Kevin Risden 4/15/11
CSSE376

Lab 8 Questions

1. The Number of Parameters metric is outside the optimal range. The method that is responsible for this is the TwitterClient constructor.
2. A strategy to fix this would be to reduce the number of parameters in the constructor and make it either an array of options that gets sent into the TwitterClient constructor or to have setters for those values after the TwitterClient is constructed.
3. The code meets this heuristic for the Cyclomatic Complexity and has an average of 2.478 and a std dev of 2.124.
4. The number of independent paths in the method backOff is 3. The conditions that would lead to each of these paths are:
    a. backOffMillis = 0
    b. backOffMillis > capMillis
    c. backOffMillis < capMillis
5. Afferent coupling is the number of packages that depend on the classes that are within the package. This shows how much the package is used for by other packages and how much it is utilized in the rest of the software. Efferent coupling is the number of packages that the classes within the package depend on. This shows how much the package is independent of the other packages in the software.
6. Top Level Design efficiency = 806/(154+928)*100 = 74.5%
7. Low Level Design efficiency = 761/(948+(154+928-806))*100 = 62.2%
8. Overall efficiency = 1-(126/3526)*100 = 96.4%