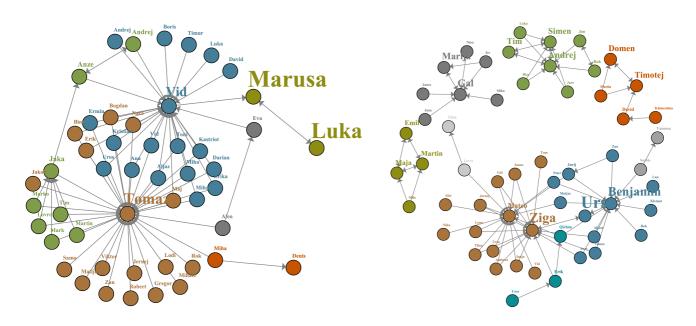
## PageRank & betweenness centrality challenge

Nominate up to two classmates by stating their student identifiers on <u>eUcilnica</u> before May 23rd at 11:59pm. This will create zero, one or two directed links from you to them. All student nominations will be collected into a social network.



- 1. First, the network will be reduced to a simple directed graph. Then, the PageRank score will be computed for each node in the network (with damping factor  $\alpha=0.85$ ). Student with the highest PageRank score will be awarded 10% of the final course grade.
- 2. Second, the network will be reduced to a simple undirected graph. Then, the betweenness centrality will be computed for each node in the network. Student with the highest betweenness centrality will be awarded 10% of the final course grade.

Both students will be given the opportunity to distribute these 10% however they please (e.g., taking all the points, evenly distributing the points between selected classmates or other). Students must make their decision before the first exam.