

HW # 14
File I/O - A word search

General concept for this problem

Given a word (i.e. a sequence of characters) search a file that contains a list of common English words to see if the given word is found in the list of common English words.

More specifically

- > Prompt for and read a word to search for from the keyboard.
- > Open the disk file
- > Search the file checking word by word for a match
- > If the word is found then print out a message that it was found and also the line number in the file where it was found. Else print not found.
- > Loop back and prompt for another word
- > Continue looping until a "Stop" phrase is entered. By stop phrase I mean a sequence of characters that likely will not be recognized as a word such as endsearching. You can determine your stop phrase but as the program starts up it should display a message stating what the stop phrase is so the user knows.

The text file to use is on the class web page and is named words.txt . Download and place in your Eclipse project directory.

Upload your .java file to D2L.

More information, likely useful

Use `BufferedReader` and the method `InputStreamReader` to obtain a complete string of characters from the keyboard rather than reading one character at a time like in a previous example.

```
BufferedReader br1 = new BufferedReader(new InputStreamReader(System.in));  
returncode = br1.read(char data1[]); // to read a string of characters up to carriage return
```

`BufferedReader` together with method `FileReader` to obtain a complete string of characters (one word) from the words.txt file.

```
BufferedReader br2 = new BufferedReader(new FileReader("test.txt"))  
returncode = br2.read(char data2[]); // read a word from a file
```

This can be used as the resource-specification in a try-with-resources statement (see pg 343) which will automatically close the file when your program completes or terminates for some reason.

In general, refer to chapter 10 in the text.