Data Visualization (9x45min)

PURPOSE: Learn how to read in data, manipulate and filter it, and practice using objects.

DESCRIPTION:

1.  Choose a set of data to visualize.  You will need to pick something that you have easy access to (eg data from a website or class).

2.  Put your data in a file that can be read from a Processing program, and adjust as necessary to make it readable (you should not be performing any calculations or data filtering manually)

3.  Build a simple program to read in your data and test that it works by using print/println statements.

4.  Figure out what kind of object you will need to define to store your data in (eg a word object which contains a word, its frequency, position and size, or a player object which contains a name and relevant stats for that player)

5.  After the data has been read in to your program, you need to PARSE it (separate it out into the chunks that you need) and create objects to store the data in. You may need to process the data as you load it or you may choose to process it after you load it all into objects.

6.  Decide how these objects will be visually represented.  Write the display portion of your program.

NOTES:

* Allowed students to do any type of representation (not just word clouds).
* Demonstrated file input and parsing using a non-object oriented program which produced a simple chart. Talked about how the object-oriented approach would be different.
* Explained map() function in demo code