

Lab 3: Exploring Tableau

Install Tableau using the class username and password. Register your name and email address.

download link: www.tableausoftware.com/uwcs

username: uw

password: gohuskies

Explore the Superstore Sales data.

Please create examples of univariate, bivariate, trivariate and multivariate data presentations for different data types (nominal, ordinal, quantitative) using different encoding techniques. Collect your examples in a web page as you did for Lab #1 and include a discussion of your conclusions.

Tableau's automatic mark selection will choose a good strategy for you – try other possibilities manually.

Try using color or size to encode some values.

For example, Order Priority is an ordinal data type, but it includes a “Not Specified” value. You can exclude the “Not Specified” values by right-clicking on their visual representation in a graph (like a bar or other mark) and choosing Exclude from the resulting context menu.

Here is a table from a paper by Mackinlay included in CMS (p 73) that shows ranking (in decreasing order) of encoding choices for different types of data. Try some of these and see if you agree.

<i>Quantitative</i>	<i>Ordinal</i>	<i>Nominal</i>
Position	Position	Position
Length	Density	Color Hue
Angle	Color Saturation	Texture
Slope	Color Hue	Connection
Area	Texture	Containment
Volume	Connection	Density
Density	Containment	Color Saturation
Color Saturation	Length	Shape
Color Hue	Angle	Length
Texture	Slope	Angle
Connection	Area	Slope
Containment	Volume	Area
Shape	Shape	Volume

[From Mackinlay, J. Automating the design of graphical presentations of relational information, ACM Transactions on Graphics, 5(2), 1986.]

When you finish with this initial exploration, work on exploring some other data. If you brought your own data, load it and begin exploring. If not, either look further at sample datasets included with Tableau or consult the Resources web page on the course website for possible data to look at.

Collect at least one or two views from this data and report on what you have learned so far.