

Spell Checker (Michael Sloma)

Extra Credit

- Table doubling with rehashing (when load factor reached)
- Nonstandard dictionary (can handle space and new line delineated)
- GUI
- Check a misspelled word against a list of common misspellings.
- "Real Time" spell checker when enter is pressed in output field
- Show table works when full or close to full (table doubling so it doesn't)
- Optimized input to use substantially less memory (uses on average half a line of memory per line on given dictionary)

Usage

To use, specify a path to a dictionary and suggestion mapping list, then specify the delineation for the dictionary file (" " or "\n"). Then press the `Load` button to load in the files to initialize the spell checker. At this point you can put text into the `output` field, and when `Enter` is pressed, the spell checker will scan the input and mark misspelled words with `*`'s. It will then suggest changes if it can match the misspelled word to a commonly misspelled word. These will be displayed in the `Suggestions` field.

Example

Output Field

```
This is a test document.  
How many dogs can fly?  
Do you think this really works?
```

```
This is a test document.  
How many dogs can fly?  
Do you think this *really* works?
```

Suggestions Field

```
really:  
really
```

Notice

The `Remaps` value shown is the total number of collisions, including those during the linear probing. There is also code for reading from a document included in the `Dictionary` class.