CPSC 2231L Lab Project
Refactoring Documentation

For the project I decided to refactor a few of the existing classes. The goal of this refactoring is to make the code easier to maintain and more efficient, while keeping the behavior of the program exactly the same.

Refactors:

In FileLoader.java

- For this refactor, I took out the unused words field and used a StringBuilder to build the file text instead of the old method. The previous code was storing stuff it never used and was putting the text together in a less efficient way, this refactor makes the class simpler and faster.

In StopWords.java

- For this refactor, I changed the internal list of stop words into a HashSet. The old version used an ArrayList, which had to search through every item each time a word was checked. Also switching to a HashSet makes lookups faster and the class runs better.

In ArticleList.java

- For this refactor, I added a buildfrequencymap helper method and used it in countwordfrequency and top5words. Before both methods repeated the same frequency counting code. I did this to remove the duplicate and make the class easier to maintain.