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2068 ERF  
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#### Assignment 4 Basic Visualization in D3

The purpose of this assignment is to familiarize yourself with the D3 JavaScript framework used to build interactive visualizations on the web. This assignment is for students with little to no programming background or experience in JavaScript. It requires self-study of the online introductory D3 video tutorial to assist with the assignment. This is a free tutorial available on Lynda.com which introduces the basics of D3 data visualization.

1.

To begin, review the free tutorial D3.js Essential Training for Data Scientists by Emma Saunders. You need to study Ch. 0, 1, 2, 3, and 4 (part 1, 2). This tutorial will cover the intro to D3, the installation of required frameworks we will be using in class, HTML and CSS refresher, intro to JavaScript, DOM, and vector graphics introduction. Follow the tutorial on your laptop and the tutorial example files to install, script, compile and run D3 scripts.

2.

Upon completion of the tutorial, create a D3 visualization of a given pictogram by Otl Aicher using simple shapes such as rectangle, circle, ellipse, path and line. Each student will receive a unique Aicher's pictogram to visualize in D3. You must use D3 for this assignment. All visualizations should be done using D3 calls. The goal is to become familiar with D3 methods, scripting syntax, basic shapes and basic commands in D3.

#### Otl Aicher

1972 Munich Olympic Games pictograms

Otl Aicher developed the most iconic Olympic symbol set in the 1972 for Munich Olympic Games. The sport symbols are ubiquitous today and their style and approach has been copied many times over. The genius of Aicher's design is that the geometry was capable of communicating so much motion and character while being made up of only the simplest shapes designed to a grid.

#### References:

Tutorial: D3.js Essential Training for Data Scientists by Emma Saunders on Lynda.com

Extensive documentation for D3 is available, and Vadim Ogievetsky's example-based introduction that we will use in class in the following week.

<http://sightlinevis.com/> - many D3 examples

#### Technical requirements

size: 680 by 680

shapes: at least 2 different shapes: circle/rectangle/line/ellipse/path

color: black on white background

files: .html, .css, d3.v4.js, shapes.js (or you may complete this assignment in a single .html file)– zip the files together for submission > Drive>A3

