

```

1  /**
2   * EECS233 WrittenHW3
3   * Tung Ho Lin
4   * Spelling Checker: Dictionary
5   */
6  import java.io.BufferedReader;
7  import java.io.FileReader;
8  import java.io.IOException;
9  import java.util.Hashtable;
10
11 //using a built in hashtable to implement the words database
12 /**
13  * The Dictionary text file has to be written in: one word one line format
14  * for the build function to work
15  */
16 public class Dictionary {
17     private Hashtable<String, String> dict;
18
19     public Dictionary() {
20         dict = new Hashtable<String, String>();
21     }
22
23     public void addWord(String input) {
24         String word = input.toLowerCase();
25         word = word.replaceAll("\\s*\\p{Punct}+\\s*$", ""); //remove all whitespaces
26         and punctuation at the end of the word
27         if(findWord(word))
28             return;
29         else
30             dict.put(word, word);
31     }
32
33     public boolean findWord(String input) {
34         String word = input.toLowerCase();
35         return dict.contains(word);
36     }
37
38 //limitation of this method, see top
39 public void build(String inputfile) {
40     try {
41         BufferedReader reader = new BufferedReader(new FileReader(inputfile));
42         String word;
43         while((word = reader.readLine()) != null)
44             addWord(word);
45         reader.close();
46     }
47     catch (IOException e) {
48         System.err.println("File not found!");
49     }
50 }
51 }

```