School of Computing Science and Engineering

Lab exercise

Code/Course	:	CSE3020 – Data Visualization	Date	:	28/09/2021
Lab Experiment		Install and use igraph package for Network and Graph	**Slot**	:	**L9+L10**

Pre-requisite: We will assume you are moderately familiar with basic concepts in R, including variables and functions, and with RStudio, the integrated development environment for programming in R.

Note: Install and import the igraph package in R and create your own dataset wherever necessary.

1. Read the given adjacency matrix into R (adjacency.csv)
2. Read the given edge matrix into R(edges.csv)
3. Create and plot the graph from the adjacency matrix and edge matrix
4. Create and plot the graph from the adjacency matrix and edge matrix
   a. customize the vertex color, shape, size
   b. edge size, edge color, vertex frame and label
5. Display the name of vertices, edges, no. of vertices and edges
6. Find the degree of each vertex, min and max degree of the created graph
7. Display the adjacency vertices of each vertex(individual) in the created graph