Result Evaluation

In the first section we have discussed the value of various metrics obtained and how is it related to our hypothesis. In the second section we have put focus on how different metrics are correlated with each other and at last we discussed about the precision and recall value obtained for our predictive model.

We calculated five different metrics value for each of the class presented in the system after that we used boxplot for each different metrics to check our hypothesis. We have also used two system-based metrics to get the value of metrics for system.

The boxplot graphically depicts the groups of numerical data through their quartiles. It is one of the measures of comparing different data distribution. The boxplot clearly represents that our code volatility hypothesis matches with our result. Each diagram depicts three swim lanes, each with its own boxplot. The first swim lane represents classes that exhibit low volatility, lane 2 represents classes that exhibit medium volatility and lane 3 represents classes that exhibit high volatility. If we look below on the boxplots of LCOM, we observe that those classes that exhibit HV have poorer metrics as compared to MV and LV. The median value for LV metric is lower than the median value of MV, which in turns lower than HV. Lower the value of LCOM metric better is the quality.