CSC 641 Network Science, Fall 2018

Instructor: Dr. Natarajan Meghanathan

Term Project: Demo on a Network Visualization and Analysis Tool

Total Points:100% - Demo-in class: 50% Demo-desktop recorded video: 50%

Due dates: Nov. 27 (in class presentation 7.30 to 8.50 PM). Desktop recorded Demo video (Nov. 27th, by 11.59 PM).

Project Outline: In this project, you will have to select a network visualization and analysis tool (other than Gephi) and give a demo of its working in class as well as submit a desktop recorded demo video covering different features of the chosen tool and explanation for using those features with appropriate examples of real-world networks.

Your tool could be applied for any field: Social Networks, Biology, Finance, Chemistry, etc, and should be able to handle more than 1000 nodes. Some sample real-world networks with more than 1000 nodes are attached in Canvas along with this project description.

Tools: A sample list of network visualization and analysis tools can be found at: http://www.kdnuggets.com/2015/06/top-30-social-network-analysis-visualization-tools.html

Team: The term project could be done by a team of 1 to 3 students. If a team has one or two students, then the team has to present one tool and its features. If a team has three students, then the team has to present two tools and their features as well as present a comparative analysis of the two tools. In general, the accomplishments of a team in the term project are expected to be proportional to the size of the team.

Each team member is expected to present during the in-class presentation.

One team member (or more than one team member) can take part in the recording of the desktop video.

Minimum Expected Times:

Team sizeIn-class presentationDesktop Demo videoOne member team15 minutes15 minutesTwo member team20 minutes25 minutes

Two member team 20 minutes 25 minutes Three member team 30 minutes 35 minutes

Desktop Recorded Demo Video Submission: The desktop recorded demo video has to be uploaded through JSU Google Drive and the link has to be emailed to the instructor (natarajan.meghanathan@jsums.edu) by November 27th - 11.59 PM. <u>Late submission of the desktop-recorded demo video (beyond November 27th, 11.59 PM: is a hard deadline) will not be accepted.</u>

Presentation in class: The demo is to be done in class on November 27th, 2018. If we need more slots, we will schedule some presentations on November 29th, 2018. The schedule will be announced in the month of November. All the members of a team are expected to participate and talk during the demo in class.

Selection of the Tool and Instructor Notification: Since it is a small class, I encourage you to discuss and finalize among yourselves and make sure that each team is working on a different visualization and analysis tool. You will have to email me the network visualization and analysis tool(s) that you will be working on by October 18, 2018 so that I can make sure that no two teams are working on the same tool(s). You could email me your choice of the tool(s) well ahead of October 18; the final assignment of the tools will be done on a first-come-first-serve basis (whoever emails me first for a tool gets the priority to work on the tool).