# Project 1

*COSC 603 Software Testing*

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## Task 5

The re-engineering of the fire danger index code was challenging for a couple of reasons. The hardest part for me was the control flow in the FORTRAN code which was not as easily to understand as in C or Java, languages which I am more used to. Also, the code includes several conditional statements and loops which are written differently than in more modern languages, and I had to analyze carefully what they meant. However, the paper did not describe a lot of the logic contained in the code, so I modeled my Java project more after the FORTRAN program than after the paper. For example, the drying factor was only mentioned in the paper, but no method for determining it was included. Furthermore, the equations for the fire danger indexes in the paper differed from those in the program, and I used the equations in the code for my own project. Whereas it was certainly nice to have some documentation coming with the project, it would have been beneficial if the paper had some references for additional information, e.g., references to scientific research or governmental reports on the indexes calculated in the paper that show what common numbers for the indexes are. That would have made testing more fruitful as it is uncertain that my code actually determines the indexes correctly. I did some limited research online, but it was not easy to obtain statistics for the fire danger indexes.

The Javadocs documents were fairly easy to generate. I had problems at first to create a correct index.html page. I had to select the src package in the Java project, otherwise the index page just contained information on the class that I had selected in the Eclipse editor pane instead of showing all packages and classes.

I did not have any problems with Github after I found out how to correctly set up the project. I had to clone the project on Github to my Java workspace before adding files to the project. At first, I tried it the other way around and started a project locally and then tried to add it to the Github project. That did not work for me, however. The commit process was not so hard to understand when I found out how to find the newest changes on the diagram showing the commit history of the project.