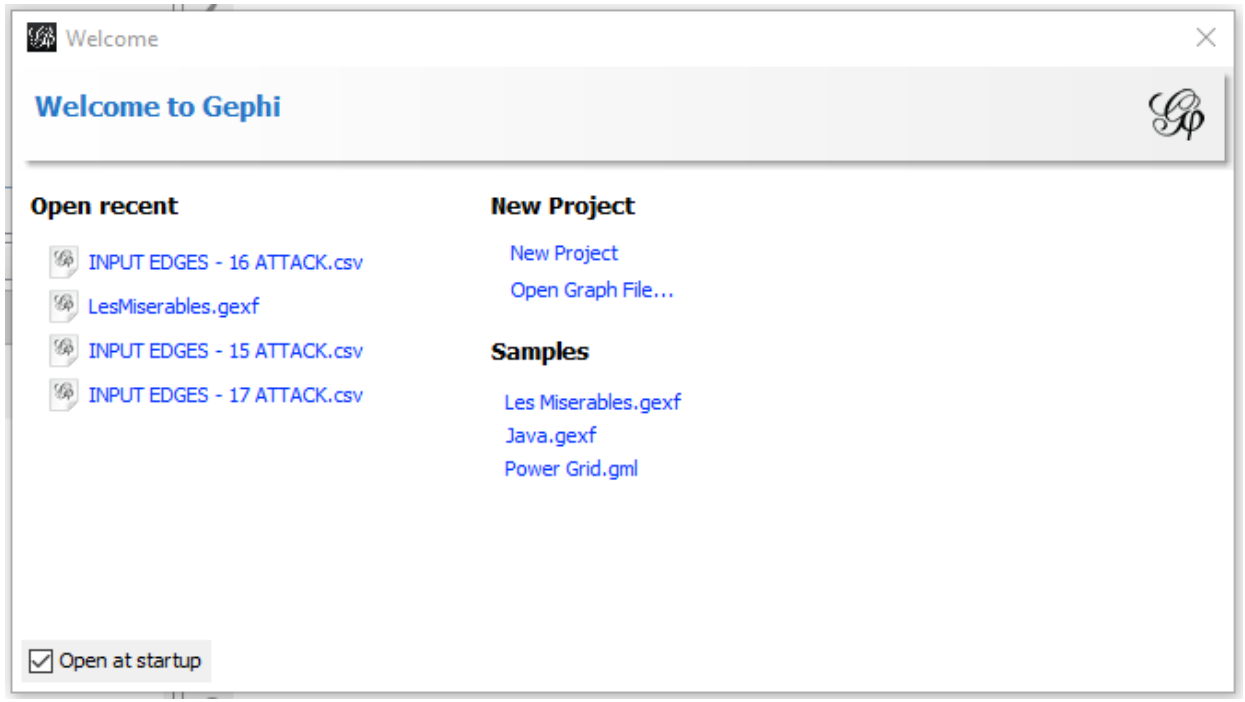
Practice
Constructing Interaction Graph

Digital Business Ecosystem Research Center

Telkom University

DIGITAL BUSINESS ECOSYSTEM RESEARCH CENTER

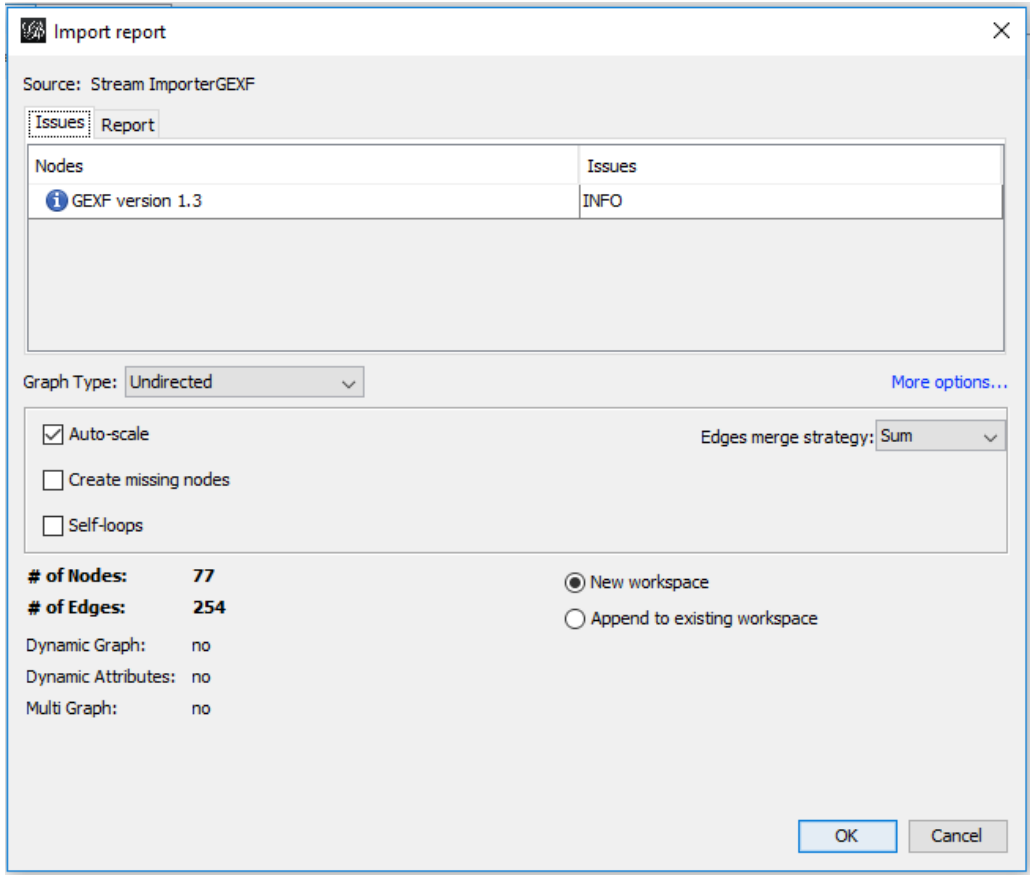
Open The Samples Data



Choose Les Miserables.gexf on Samples

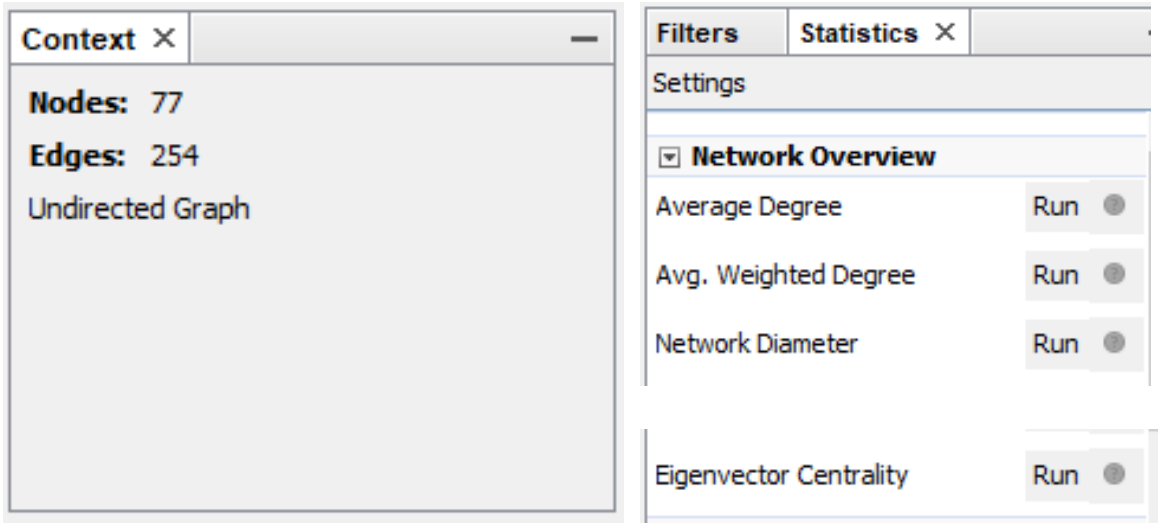
Data Information

- Graph type can be undirected, directed, mixed
- The workplace can be new or append to the existing one

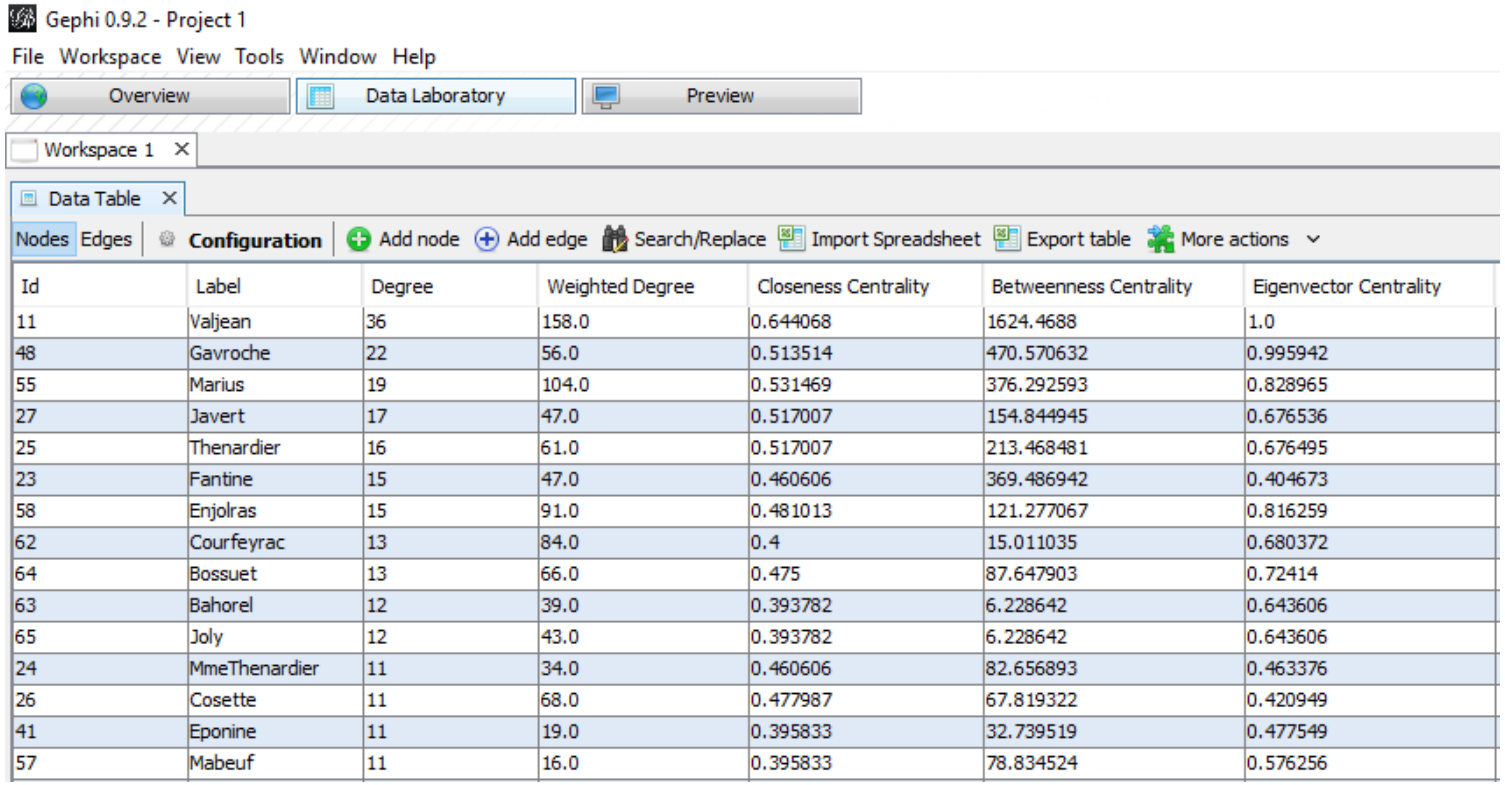


Run the Centrality Metric

- Average Degree to measure Degree Centrality
- Average Weighted Degree to measure Average Weighted Degree Centrality
- Network Diameter to measure Betweenness Centrality and Degree Centrality
- Eigenvector Centrality to measure Eigenvector Centrality



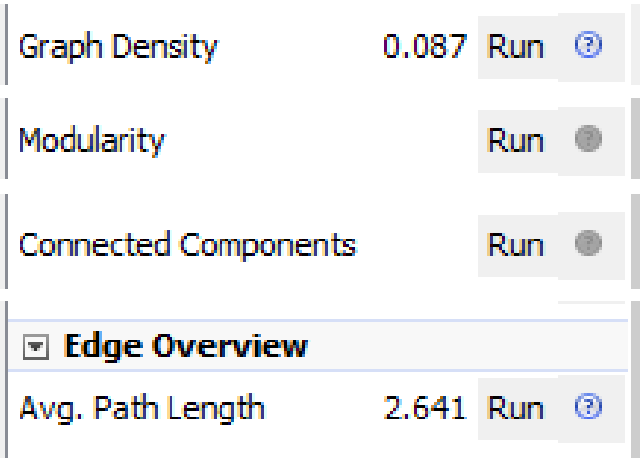
Centrality Metric Measurement Result



Id	Label	Degree	Weighted Degree	Closeness Centrality	Betweenness Centrality	Eigenvector Centrality
11	Valjean	36	158.0	0.644068	1624.4688	1.0
48	Gavroche	22	56.0	0.513514	470.570632	0.995942
55	Marius	19	104.0	0.531469	376.292593	0.828965
27	Javert	17	47.0	0.517007	154.844945	0.676536
25	Thenardier	16	61.0	0.517007	213.468481	0.676495
23	Fantine	15	47.0	0.460606	369.486942	0.404673
58	Enjolras	15	91.0	0.481013	121.277067	0.816259
62	Courfeyrac	13	84.0	0.4	15.011035	0.680372
64	Bossuet	13	66.0	0.475	87.647903	0.72414
63	Bahorel	12	39.0	0.393782	6.228642	0.643606
65	Joly	12	43.0	0.393782	6.228642	0.643606
24	MmeThenardier	11	34.0	0.460606	82.656893	0.463376
26	Cosette	11	68.0	0.477987	67.819322	0.420949
41	Eponine	11	19.0	0.395833	32.739519	0.477549
57	Mabeuf	11	16.0	0.395833	78.834524	0.576256

Run the Network Structure Metric

- Graph Density to measure Network Density
- Modularity to measure Community Detection
- Connected components to measure Connected Components
- Avg. Path Length to measure Average Path Length



THANK YOU