CSSE 376 LAB #8

- 1. The only metric that is exceeded is number of parameters per method. The TwitterClient constructor in the TwitterClient.java file.
- 2. You could have a struct or class which contains all of those objects that you need in the constructor, or you can have setter methods which should be called separately to set different members.
- 3. This code does meet that heuristic.
- 4. There are three different paths through the code. One is caused by having a value for backOffMillis of 0, one is caused by having a value of backOffMillis > capMillis, and a third path in which backOffMillis <= capMillis.
- 5. Afferent Coupling is the number of other packages which depend on a given class, while efferent coupling is the opposite, the number of packages which a given package depends on.
- 6. The effectiveness of the top level design inspection is as follows:

$$\frac{\textit{Defects found and removed in phase}}{\textit{Defects existing before phase or injected during phase}} = \frac{806}{928 + 154} = \frac{806}{1082} = 74.49\%$$
The effectiveness of the law level design inspection is as follows:

7. The effectiveness of the low level design inspection is as follows:

$$\frac{\textit{Defects found and removed in phase}}{\textit{Defects existing before phase or injected during phase}} = \frac{761}{948 + 928 + 154 - 806} = \frac{761}{1224} = 62.17\%$$

8. The effectiveness of the overall development process is as follows:

Defects found and removed overall – those found in the field

$$= \frac{806 + 761 + 1144 + 346 + 267 + 76}{928 + 154 + 948 + 1469 + 12 + 10 + 2 + 3} = \frac{3400}{3526} = 96.43\%$$