BITL1

Lab 8

1 March 2022

Introduction to Visualization

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1. **Warm up:** Answer the following questions.
   (a) What tools did you use to make Project 1?
   (b) What suggestions (in terms of organizing, support, etc) do you have for Project 2?

2. **Daily Python:** Inspect the data in the Colab notebook.
   (a) Change the code so that all edges are black.
   (b) Change the code so that the size of each node is its degree.
   (c) Change the code so that the width of each edge is the sum of the degrees of the vertices it connects.

3. **Main task:** Today's task is about (large) network visualization
   (a) Look at the following sources for good ways to visualize large networks. What do you notice about them? What stands out? What could be done better?
      - *Content sharing network domain graph:* `medium.com/@katestarbird`
      - *R package dependencies:* `twitter.com/USGS_DataSci`
   (b) Go to `konect.cc` and open the *Networks* page.
   (c) Choose an undirected network and download it.
   (d) Draw it using `networkx` in Python, emphasizing the clusters. Depending on your graph, try the different layouts listed in the left side of the page: `networkx.org/drawing`

   Submit the image of the graph that best represents your data on ORTUS.