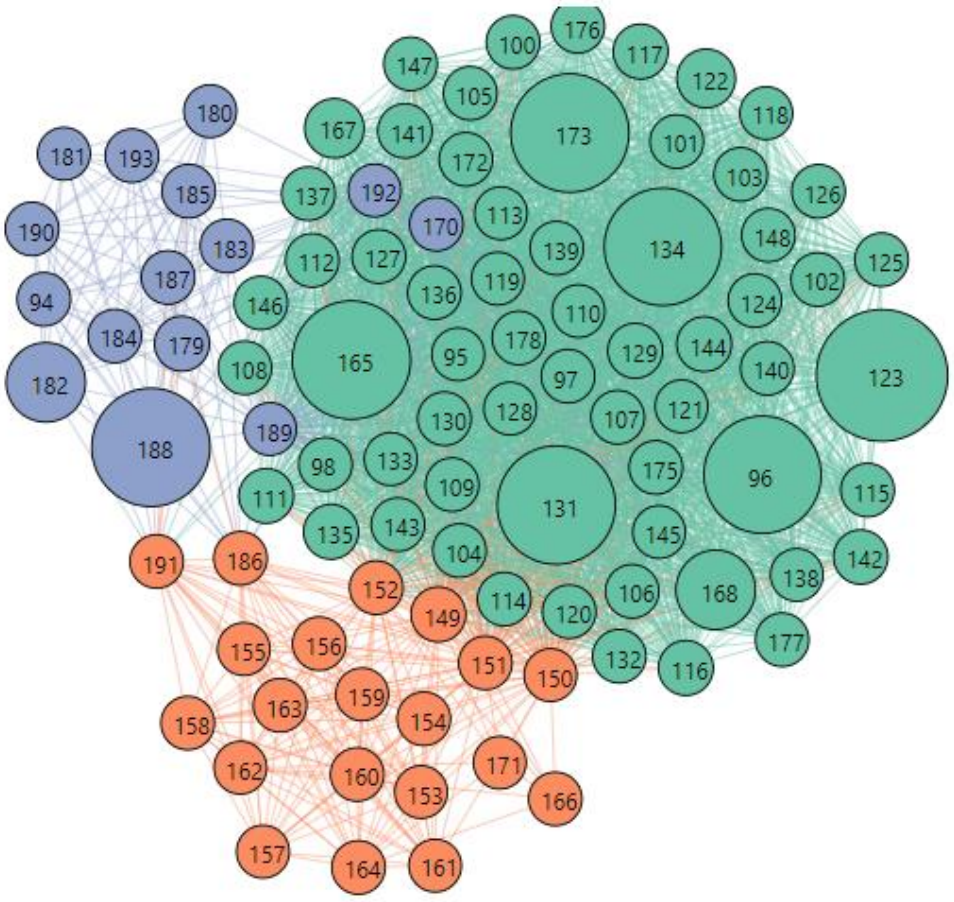

A qualitative color palette is used to colorize the nodes based on the communities detected in the sample network. The network visualization provides the audience with a better picture of the data. By removing insignificant edges with similarity values smaller than 0.5, the graph only displays the meaningful connections between samples. The Louvain method successfully detects which groups of samples behave similarly. By grouping samples, it would help researchers investigate the group of samples that have the same behavior more easily. For example, instead of studying all the samples, researchers now only need to focus on important samples that represent the entire group. There are three clusters that can be seen from the graph for the default set of samples: orange, green, and blue. It is noticeable that most of the nodes in the orange cluster are resistant to METHICILLIN, FOSFOMYCIN, BETA-LACTAM, and TETRACYCLINE. The samples in the orange cluster tend to be more correlated with the green cluster than the blue cluster. It is true since we can see that the set of antibiotics that the samples in the green cluster are resistant to only includes FOSFOMYCIN, BETA-LACTAM, and TETRACYCLINE. Looking at the blue cluster, 13/15 samples in this cluster are resistant to QUINOLONE. They are collected in the UK from the blood of humans between 2008 and 2009. There are only three samples namely 170, 189, and 192 that behave quite similarly to the green cluster. Those samples can be the targets for the study to investigate the common properties between the blue cluster and the green cluster. The minimum spanning tree is a more readable and well-structured version of the previous network graph. The users can use it to extract more detailed key insights on samples.