



One of the most fun, rewarding, and creative aspects of computation is the ability to take your own ideas and make them a reality – **you literally get to make something that never existed before!**

The final project for CS 105 will span the last four weeks of the lab sections, starting with this week. The outline for the lab was discussed in lecture by Wade and described below:

- **Final Project, Week #1:**
  - In lab, you will pick your own teams of **2-3 students** (*no groups of 1; no groups of 4+*) to work in to complete the Excel lab (*Lab #10*). As part of the lab, you will submit a sheet of paper to your TA that indicates your team.
  
- **Final Project, Week #2 [20 points]:**
  - Before your lab section, your team will find or gather a data set consisting of **at least 300 rows** of data, where each row contains at least **5 unique columns**. In general, the more rows and more columns your data has will make the later parts of the project more interesting.
    - This data set must be unique to your team. Each team needs their own data.
    - The data set **cannot** be anything you have seen or used in CS 105.
  
- **Final Project, Week #3 [30 points]:**
  - During lectures between now and this lab, you will learn about data visualization, which will help you complete this step. However, it is not necessary to use something seen from lecture – this is **all about being creative**.
  
  - Using what you have learned, you team will need to create a hand drawn visualization that shows the data visualization that you plan to create. There are only a few restrictions on this data:
    - Your visualization must be something that is **not practically possible** to do with Excel. (*No bar chart, no pie chart, etc.*)
    - Your hand-drawn visualization should be a small-scale version of your planned visualization, using **at least 15 data points** from your data set. Your hand drawn visualization should present your data accurately (eg: the data being visualized must actually be part of your data).
  
  - **This week is all about being creative!** The deliverable is a hand drawn data visualization.
  
- **Final Project, Week #4 [50 points]:**
  - Using d3.js, your team will create a data visualization of your data you gathered. You and your team will give a short presentation about this to your lab section.