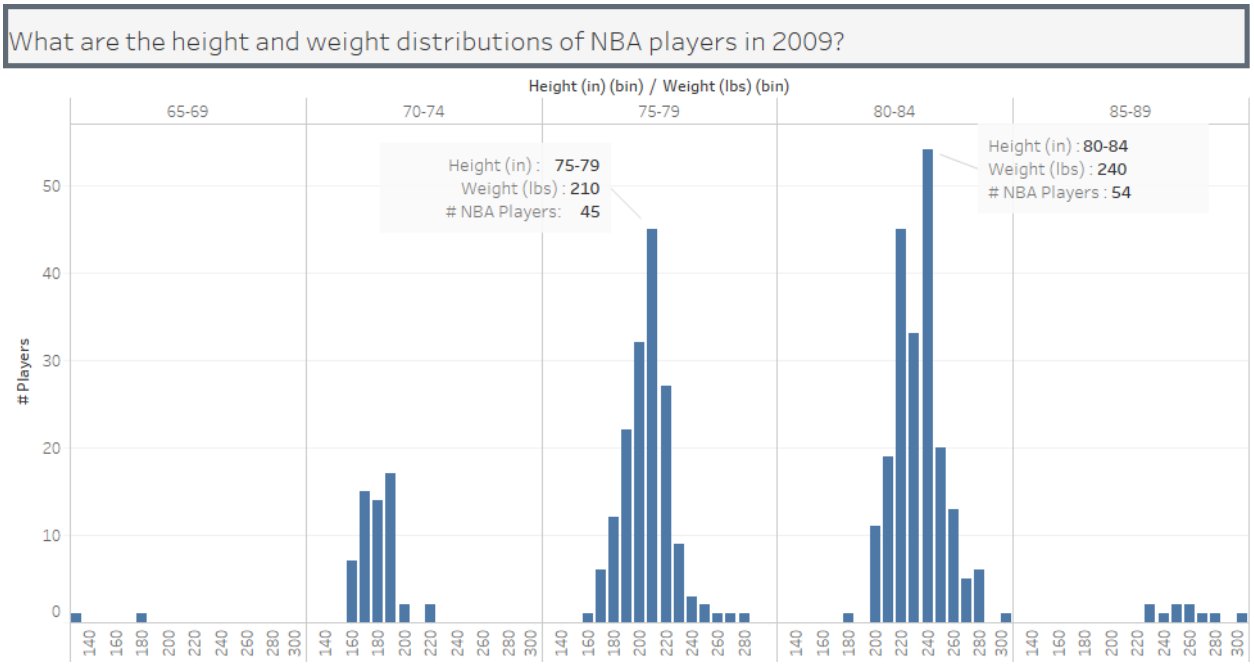
Chapter 1 – Basic Charts

Creating an Tree Map



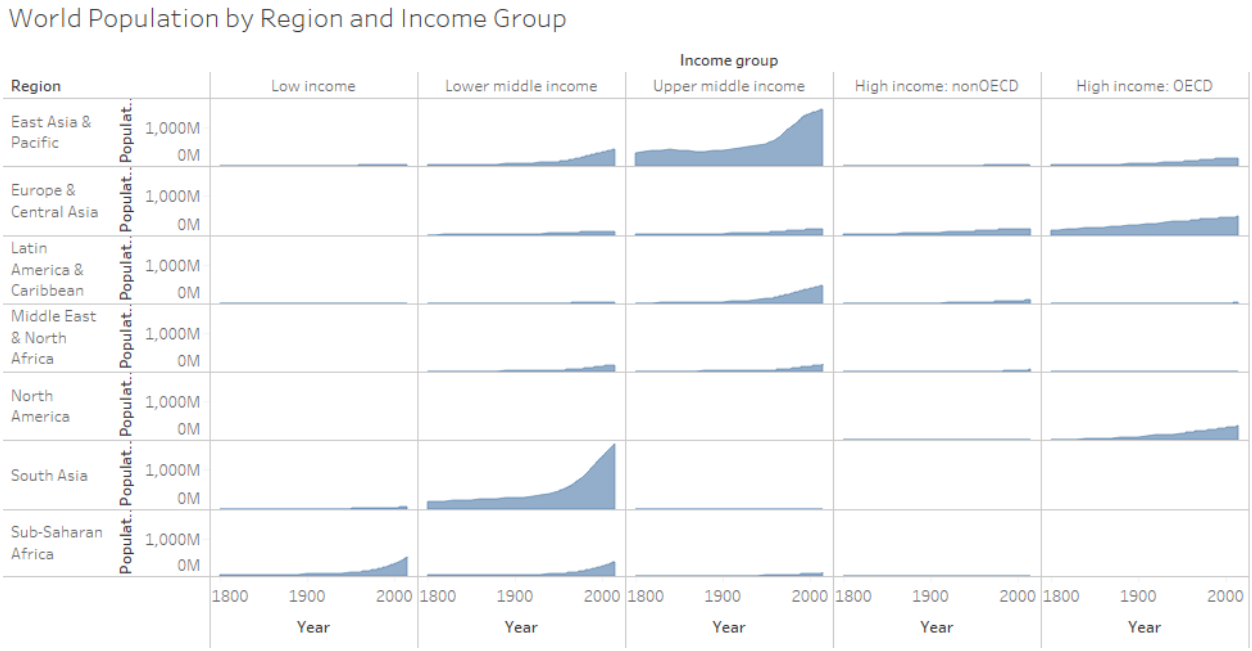
Chapter 2 – Advanced Charts

Creating a Histogram



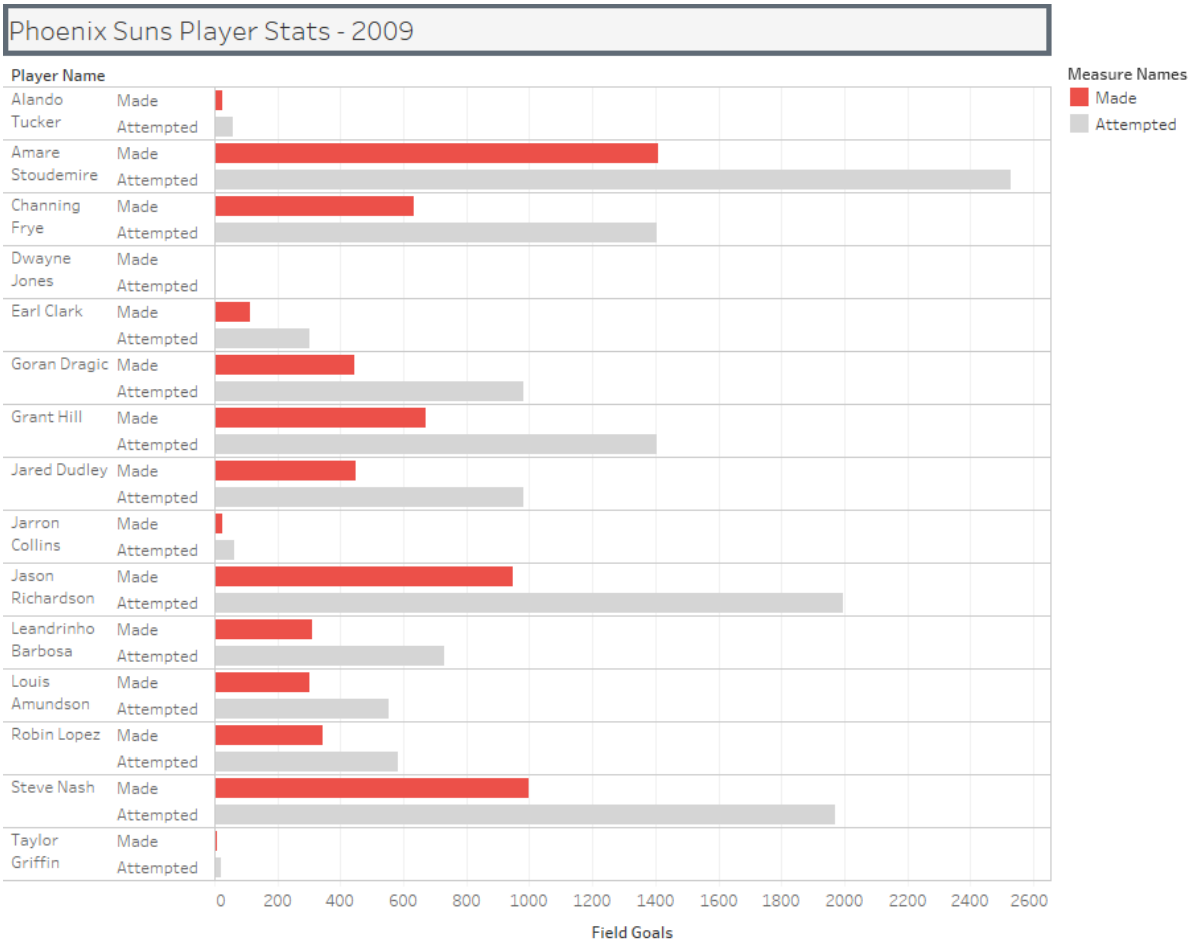
Chapter 2 – Advanced Charts

Creating Small Multiple Chart



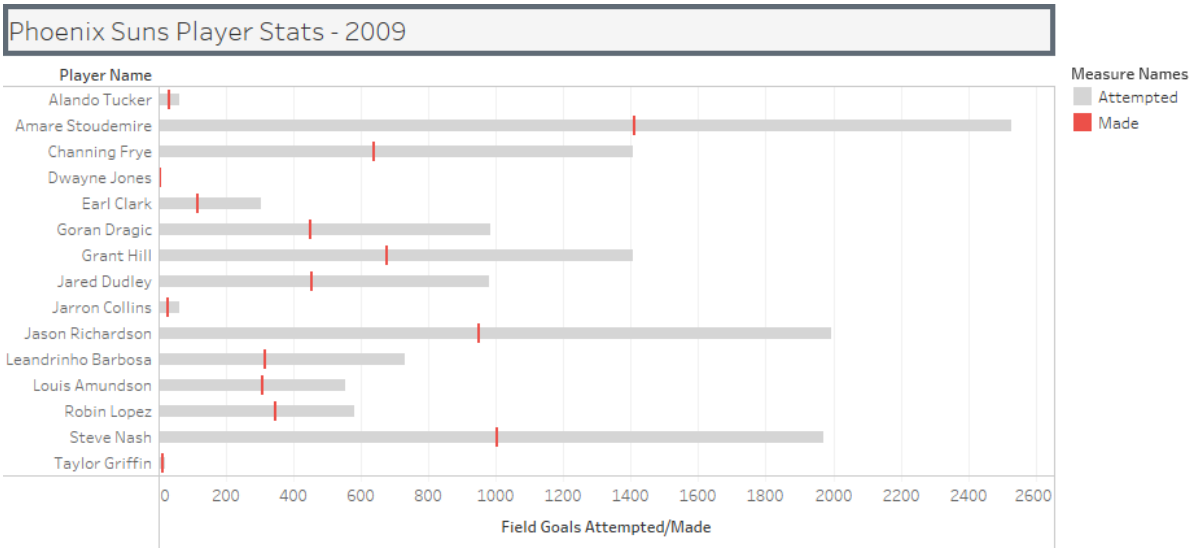
Chapter 2 – Advanced Charts

Creating Shared Axis Chart



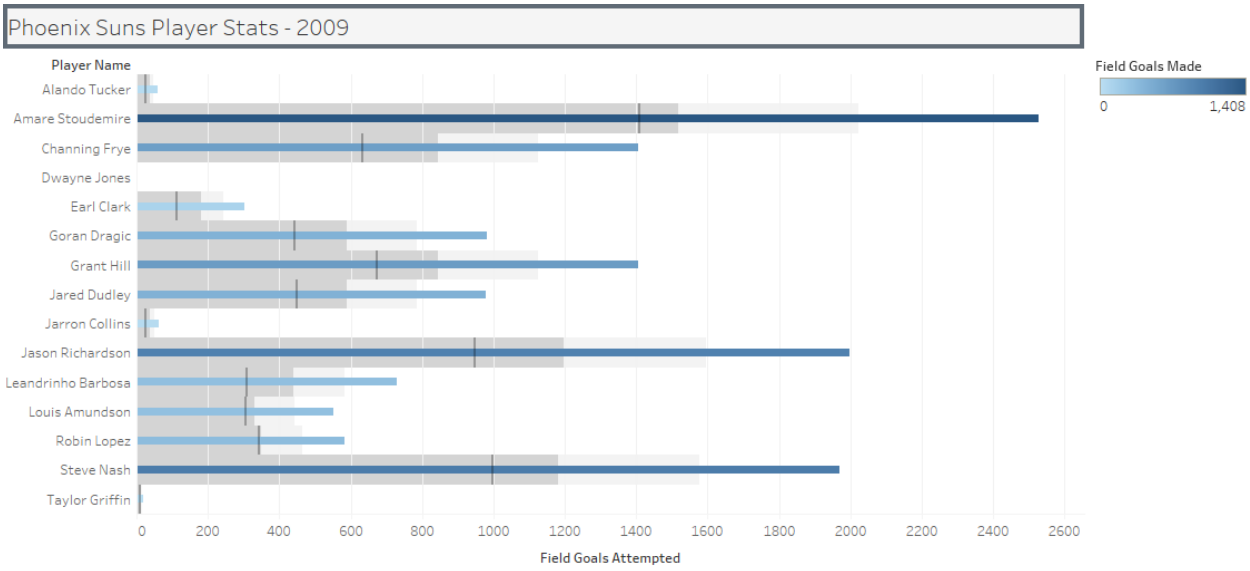
Chapter 2 – Advanced Charts

Creating Combo Chart



Chapter 2 – Advanced Charts

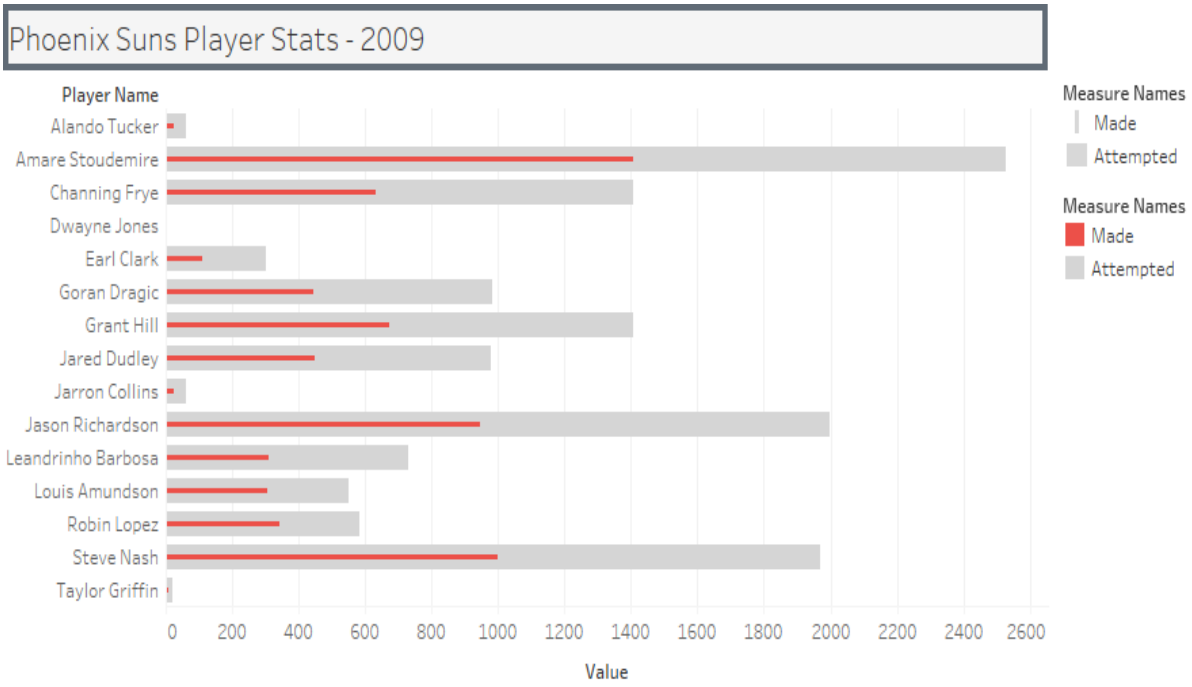
Creating Bullet Chart



The light grey shade is not visible at the end while copying the data.

Chapter 2 – Advanced Charts

Creating Bar in Bar chart

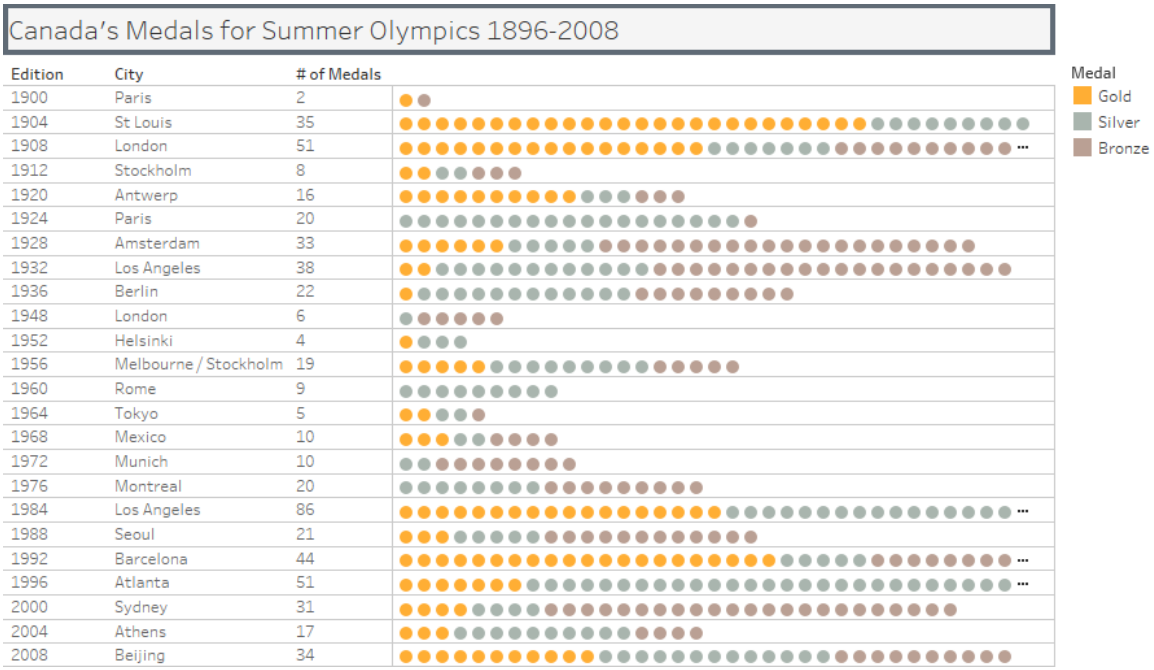


Chapter 2 – Advanced Charts

Creating Donut chart

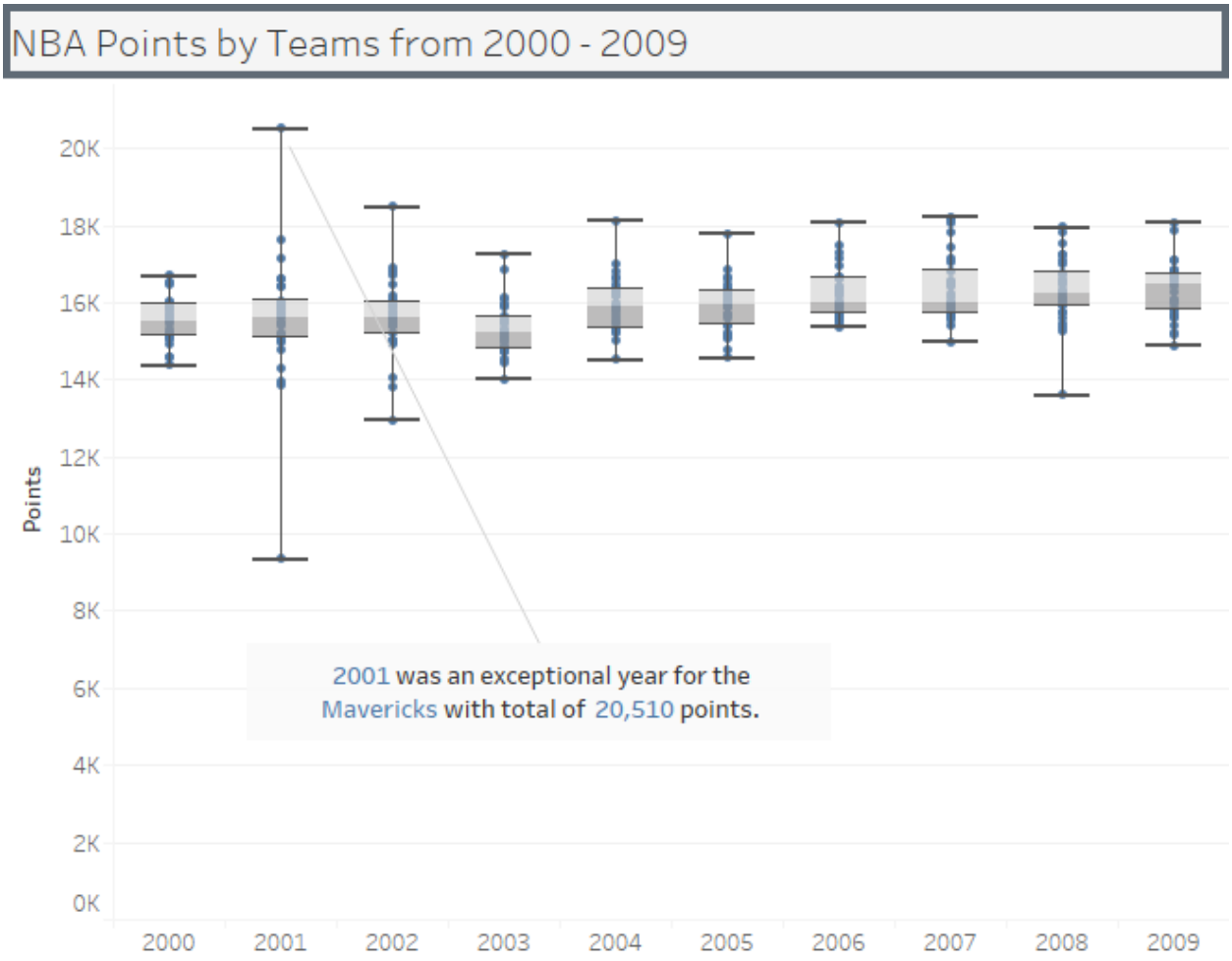
Chapter 2 – Advanced Charts

Creating Unit chart



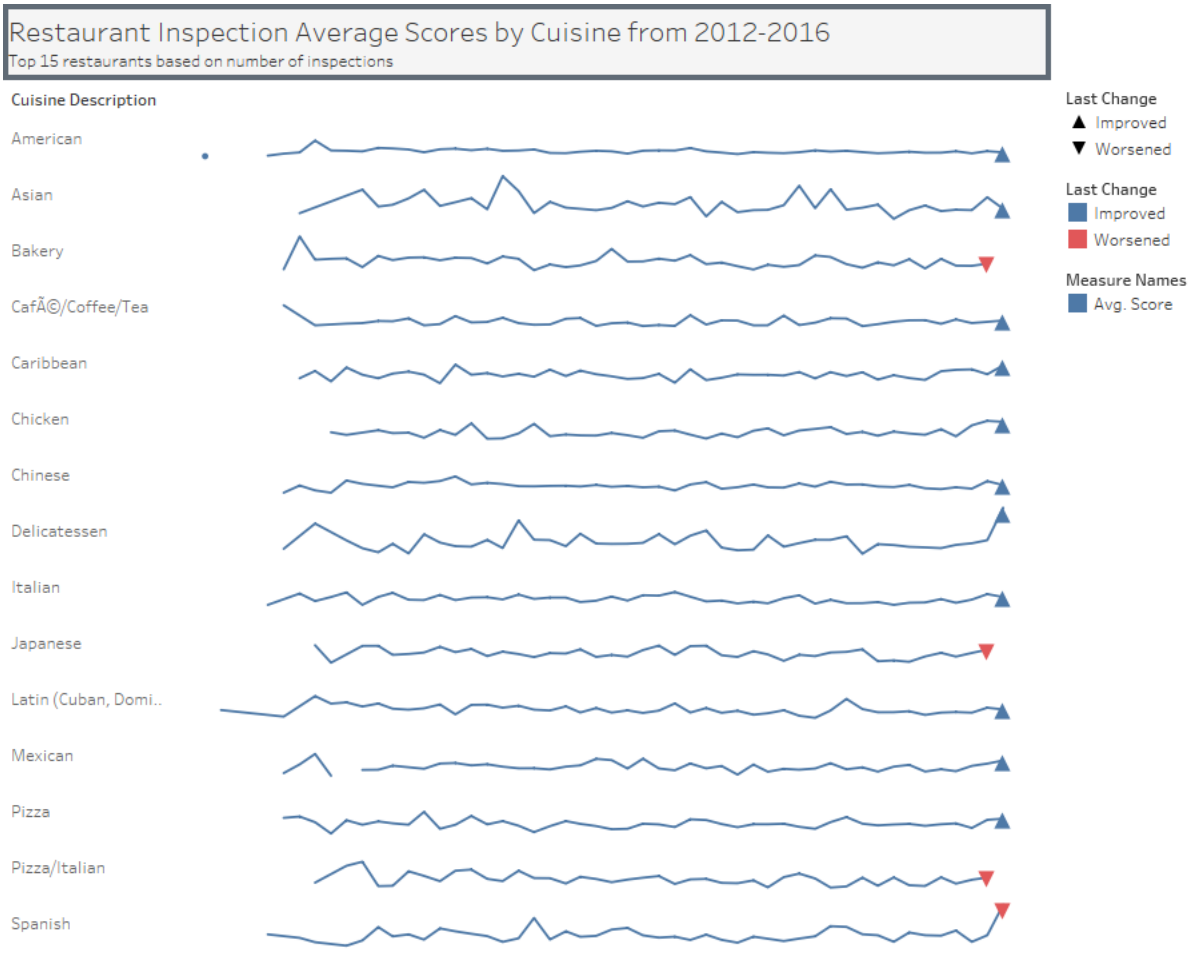
Chapter 2 – Advanced Charts

Creating a Box and Whisker Chart



Chapter 2 – Advanced Charts

Creating a Sparkline with Indicators



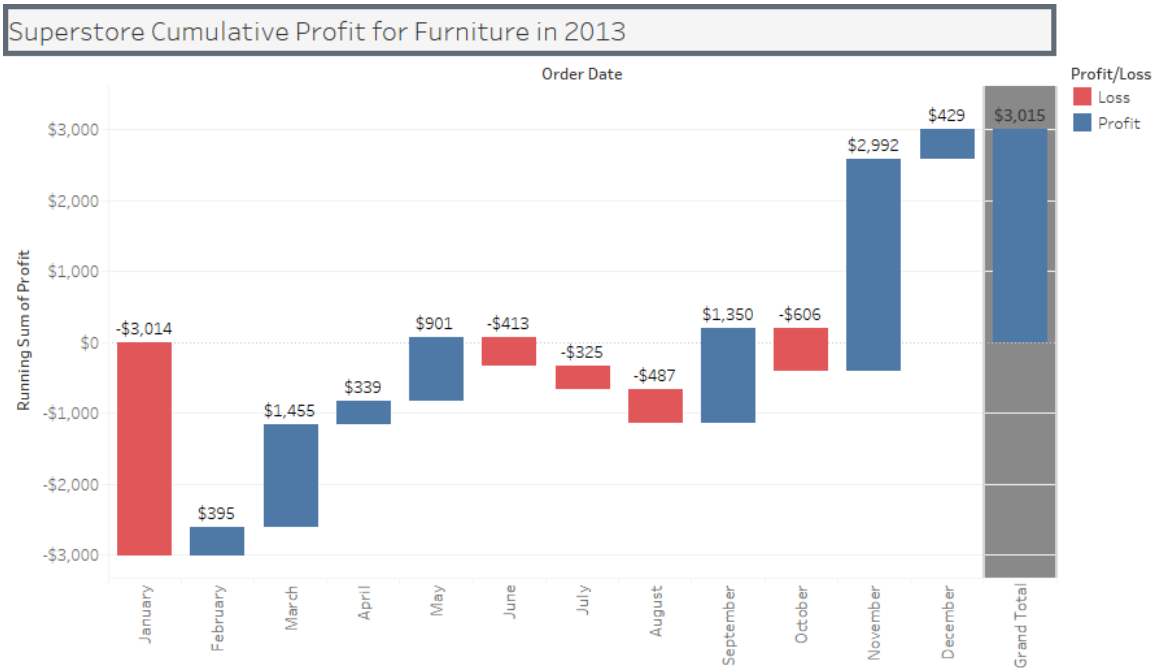
Chapter 2 – Advanced Charts

Creating a KPI Text Table

This Table was omitted from assignment.

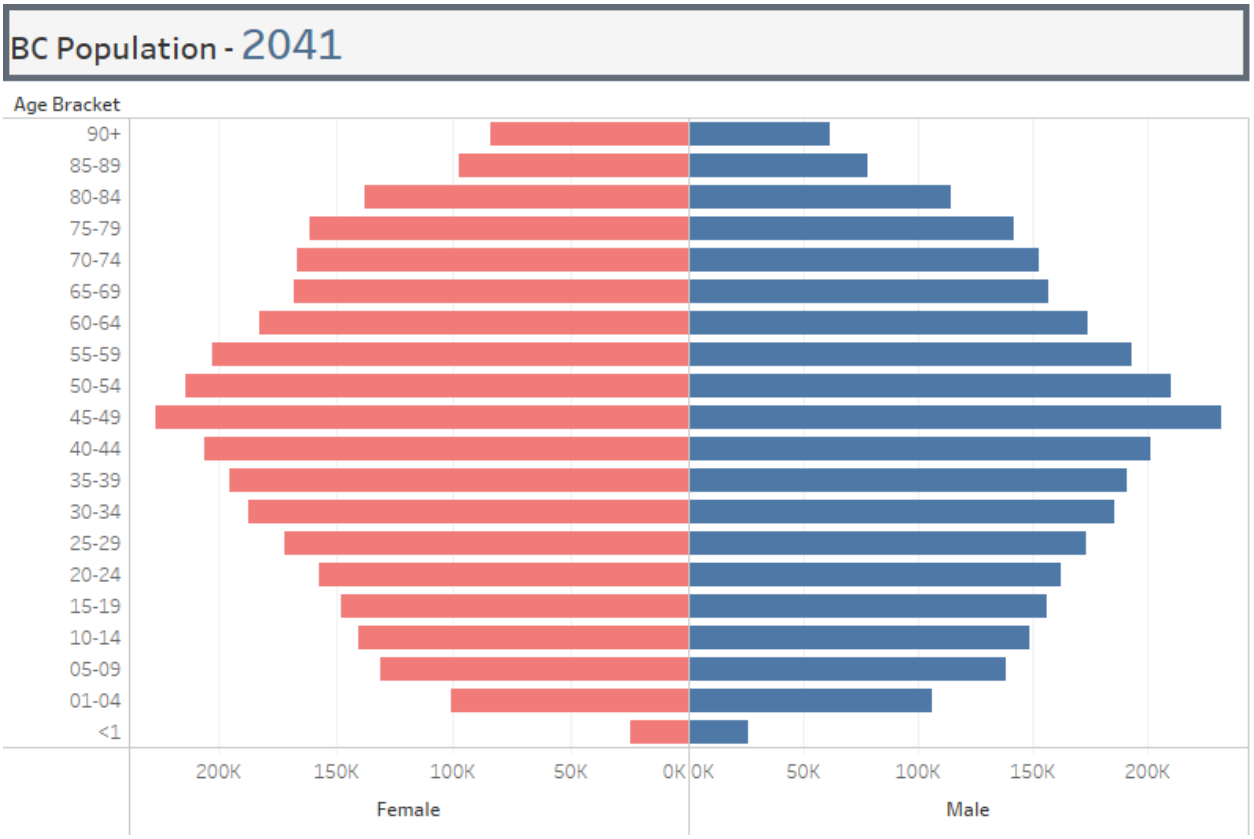
Chapter 2 – Advanced Charts

Creating a Waterfall Chart



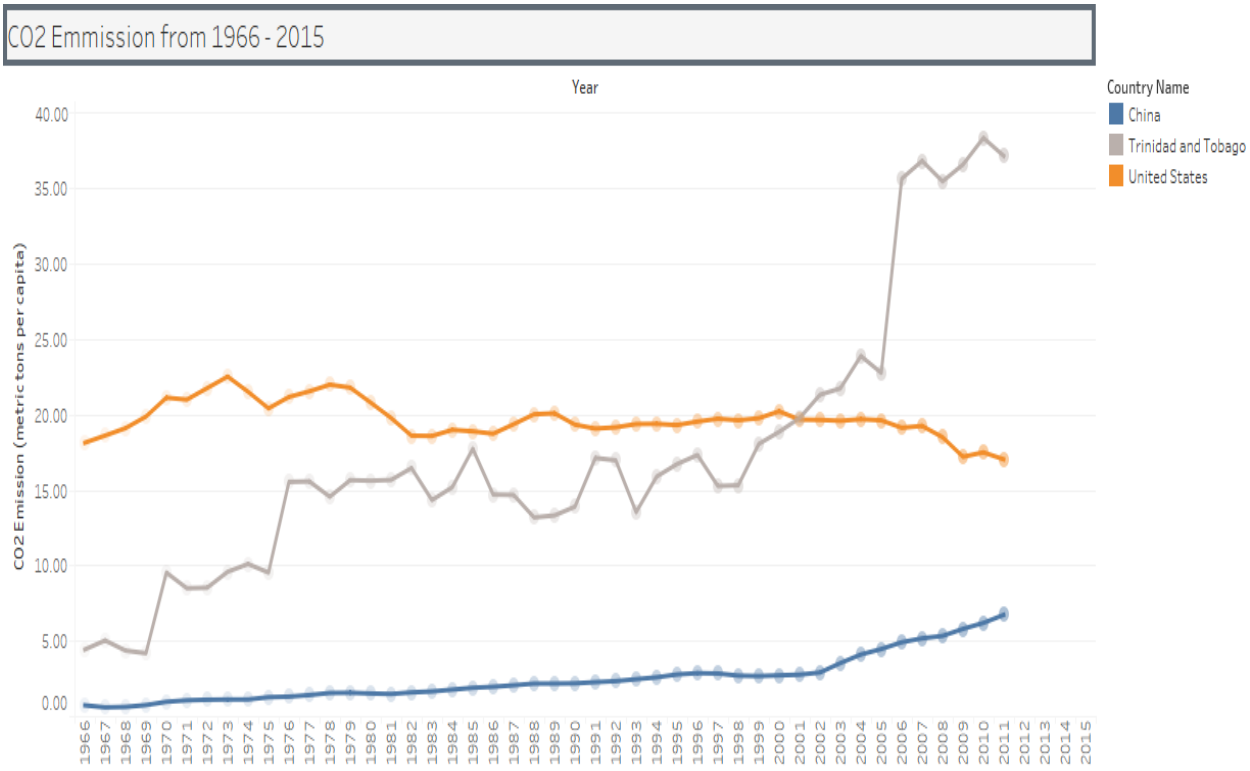
Chapter 2 – Advanced Charts

Creating Population Pyramid



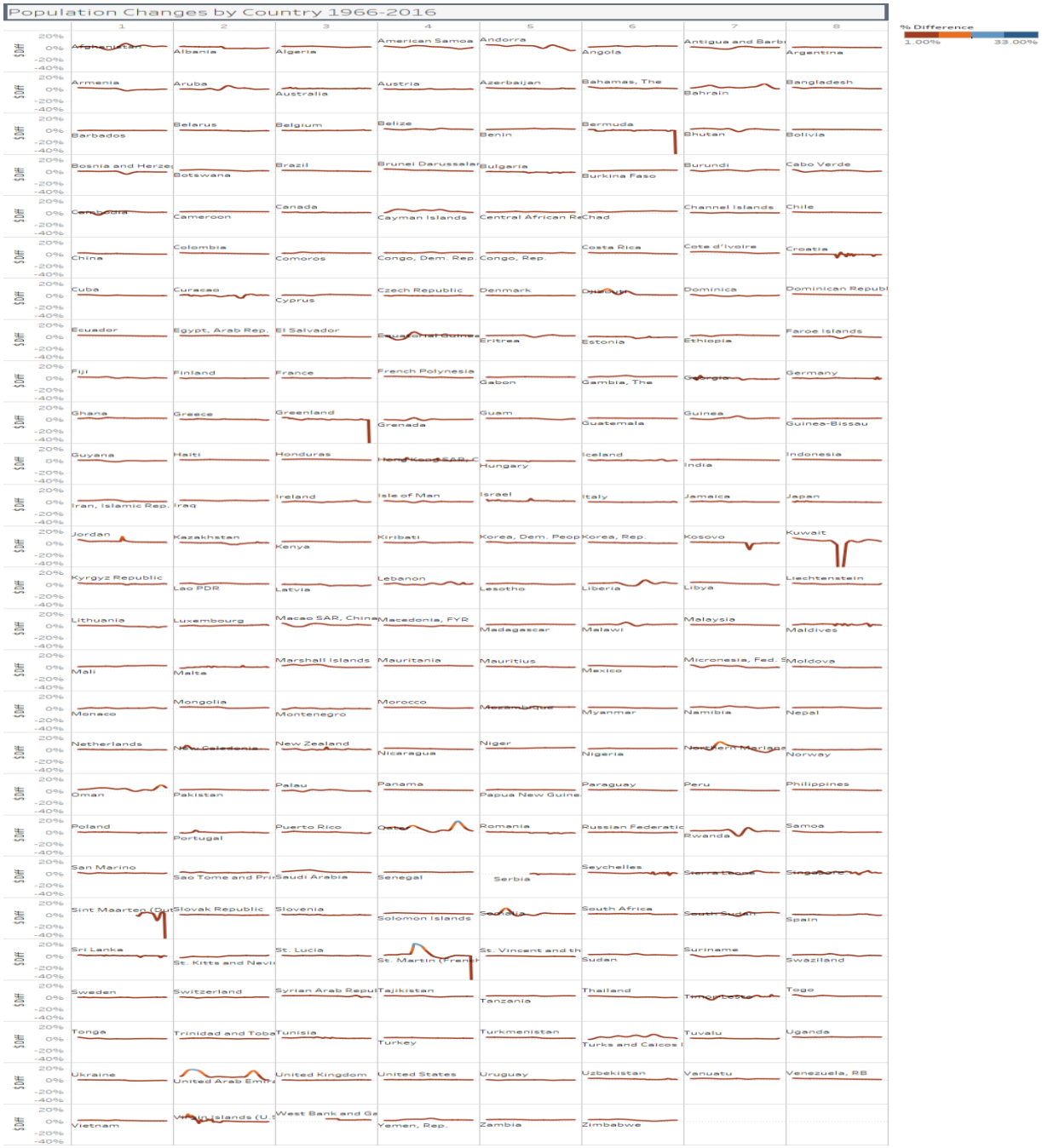
Chapter 3 – Interactivity

Creating a Motion Chart



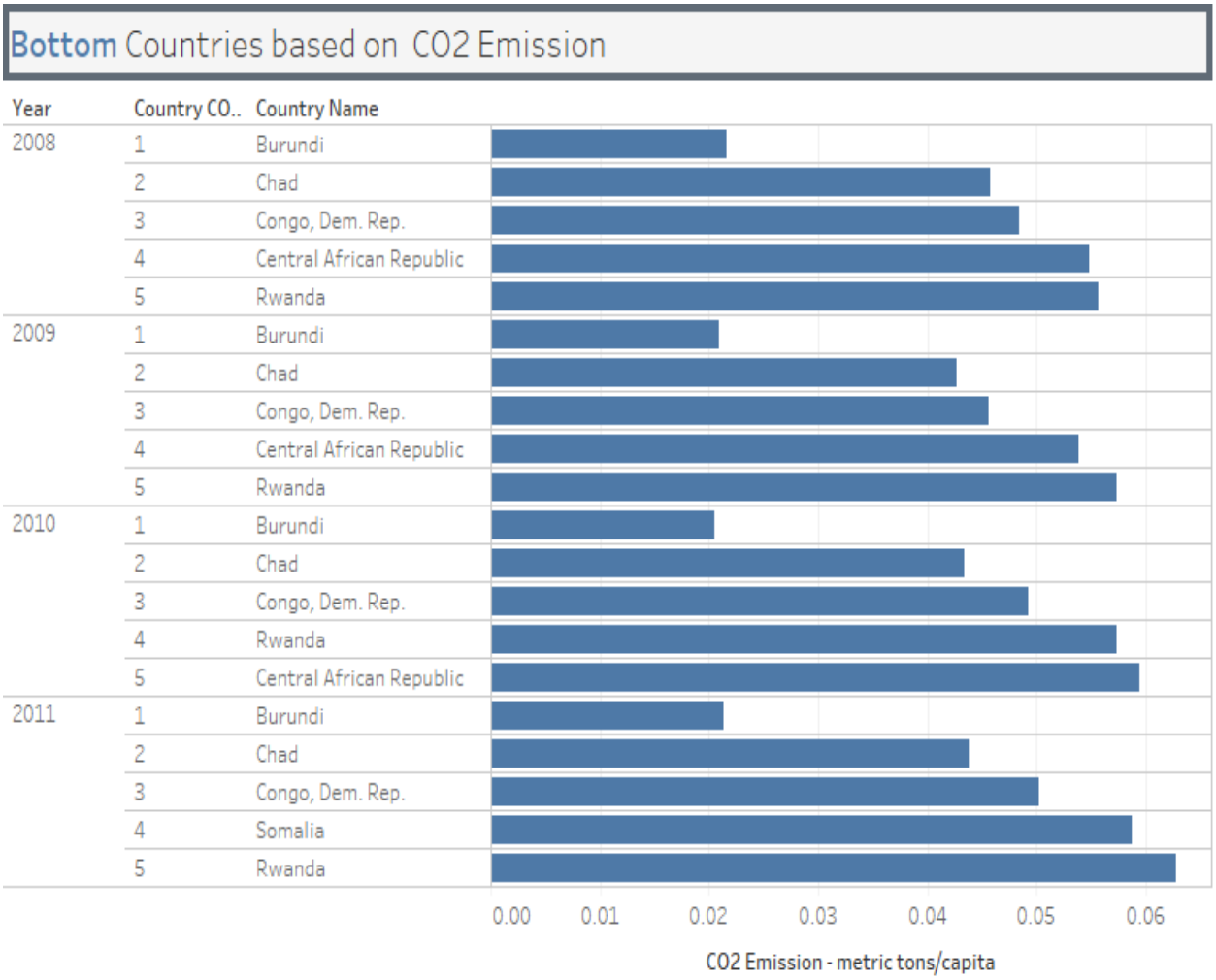
Chapter 3 – Interactivity

Creating a Dynamic Column/Row Trellis Chart



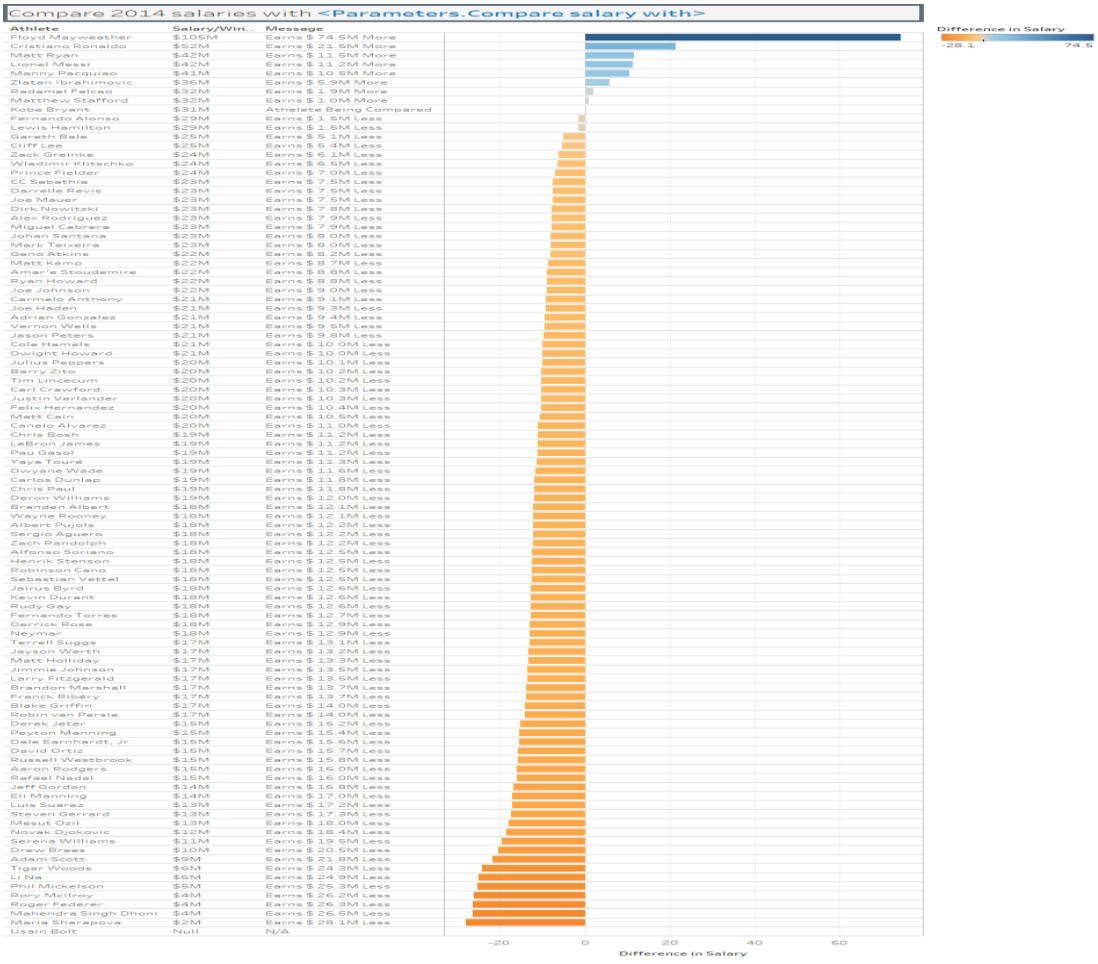
Chapter 3 – Interactivity

Creating a Top/Bottom N filter



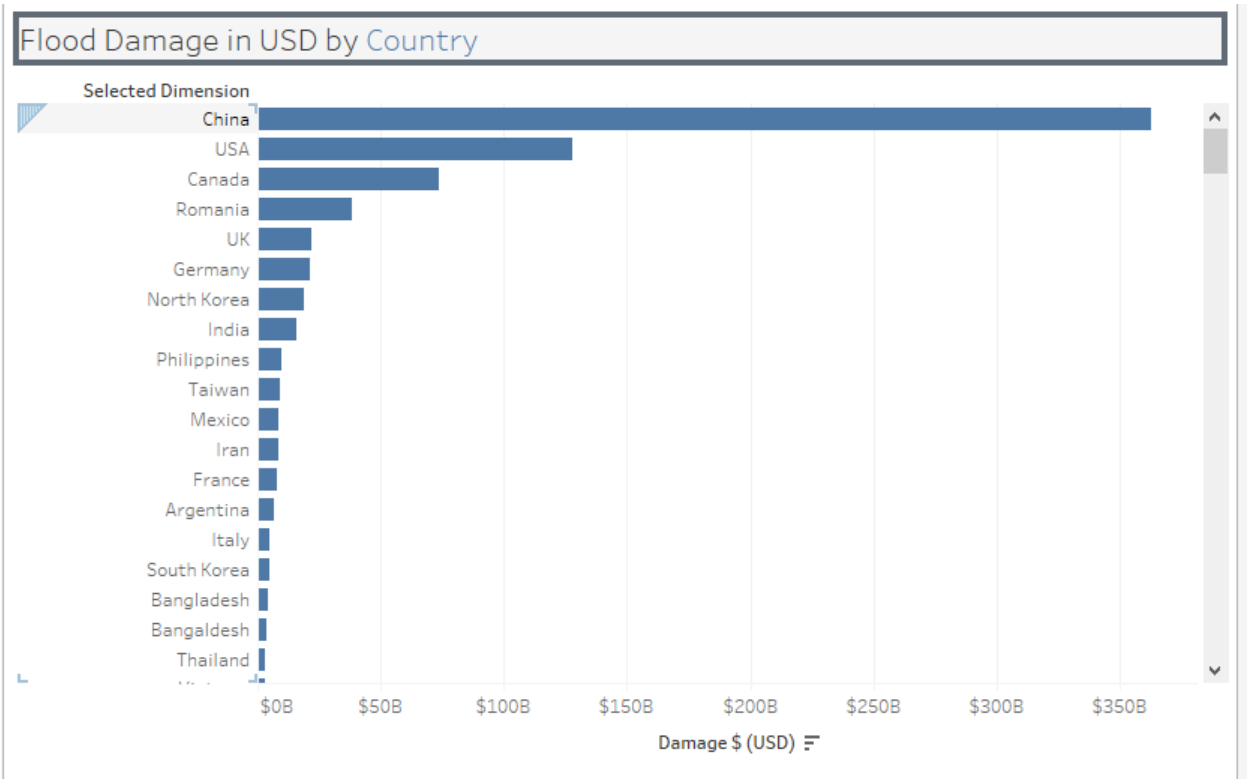
Chapter 3 – Interactivity

Comparing one to everything else



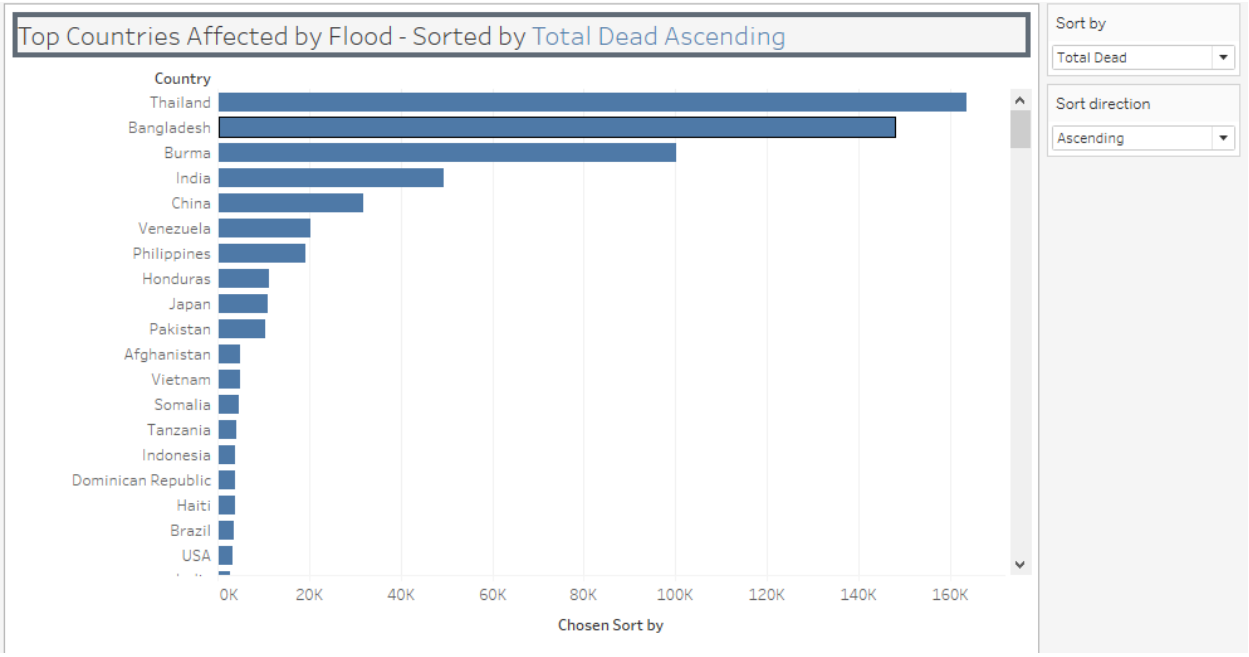
Chapter 3 – Interactivity

Dynamically displaying dimensions



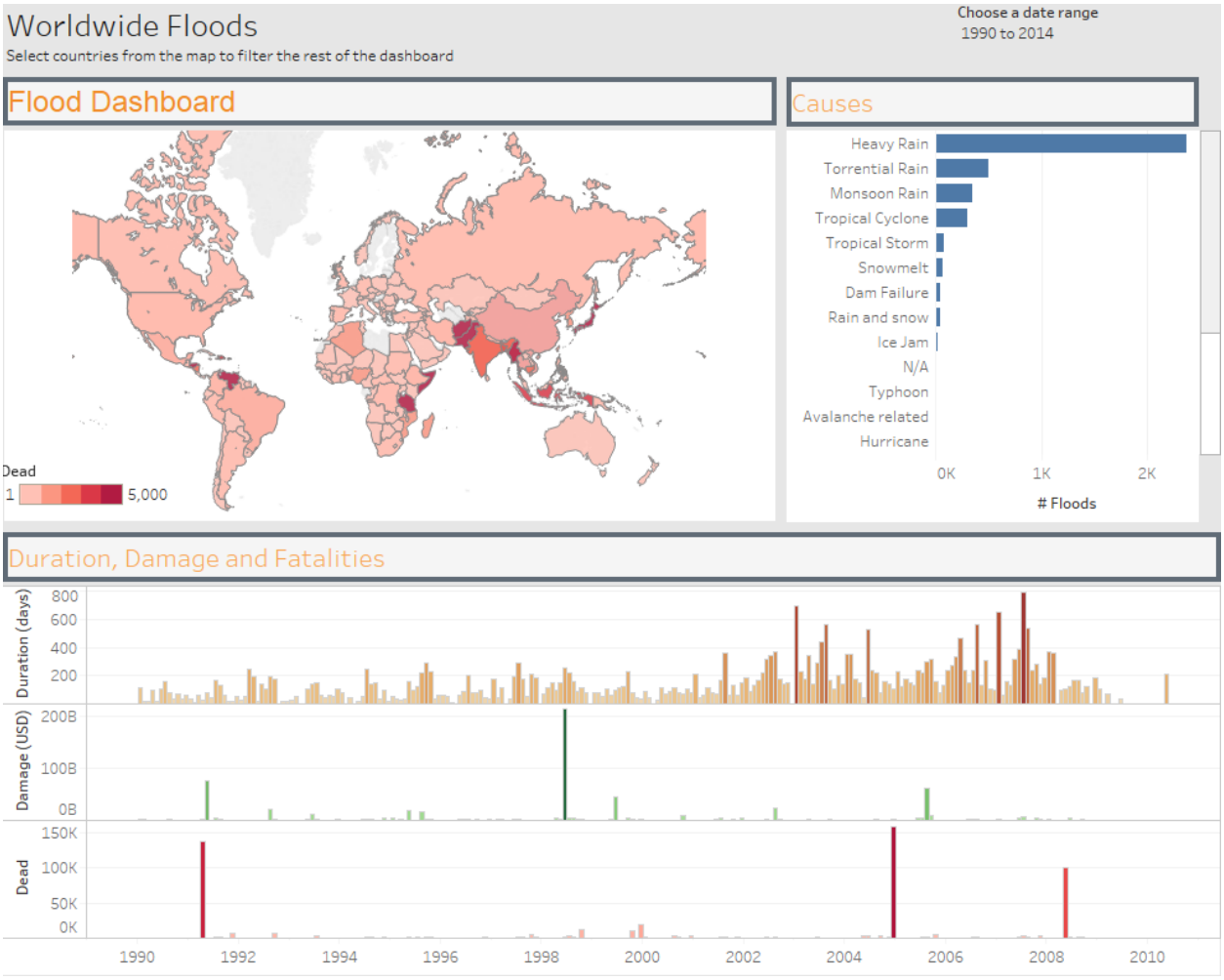
Chapter 3 – Interactivity

Dynamically displaying and sorting measures



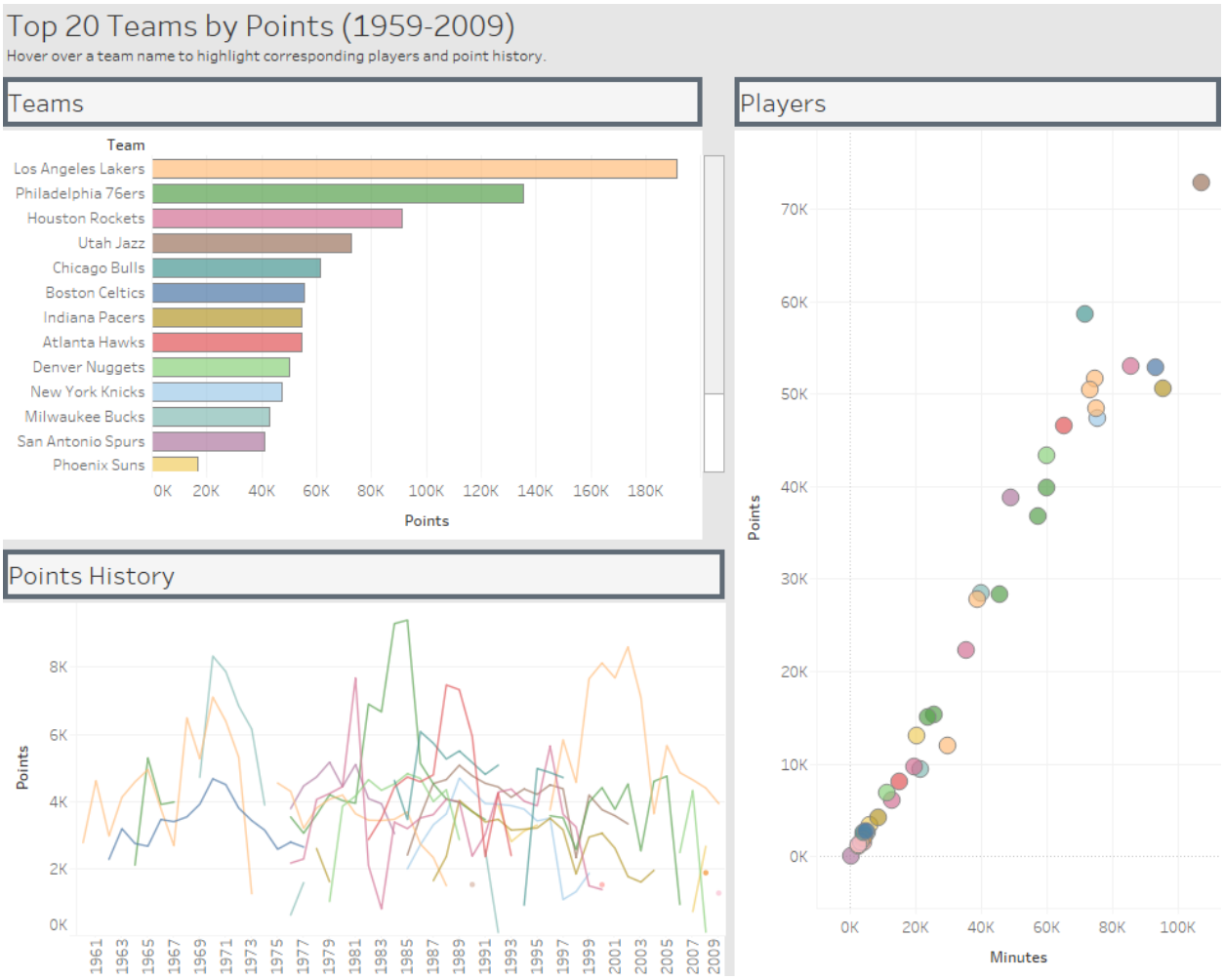
Chapter 4 – Dashboards and Story Points

Creating a Filter Action



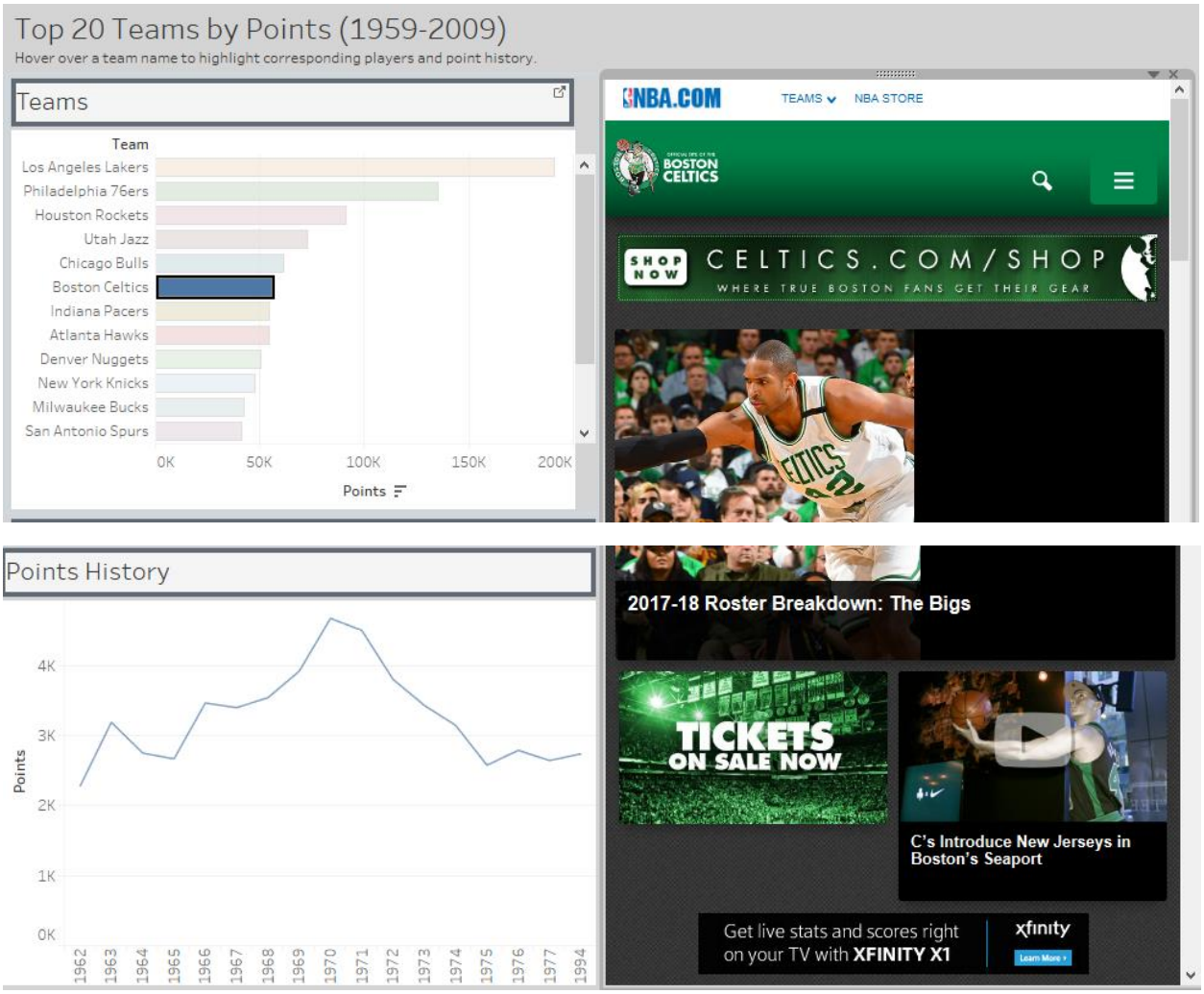
Chapter 4 – Dashboards and Story Points

Creating a Highlight Action



Chapter 4 – Dashboards and Story Points

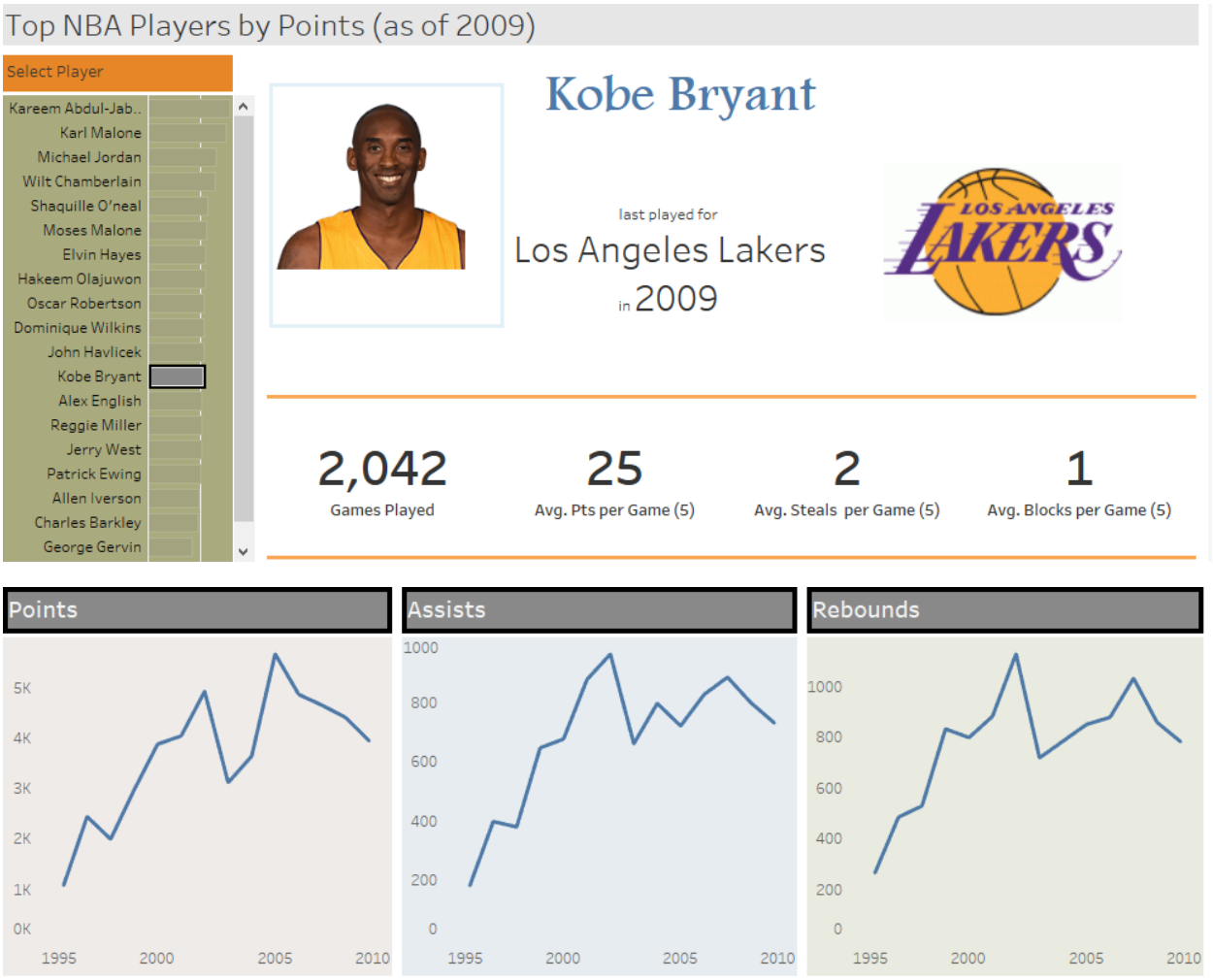
Creating a URL Action



I have copied the image in 2 parts using snipping tool.

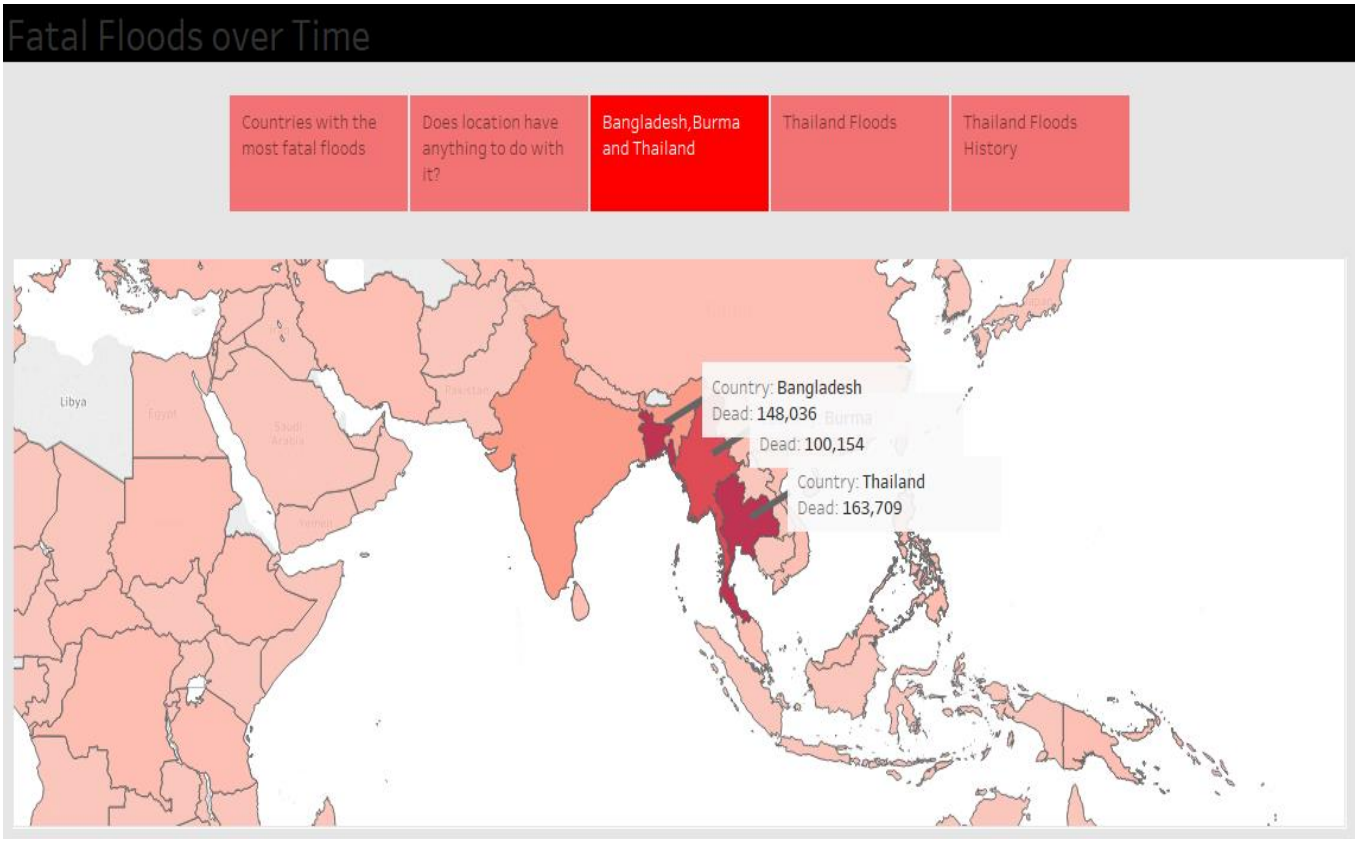
Chapter 4 – Dashboards and Story Points

Creating an Infographic-like dashboard



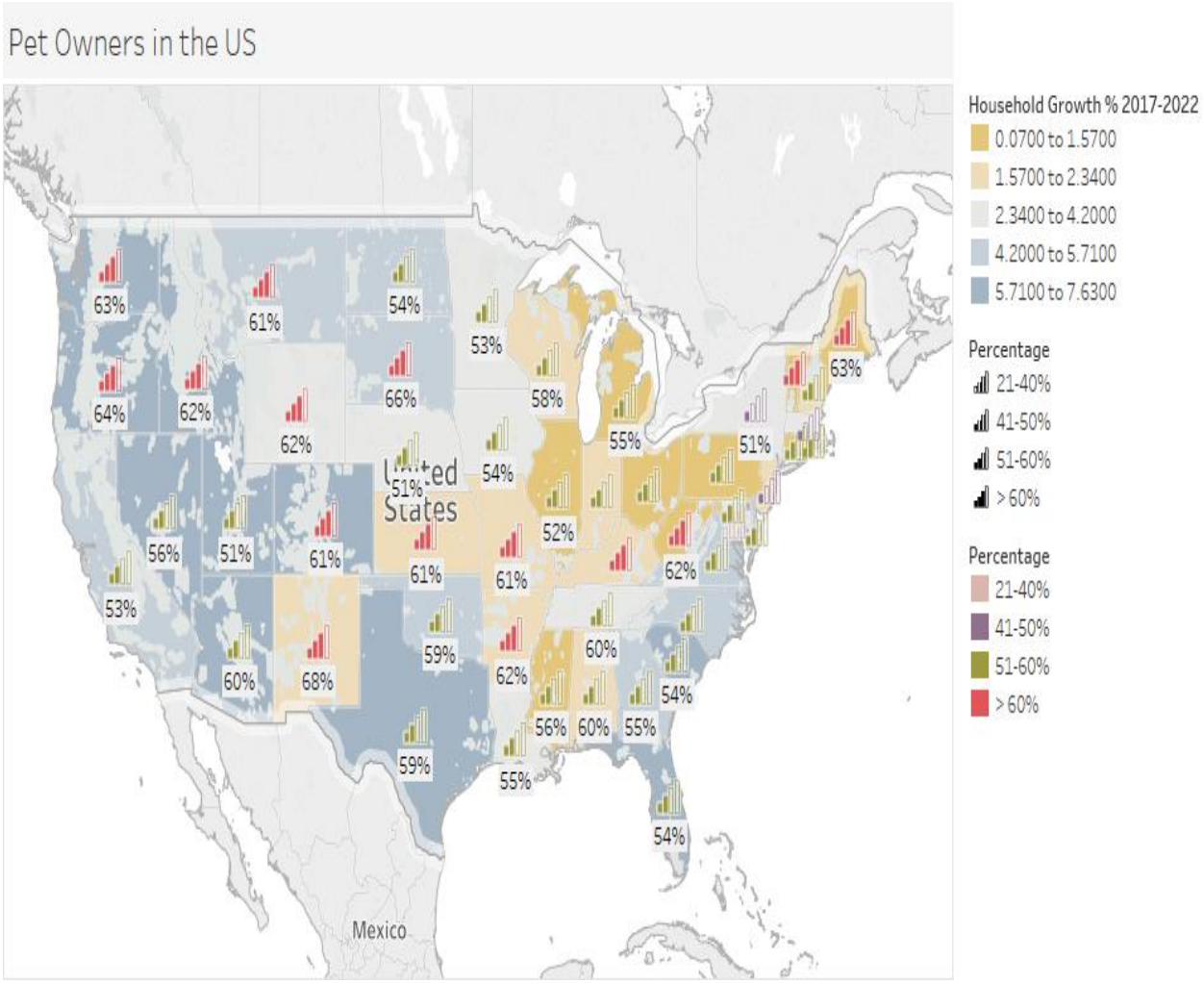
Chapter 4 – Dashboards and Story Points

Creating Story Points



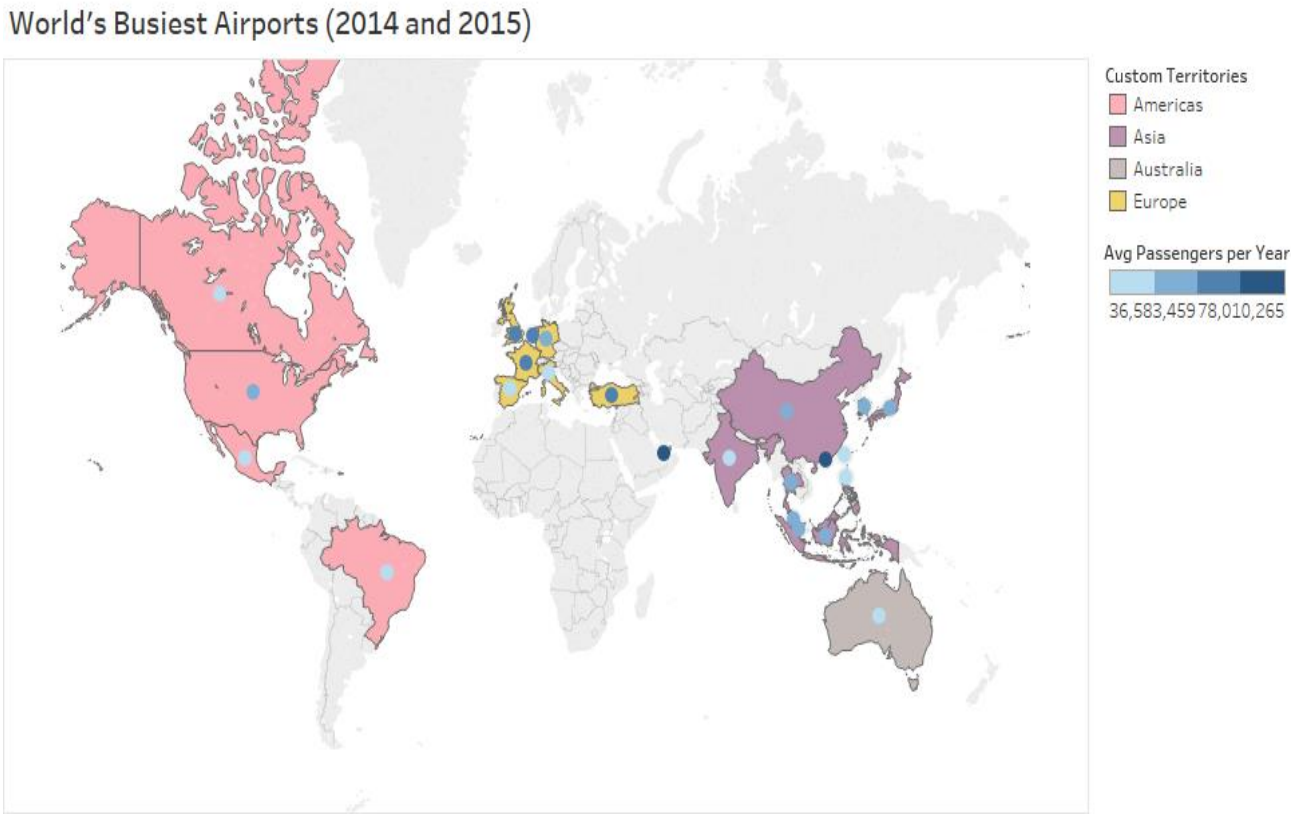
Chapter 5 – Maps and Geospatial Visualization

Adding data layers to map



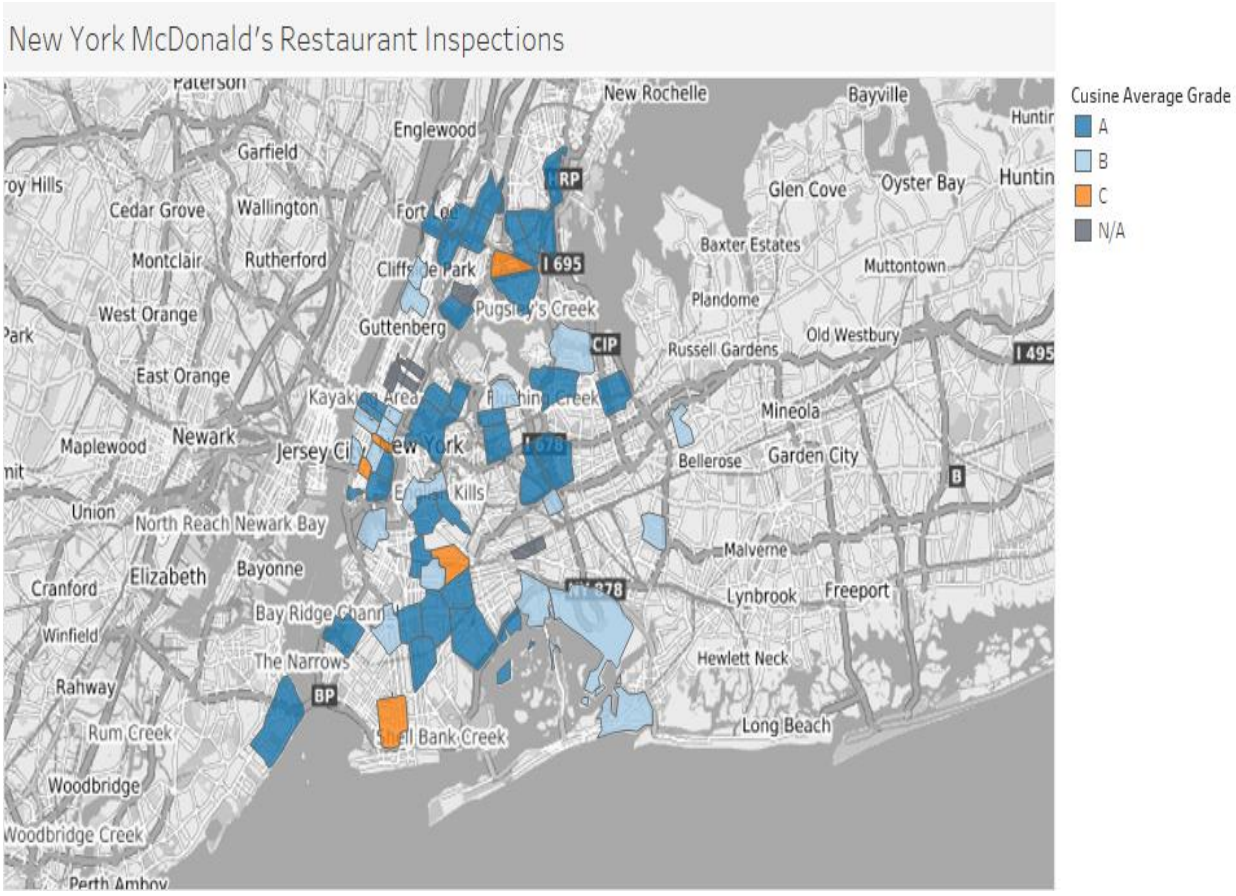
Chapter 5 – Maps and Geospatial Visualization

Creating custom territories



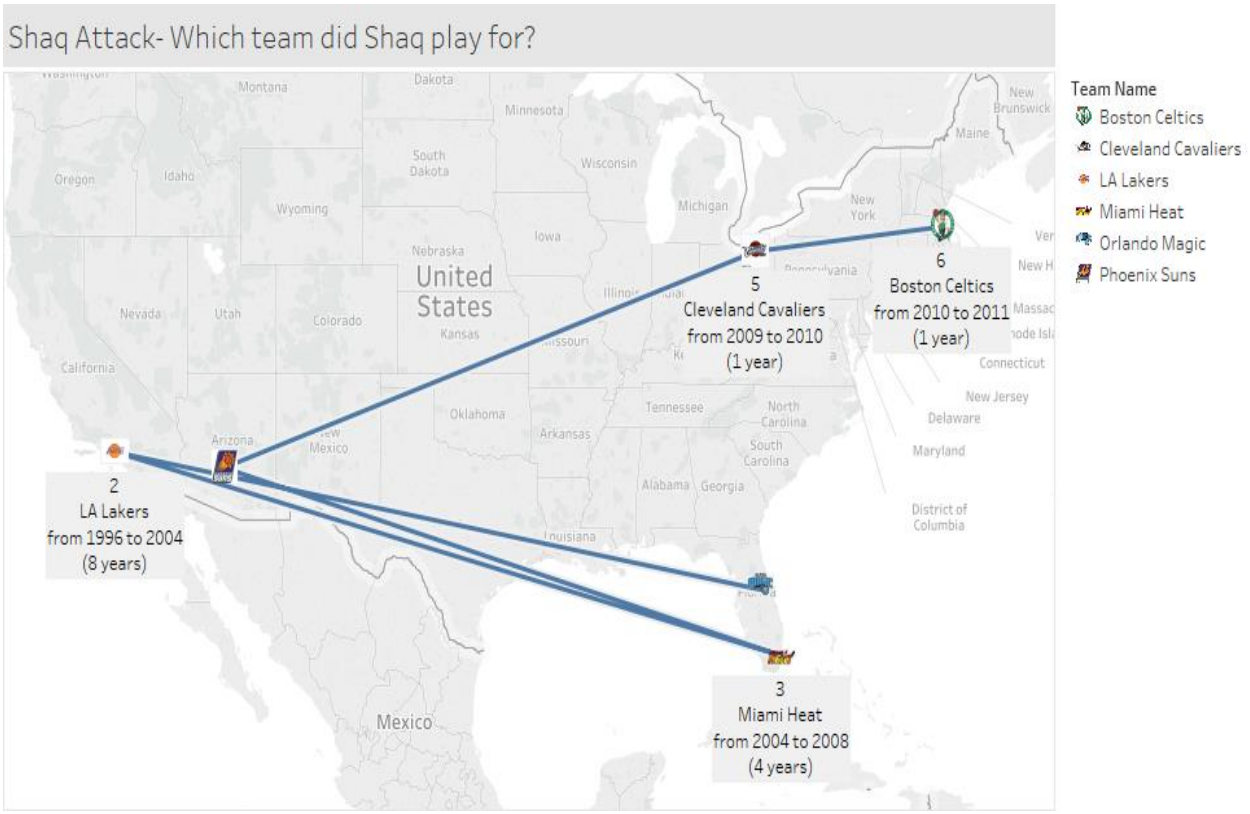
Chapter 5 – Maps and Geospatial Visualization

Working with WMS



Chapter 5 – Maps and Geospatial Visualization

Using path to display movement in map



Chapter 5 – Maps and Geospatial Visualization

Mapping Custom polygons

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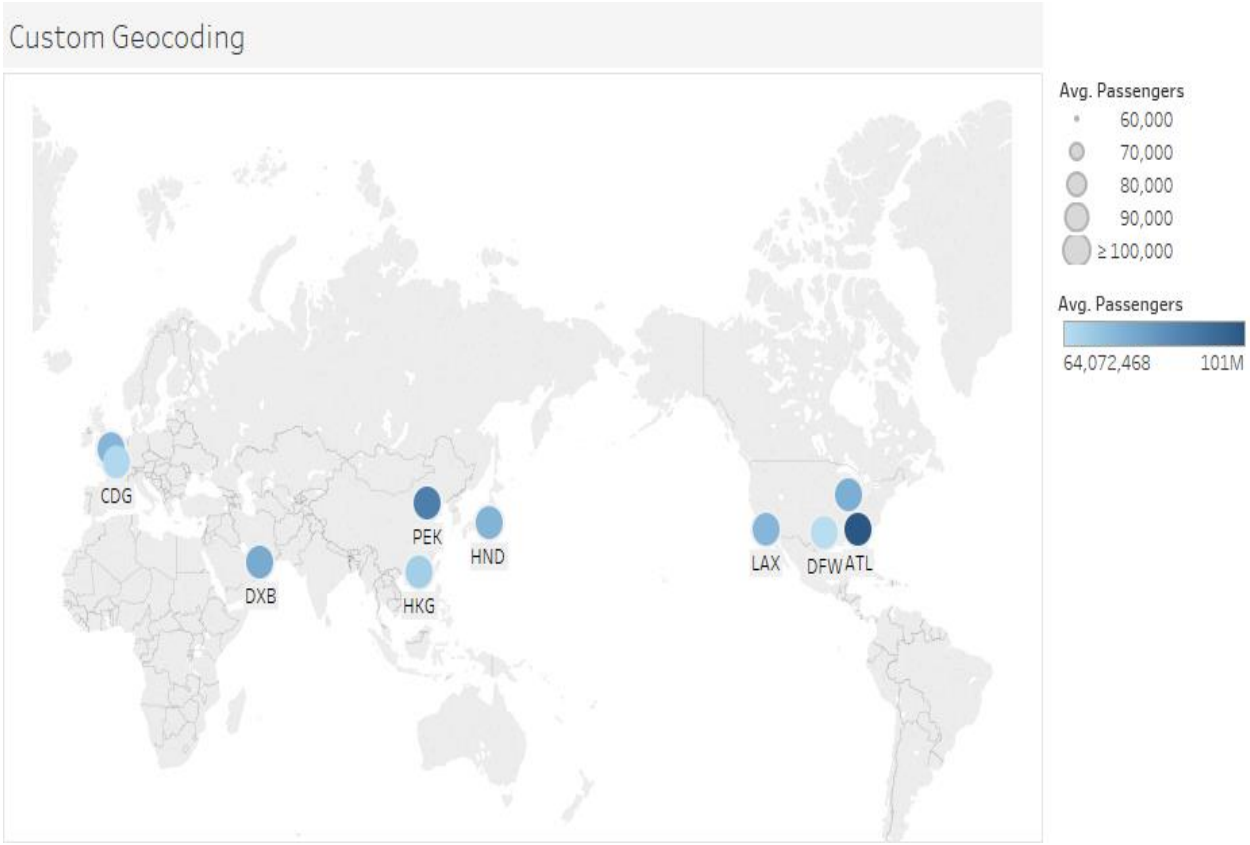
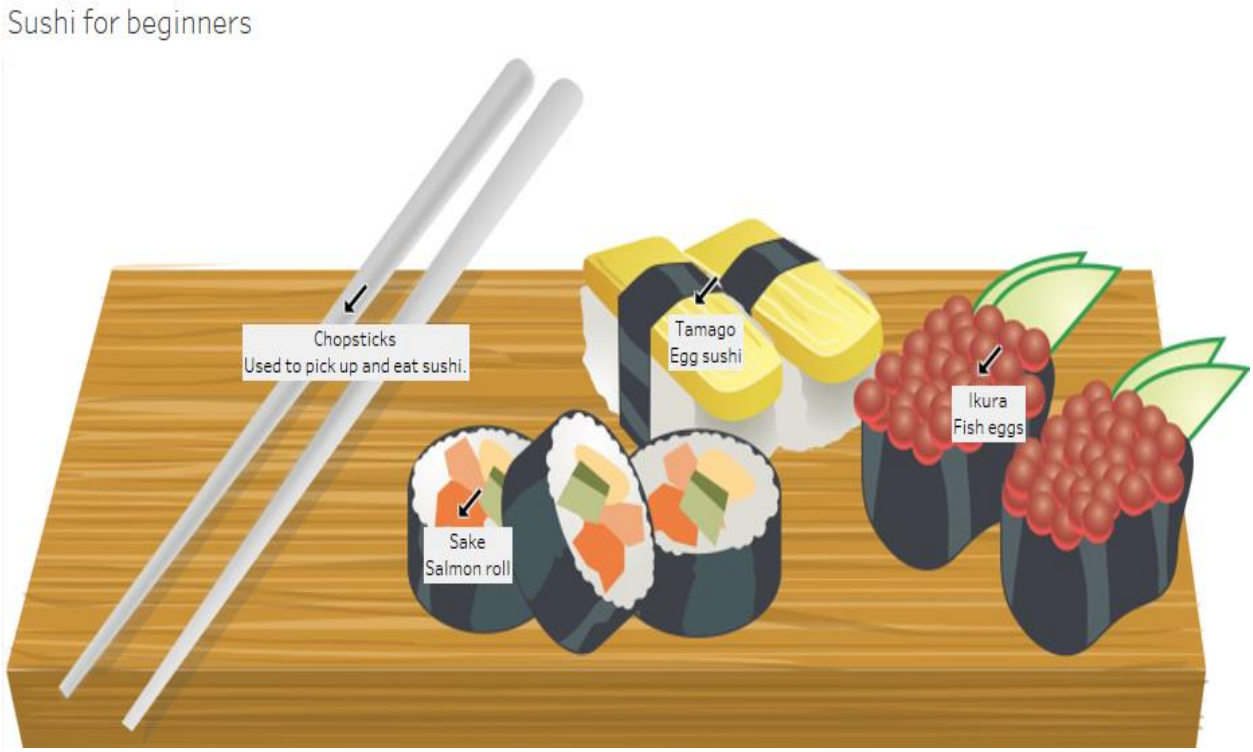
Chapter 5 – Maps and Geospatial Visualization

Importing custom geocoding



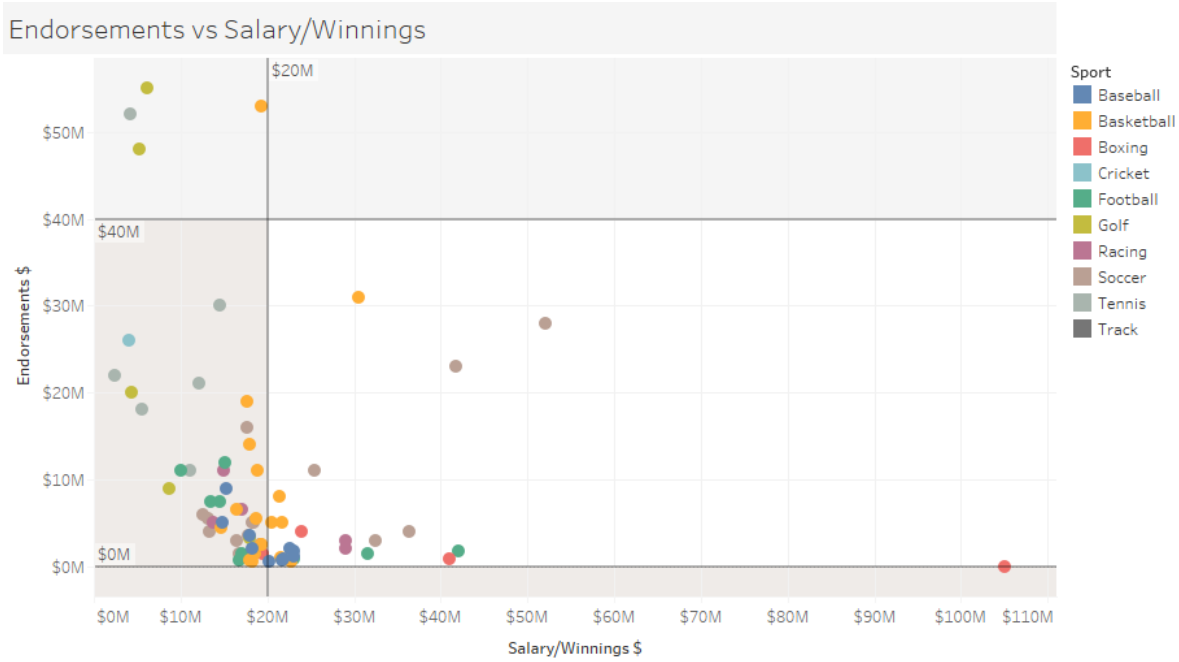
Chapter 5 – Maps and Geospatial Visualization

Using a custom image background



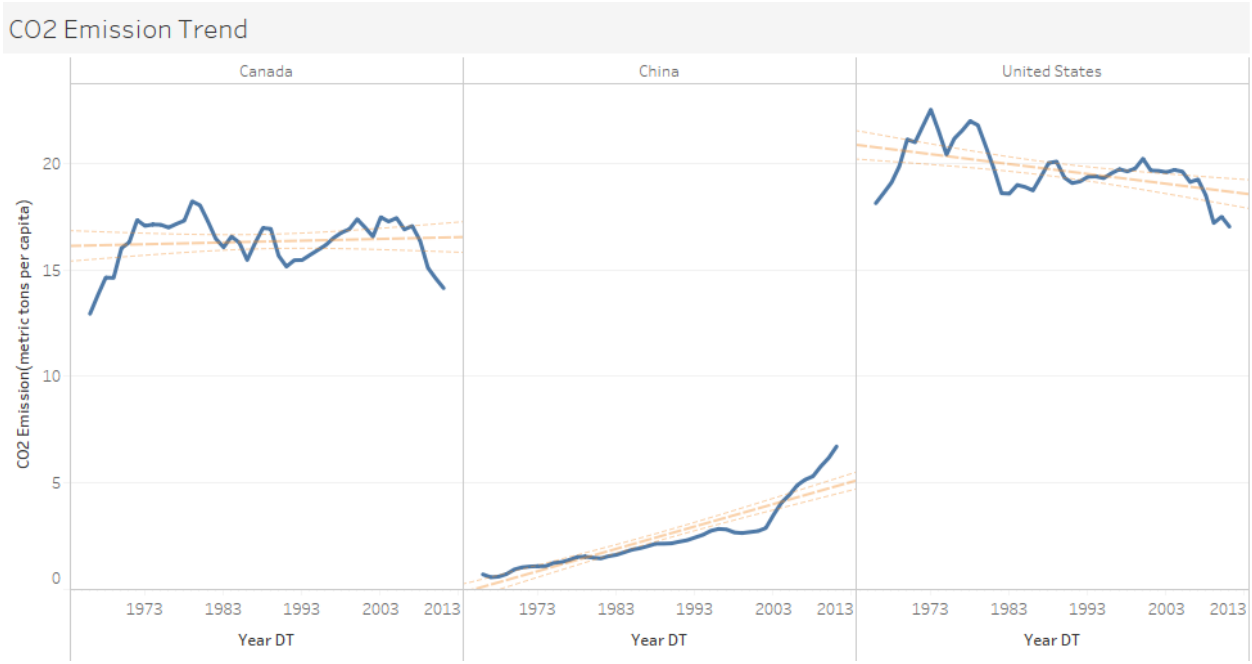
Chapter 6 – Analytics

Adding a constant line



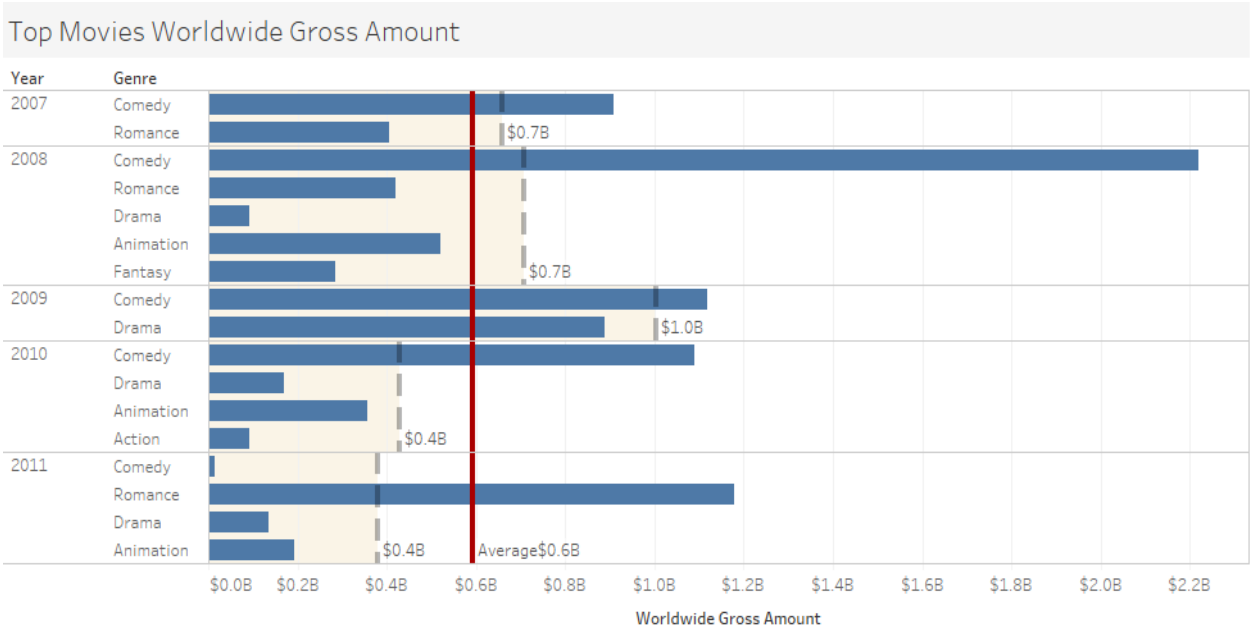
Chapter 6 – Analytics

Adding a Trend Line



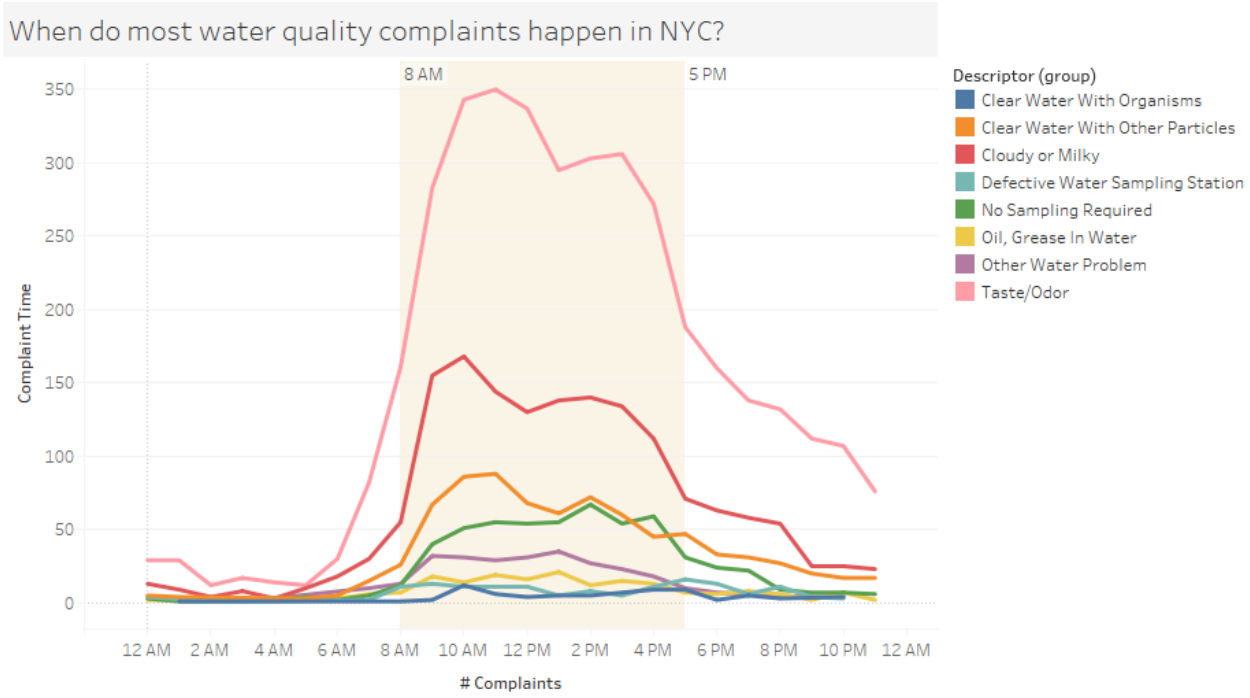
Chapter 6 – Analytics

Using a Reference Line



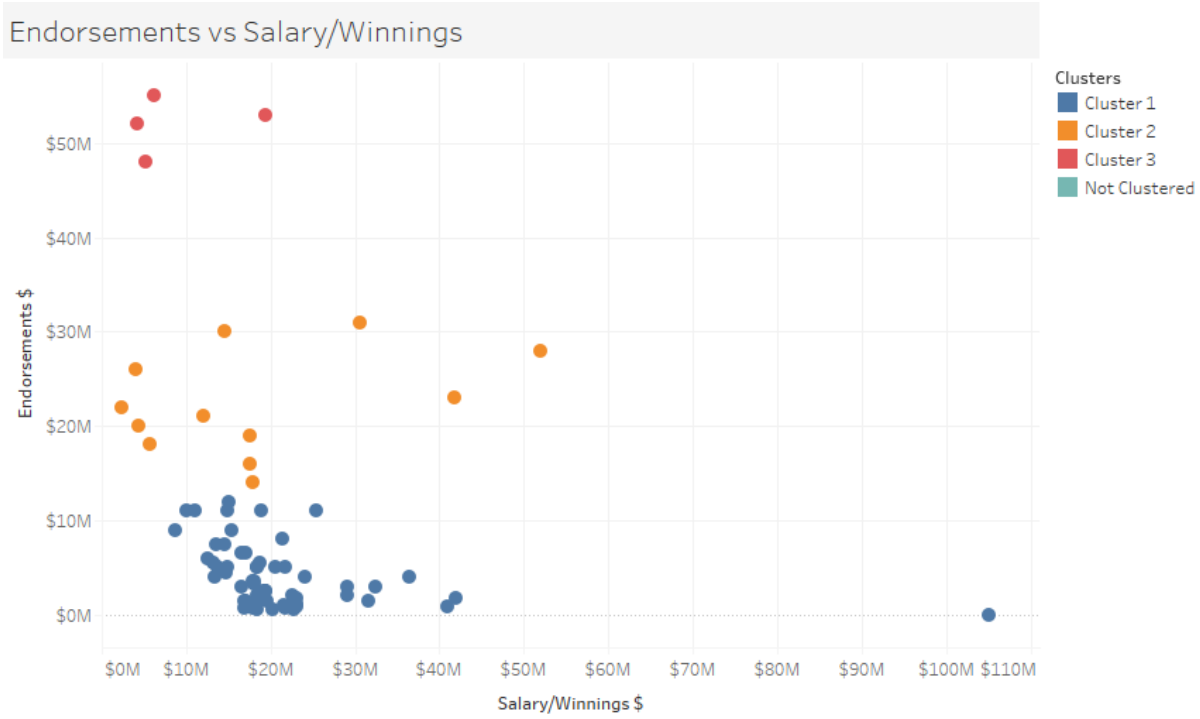
Chapter 6 – Analytics

Adding a reference band



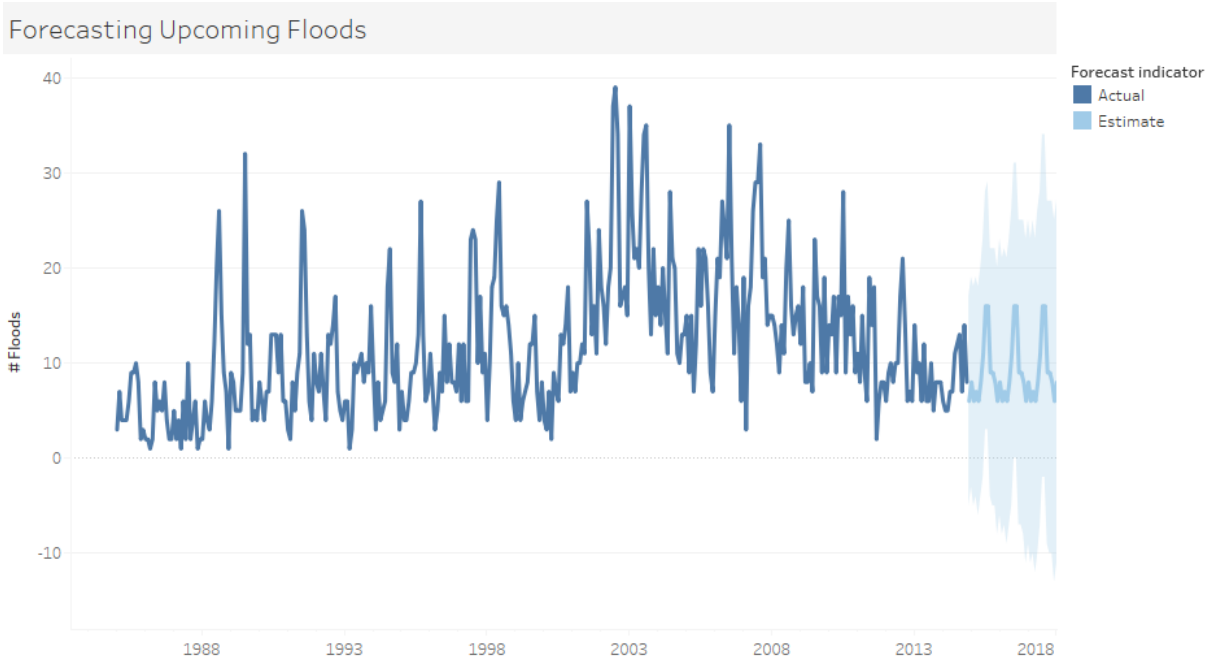
Chapter 6 – Analytics

Performing Cluster Analysis



Chapter 6 – Analytics

Visualizing Forecast



Chapter 6 – Analytics

Performing linear regression with R

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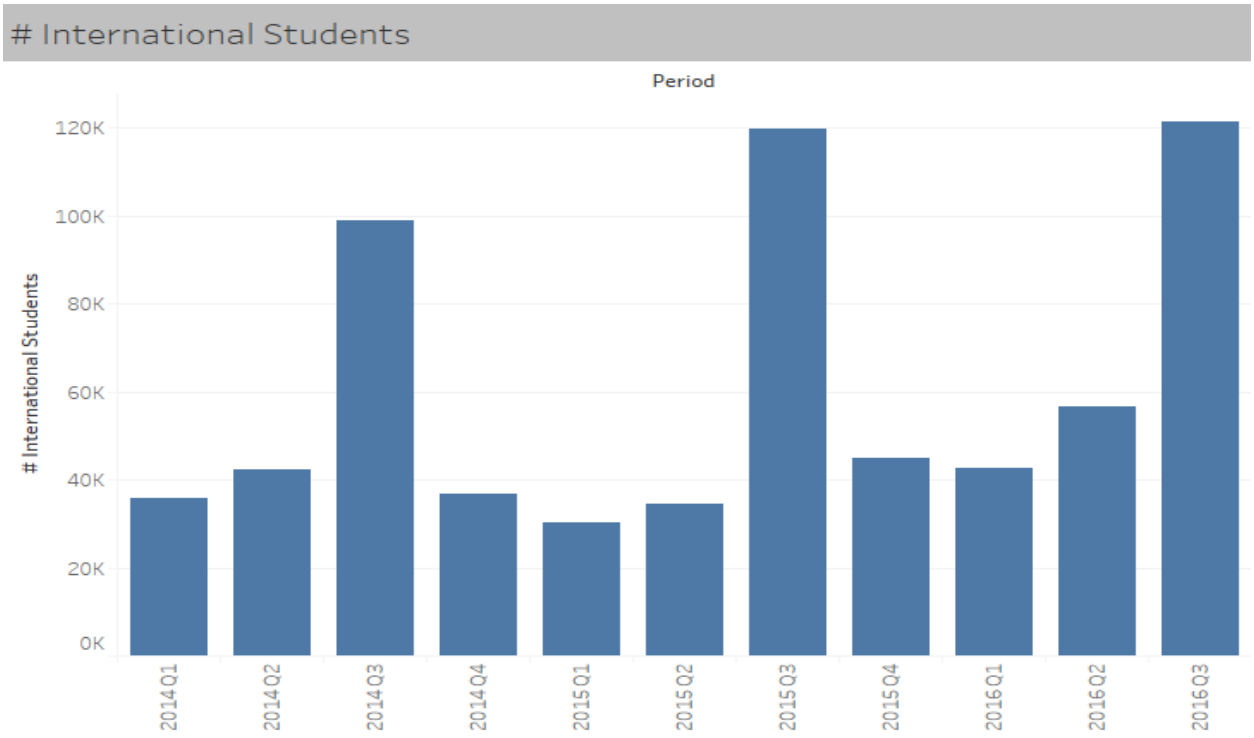
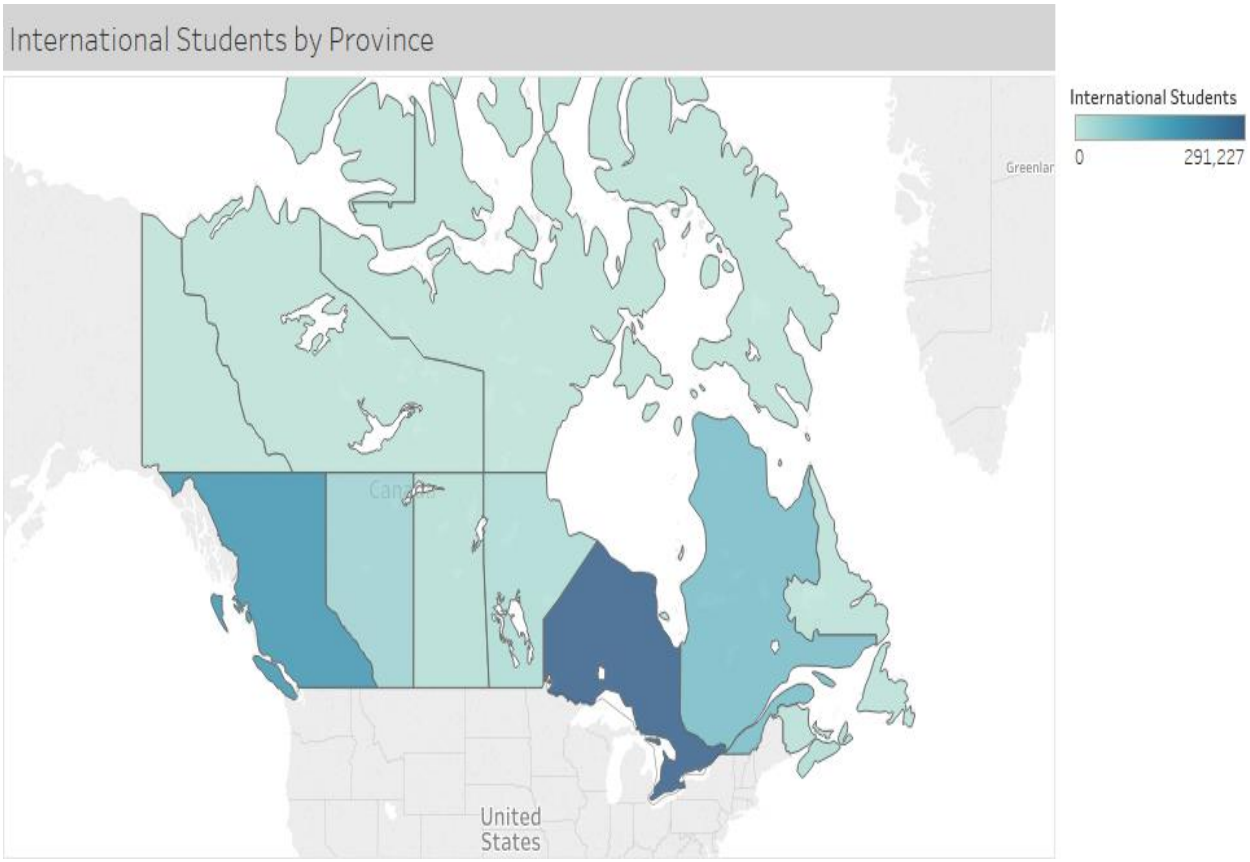
Chapter 7 – Data Preparation

Using the Data Interpreter and Pivot



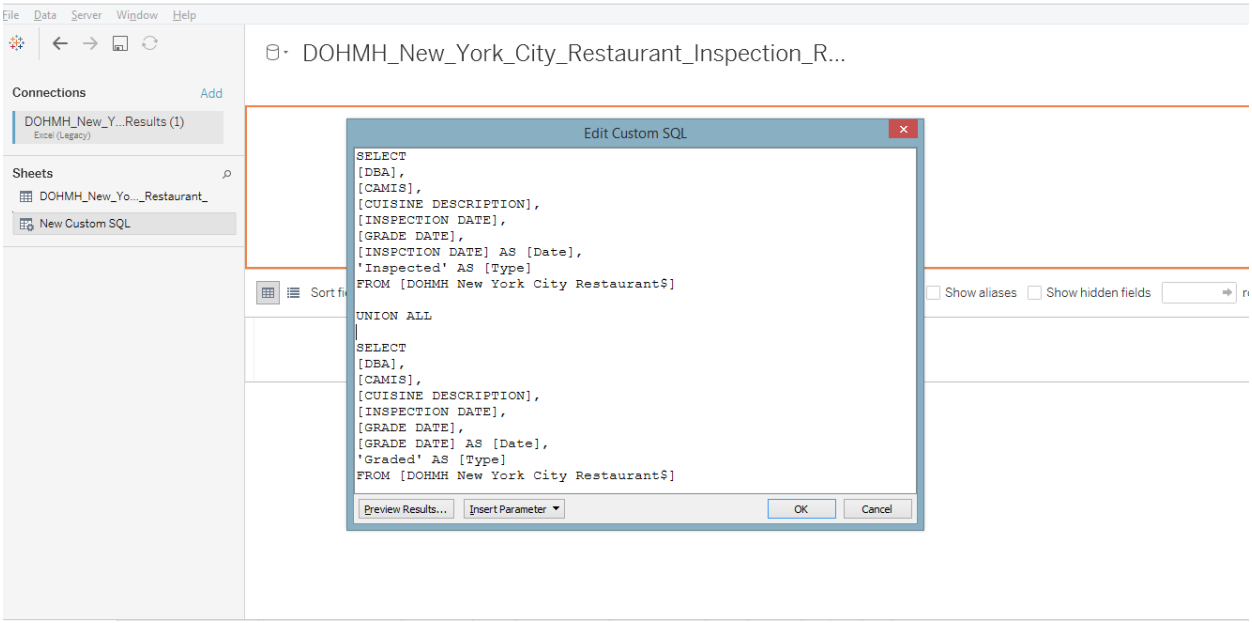
Chapter 7 – Data Preparation

Using the Data Interpreter and Pivot



Chapter 7 – Data Preparation

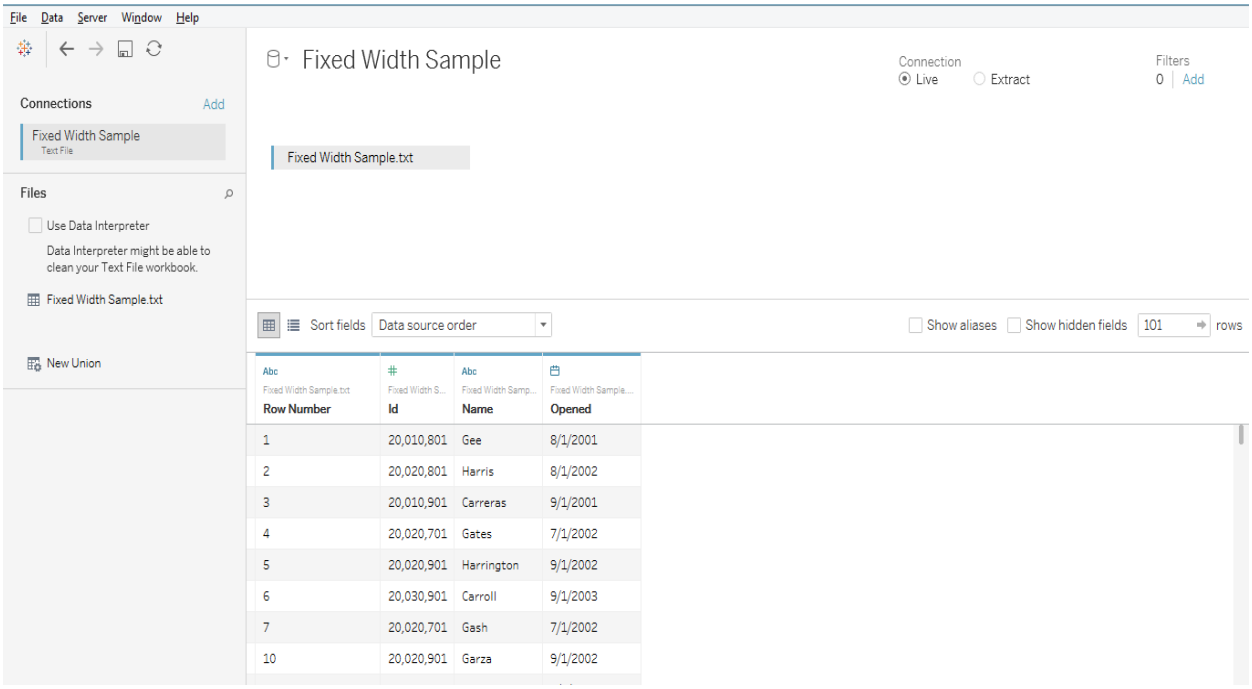
Using the Legacy Jet driver



The query is not working.

Chapter 7 – Data Preparation

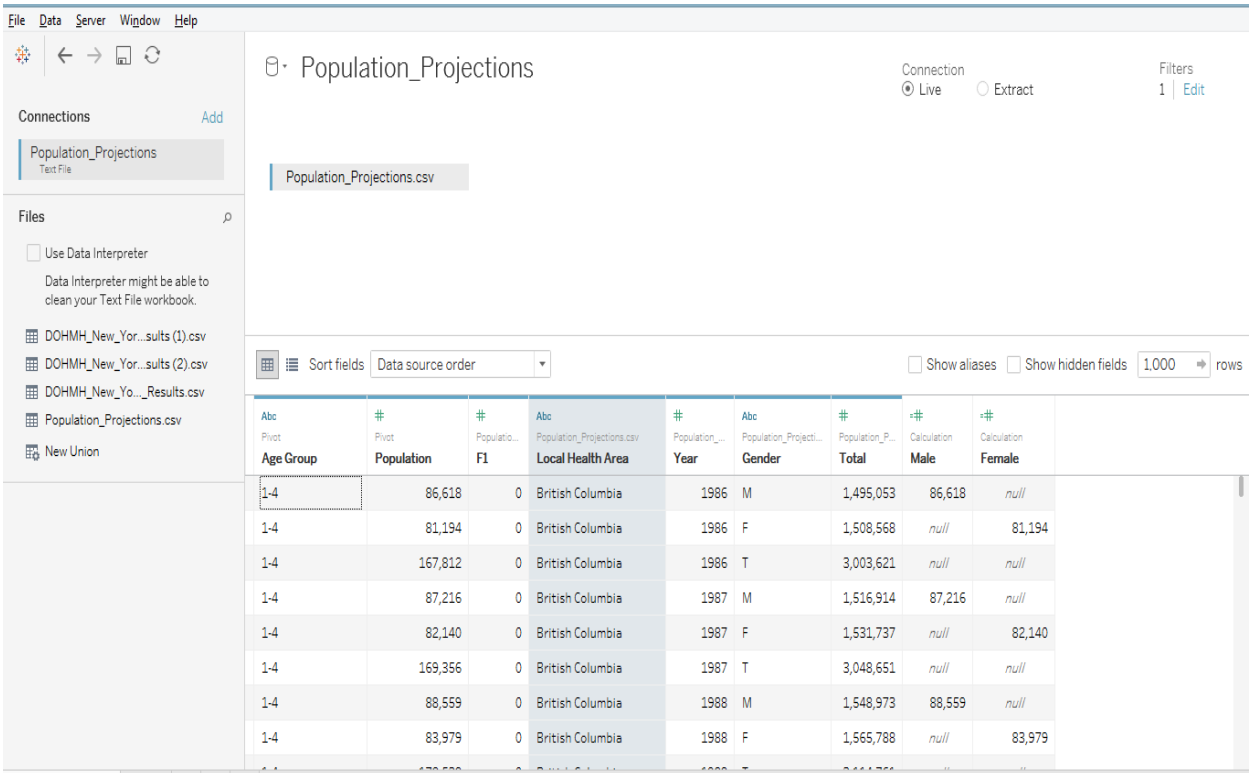
Using schema.ini to resolve data type issues



As there is some issue with .ini file the output of **Opened** column is not coming in proper format.

Chapter 7 – Data Preparation

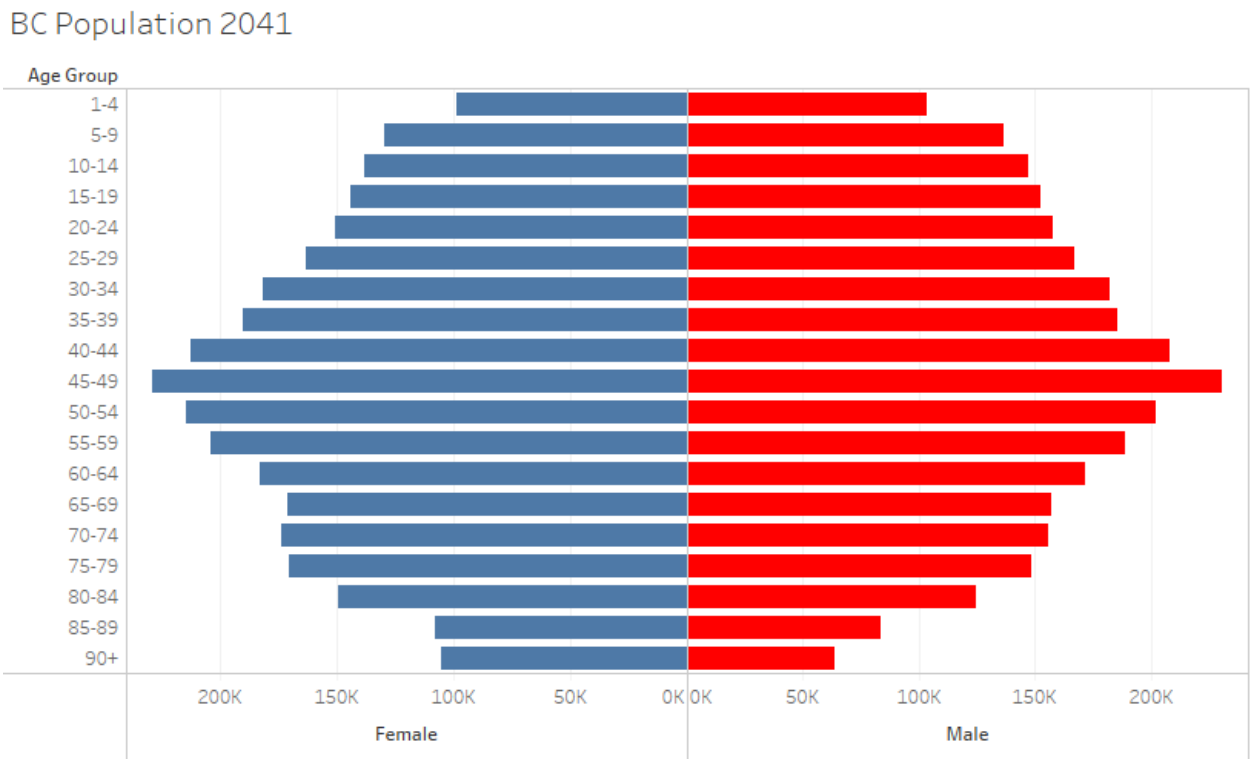
Pivoting columns



Age Group	Population	F1	Local Health Area	Year	Gender	Total	Male	Female
1-4	86,618	0	British Columbia	1986	M	1,495,053	86,618	null
1-4	81,194	0	British Columbia	1986	F	1,508,568	null	81,194
1-4	167,812	0	British Columbia	1986	T	3,003,621	null	null
1-4	87,216	0	British Columbia	1987	M	1,516,914	87,216	null
1-4	82,140	0	British Columbia	1987	F	1,531,737	null	82,140
1-4	169,356	0	British Columbia	1987	T	3,048,651	null	null
1-4	88,559	0	British Columbia	1988	M	1,548,973	88,559	null
1-4	83,979	0	British Columbia	1988	F	1,565,788	null	83,979

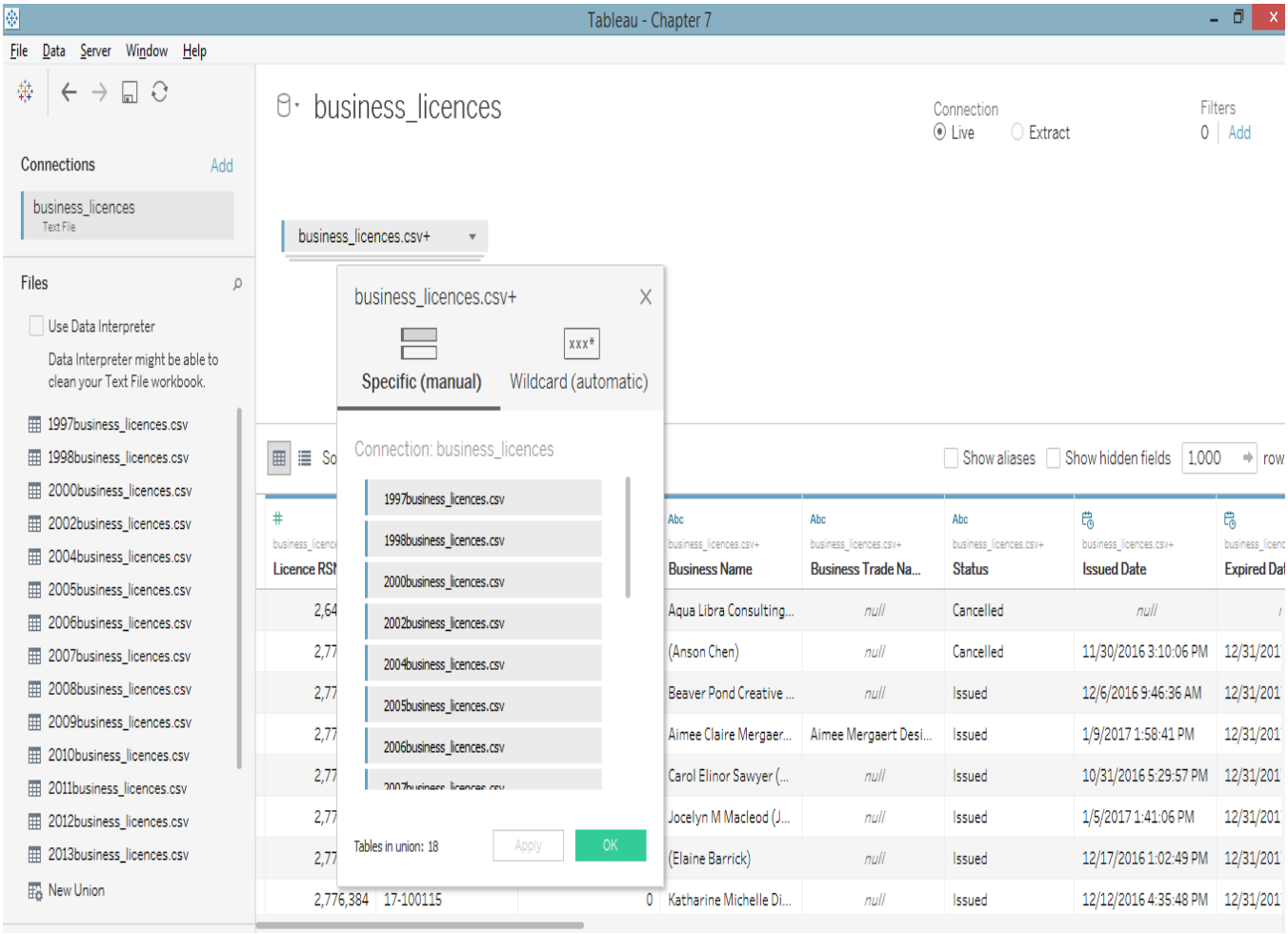
Chapter 7 – Data Preparation

Pivoting columns



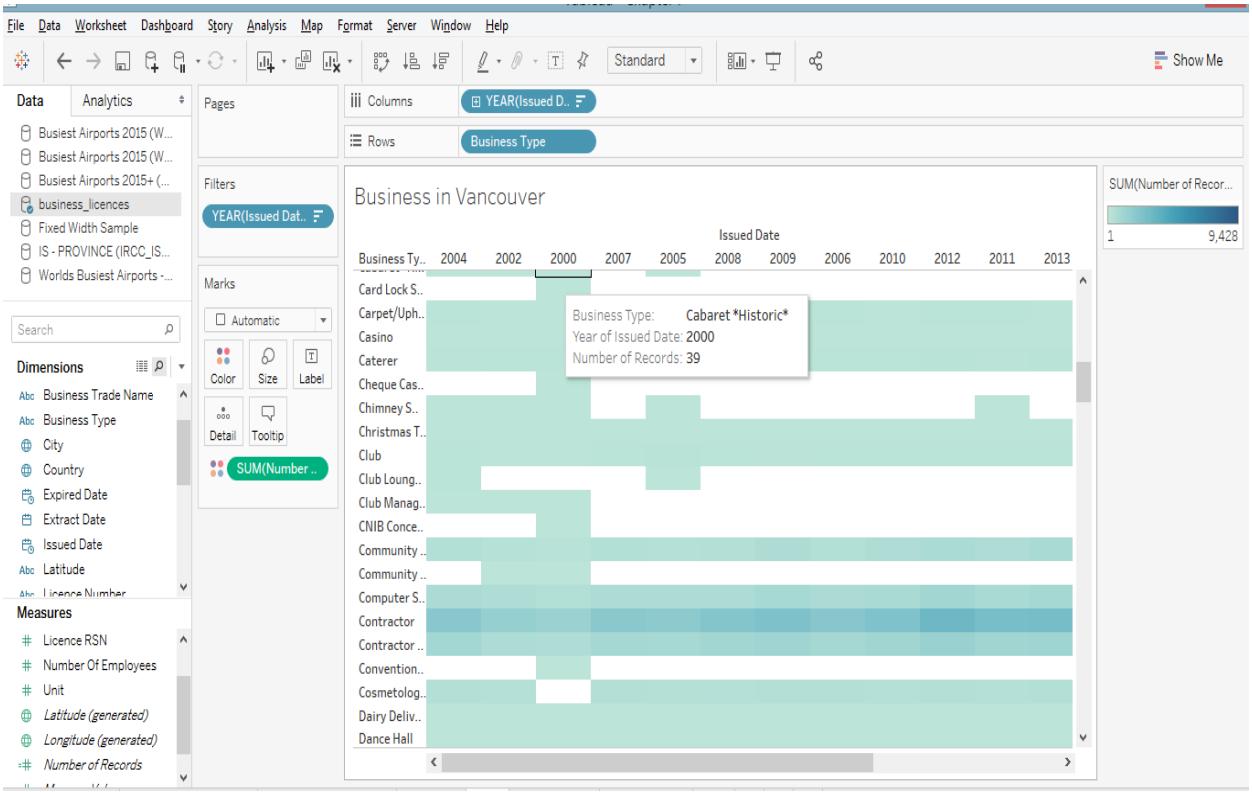
Chapter 7 – Data Preparation

Using Union



Chapter 7 – Data Preparation

Using Union



I have tried to generate graph using Heat Map but could not get the results like what has been mentioned in text book.

Chapter 7 – Data Preparation

Using Join

Left Outer Join

Airport	Passengers	Airport Code	Airport Name
ATL	101,489,887	ATL	Hartsfield Jackson Atlant..
CDG	65,771,288	Null	Null
DXB	78,010,265	DXB	Dubai International
HKG	68,342,785	HKG	Hong Kong International ..
HND	75,316,718	HND	Tokyo International
LAX	74,704,122	LAX	Los Angeles International
LHR	74,989,914	LHR	London Heathrow
ORD	76,942,493	ORD	Chicago O'Hare Internatio..
PEK	89,938,628	PEK	Beijing Capital Internatio..

The view is broken down by Airport, sum of Passengers, Airport Code and Airport Name.

Chapter 7 – Data Preparation

Using Join

Left outer join 1

Airport1	Passengers	Airport Cod..	Airport Name1
Null	Null	DFW	Dallas Fort Worth Interna..
ATL	101,489,887	ATL	Hartsfield Jackson Atlant..
DXB	78,010,265	DXB	Dubai International
HKG	68,342,785	HKG	Hong Kong International ..
HND	75,316,718	HND	Tokyo International
LAX	74,704,122	LAX	Los Angeles International
LHR	74,989,914	LHR	London Heathrow
ORD	76,942,493	ORD	Chicago O'Hare Internatio..
PEK	89,938,628	PEK	Beijing Capital Internatio..

Chapter 7 – Data Preparation

Using Join

RIght outer join

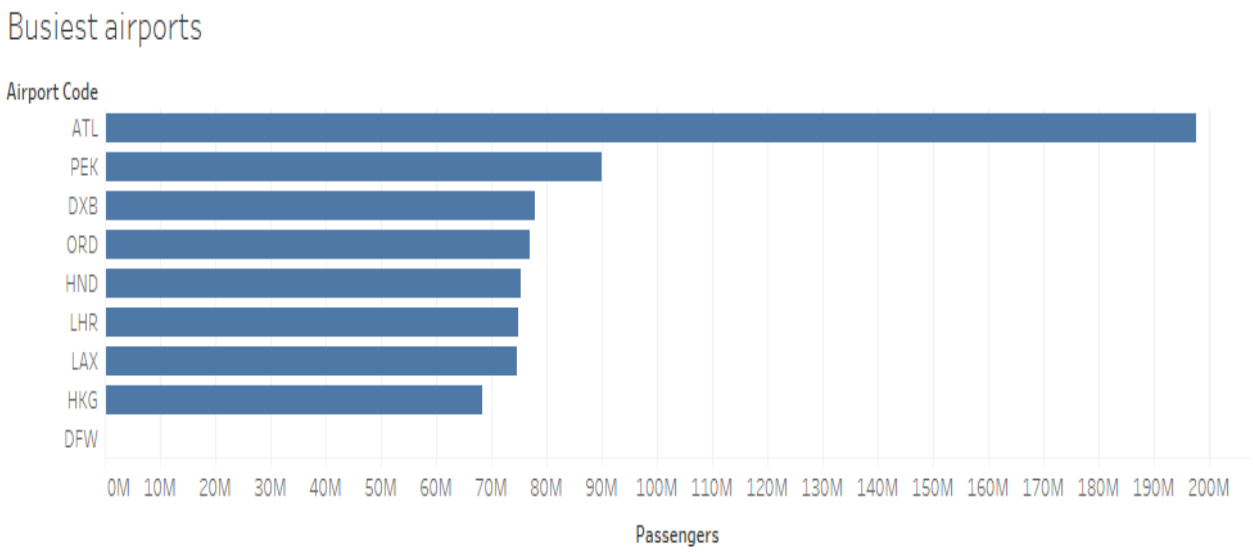
Airport1	Passengers	Airport Cod..	Airport Name1
ATL	101,489,887	ATL	Hartsfield Jackson Atlant..
CDG	65,771,288	Null	Null
DXB	78,010,265	DXB	Dubai International
HKG	68,342,785	HKG	Hong Kong International ..
HND	75,316,718	HND	Tokyo International
LAX	74,704,122	LAX	Los Angeles International
LHR	74,989,914	LHR	London Heathrow
ORD	76,942,493	ORD	Chicago O'Hare Internatio..
PEK	89,938,628	PEK	Beijing Capital Internatio..

Chapter 7 – Data Preparation

Using Join

Chapter 7 – Data Preparation

Using Blend



Chapter 7 – Data Preparation

Using Blend