Team Project – Second Assignment

Building on the network's initial presentation, we will now explore its significant characteristics:

1. Summarize the main characteristics of the network including whether the network is directed or undirected, if there are subnetworks that may be of interest, if there are loops and/or multi-edges, etc.

2. Compute the order and size of the network and certain (induced or not) subnetworks of interest and draw conclusions about these values.

3. Obtain the degree distribution with and without weights (if any) and comment on the results obtained. If the network is directed, consider the in, out and total degrees. Describe any relevant conclusion about the structure of the network derived from these results.

4. Obtain the number of components of the network (weakly and strongly if the network is directed).

5. Compute the diameter with and without weights (if any) and determine the farthest vertices along with the path joining them. Consider whether the network is directed or not.

6. If size permits, present the adjacency matrix and determine whether based on that matrix the network contains many edges or not. That is, measure in a simple way the density of the network.