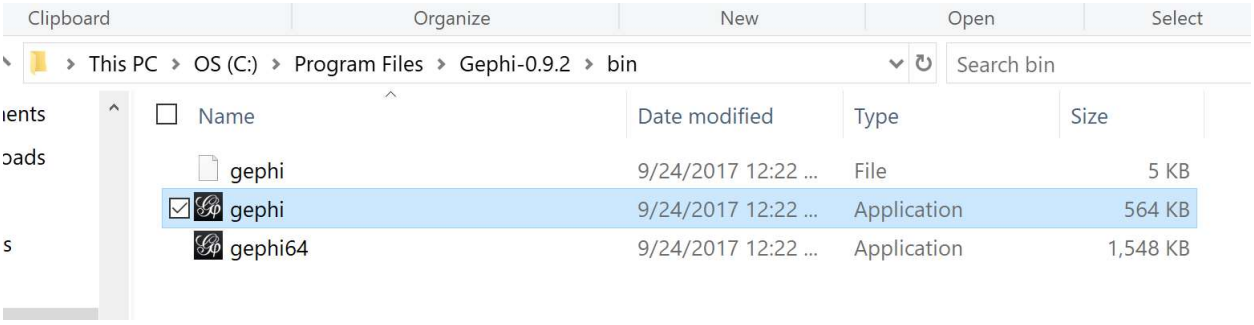
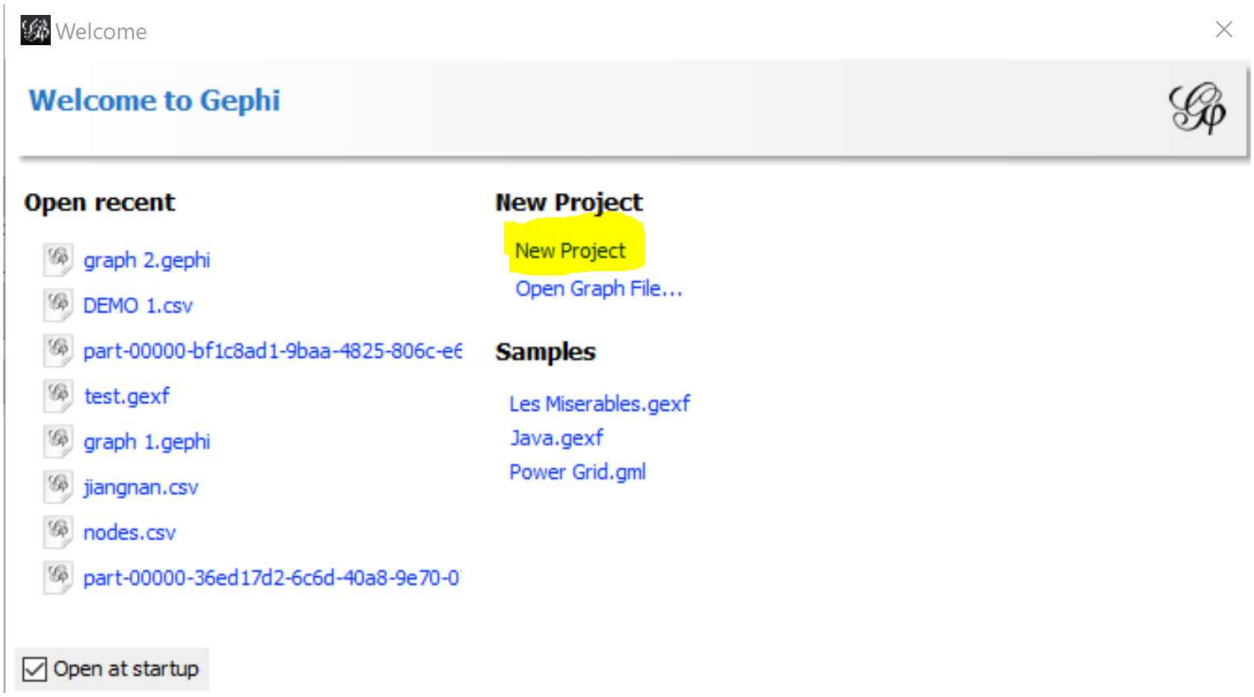
Downloading and Running Gephi

1. Download for free from Gephi website

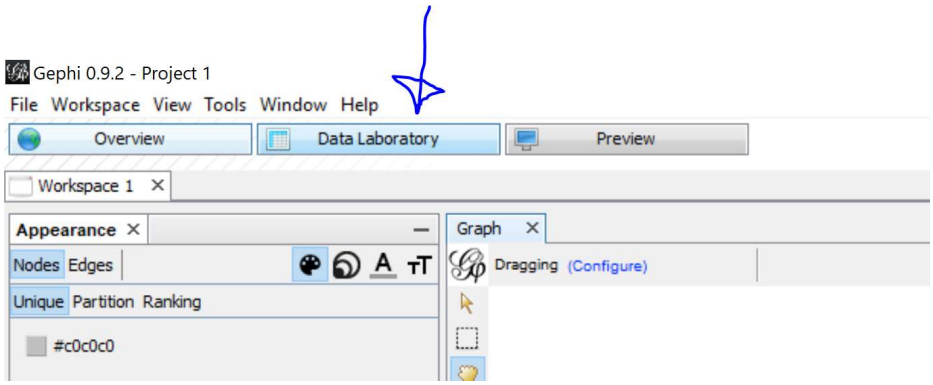
2. Follow instructions to download. You will need Java version 1.8 or higher
    a. Gephi may not recognize your version of Java and fail to run after download
    b. If this happens, navigate the application folder and run the 32 bit version



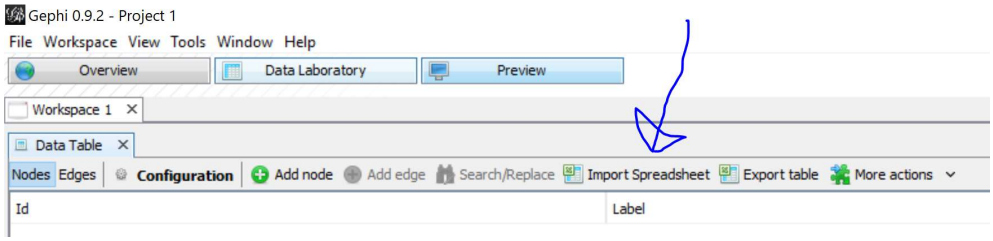
3. When you open Gephi, you can load a sample network or start from scratch
4. If you start from scratch, select ‘New Project’



5. With a new project, load your .gexf file using **File > Open**
6. If you are loading from a CSV:
    a. Click 'Data Laboratory'

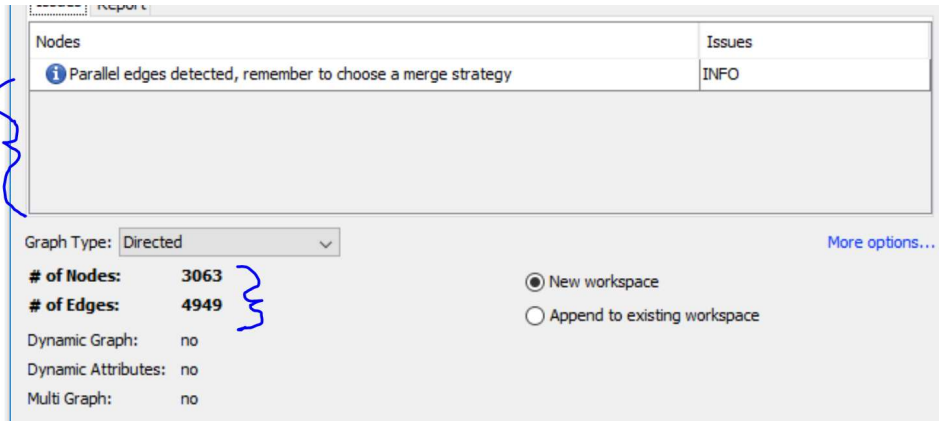


    b. Select 'Import Spreadsheet'

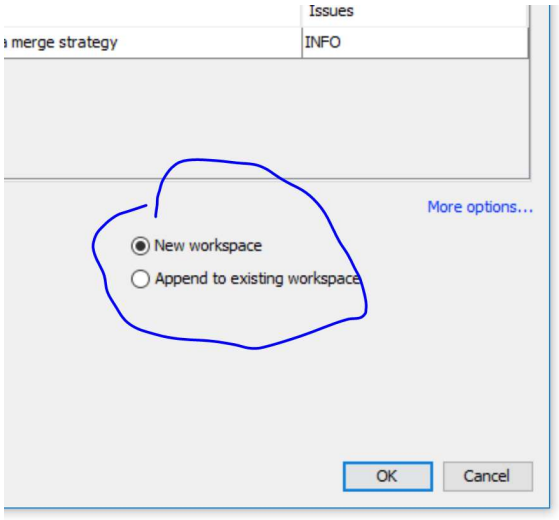


    c. Select your node or edge file, select 'Next'
        i. NOTE: the headings in the edge table need to be 'source' and 'target' for Gephi to read properly, and the node names need to be headed with 'id' in the node table

d. Verify the data types of each column, select ‘Finish’
e. This screen will indicate how many edges and nodes were detected, and how many errors there were on import
    i. Decide if you are interested in directionality, undirected edges, or a mixture of directed and undirected edges

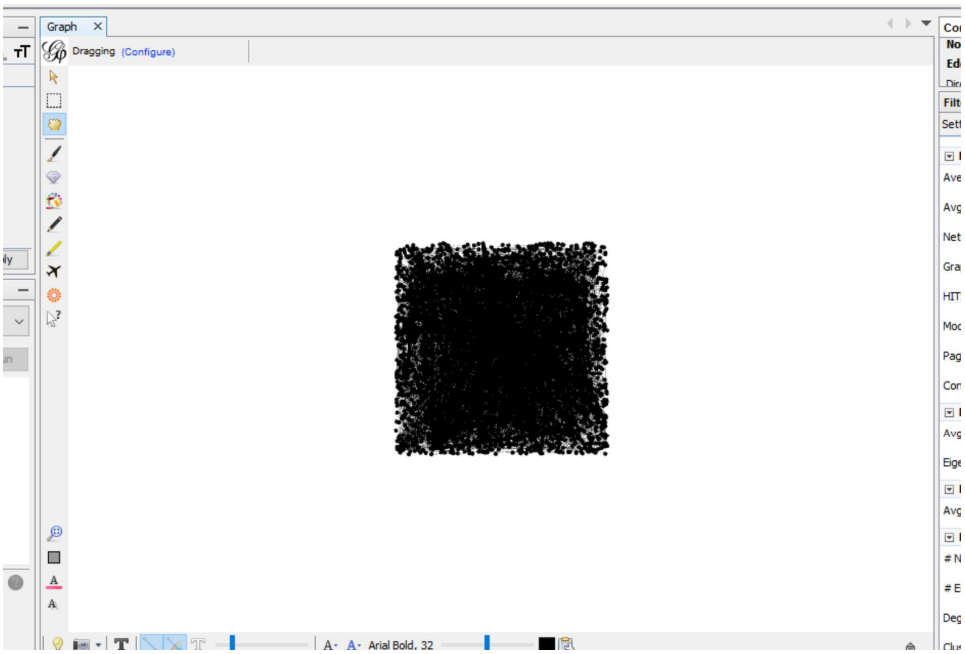


f. You can decide to append the data to an existing table or create a new workspace

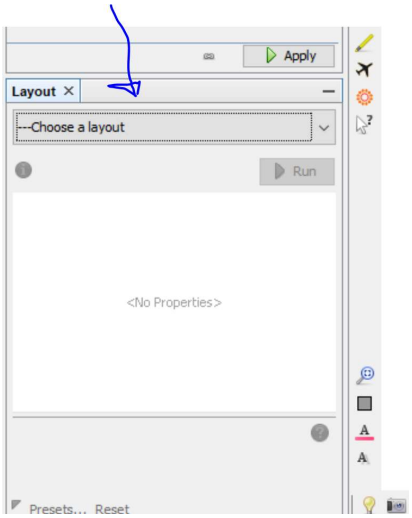


g. Click ‘OK’ if settings and messages in this screen are ok

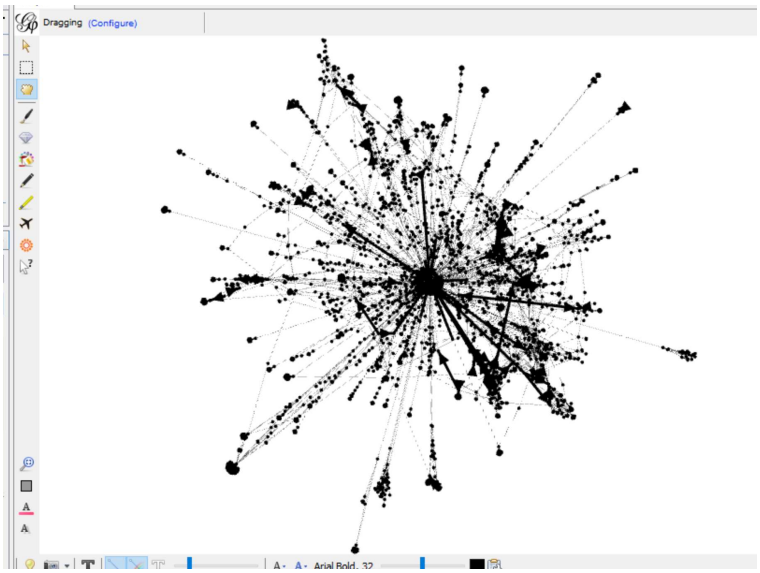
7. Navigate back to ‘Overview’ from ‘Data Laboratory’; our network will initially look something like this:



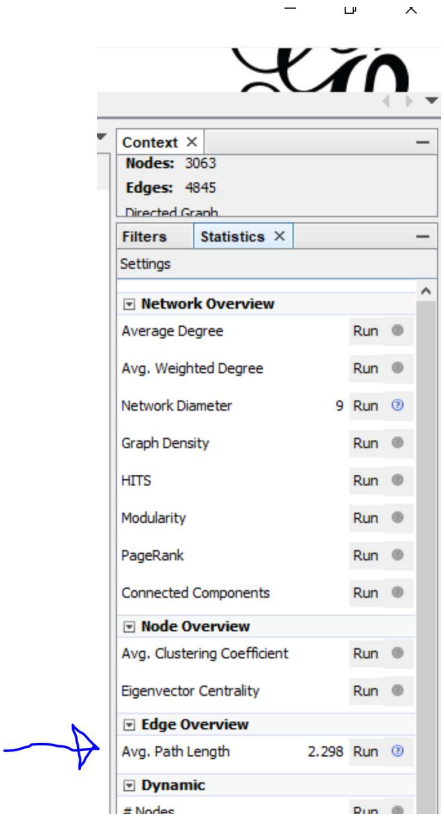
8. To improve the graph
    a. You can reshape using a spacing algorithm
        i. Select a layout from the ‘Layout’ section



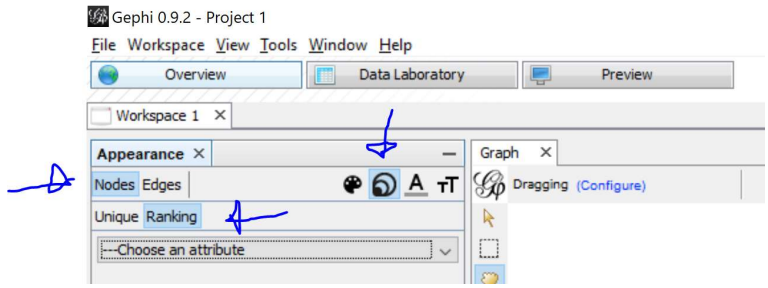
        ii. ForcedAtlas will pull nodes with strong connections together and push weak connected nodes apart



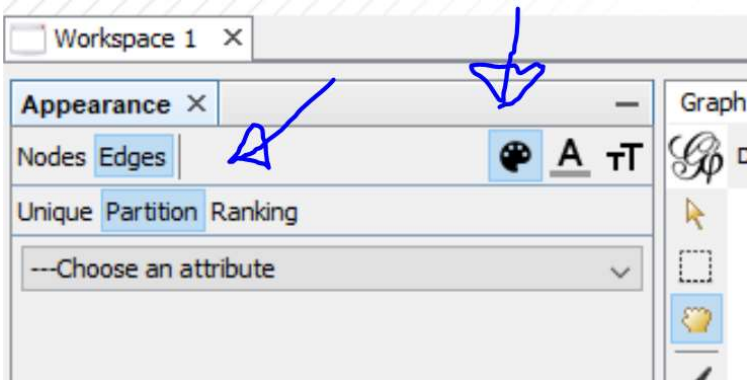
b. You can tie the shape and color of the nodes and edges to graph analysis statistics
    i. If your node table does not include features, use the 'Statistics' tab on the right side and run 'Avg. Path Length'



    ii. You will get a report of the analysis; close this
    iii. On the left side, select 'Nodes', 'Ranking', and the sizing symbol

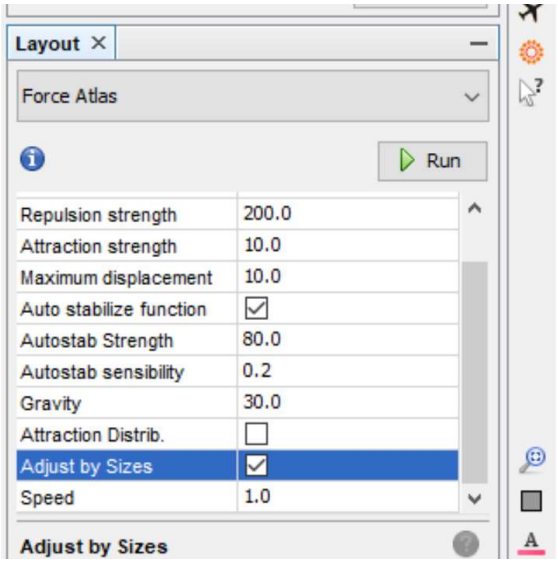


iv. From the drop down select 'Betweenness Centrality'
    1. If this measure is skewed for your data (seen in the post analysis report you closed earlier), use the 'Spline' option to smooth skewness
v. Adjust the size settings to preference
vi. Click 'Apply' when done
vii. On the 'Statistics' section, click 'Modality' and keep default settings
viii. On the left side, select 'Edges', 'Partitioning' and the color palette



ix. Select 'Modality Class' and adjust colors to preference

c. Under 'ForcedAtlas' check the 'Adjust by Size' option to reduce overlap of nodes



9. Feel free to experiment with graph analysis statistics measure and layouts. This is half the fun of Gephi!