

# Jazzy Dictionary Timings

(All timings are in milliseconds)

## Environment

Athlon 64 3800+ (1GB Ram) running Windows XP (32-bit Edition) and Sun JRE 1.5.0\_06

## Test Details

|                               |                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------|
| Load & Initialize             | Load the english.0 dictionary via the class constructor                              |
| Check for first and last      | Lookup the first and last words in the dictionary 100,000 times                      |
| Check for over-sized invalid  | Check for the word "Testerx" (which is longer than a known valid word) 100,000 times |
| Check for under-sized invalid | Check for the word "Tes" (which is shorter than a known valid word) 100,000 times    |

## SpellDictionaryHashMap

|                               | <i>Run 1</i> | <i>Run 2</i> | <i>Run 3</i> | <i>Average</i> |               |
|-------------------------------|--------------|--------------|--------------|----------------|---------------|
| Load & Initialize             |              | 610          | 610          | 594            | <b>604.67</b> |
| Check for first and last      |              | 562          | 593          | 578            | <b>577.67</b> |
| Check for over-sized invalid  |              | 500          | 485          | 500            | <b>495</b>    |
| Check for under-sized invalid |              | 453          | 469          | 469            | <b>463.67</b> |

## NEW: SpellDictionaryLimitedCharacterSetTrie

|                               | <i>Run 1</i> | <i>Run 2</i> | <i>Run 3</i> | <i>Average</i> | <i>% of SpellDictionaryHashMap</i> |       |
|-------------------------------|--------------|--------------|--------------|----------------|------------------------------------|-------|
| Load & Initialize             |              | 485          | 484          | 469            | <b>479.33</b>                      | 79.27 |
| Check for first and last      |              | 140          | 157          | 156            | <b>151</b>                         | 26.14 |
| Check for over-sized invalid  |              | 125          | 140          | 125            | <b>130</b>                         | 26.26 |
| Check for under-sized invalid |              | 78           | 63           | 78             | <b>73</b>                          | 15.74 |

## NEW: SpellDictionaryEnglishOnlyTrie

|                               | <i>Run 1</i> | <i>Run 2</i> | <i>Run 3</i> | <i>Average</i> | <i>% of SpellDictionaryHashMap</i> |       |
|-------------------------------|--------------|--------------|--------------|----------------|------------------------------------|-------|
| Load & Initialize             |              | 453          | 469          | 453            | <b>458.33</b>                      | 75.8  |
| Check for first and last      |              | 94           | 93           | 93             | <b>93.33</b>                       | 16.16 |
| Check for over-sized invalid  |              | 78           | 79           | 94             | <b>83.67</b>                       | 16.9  |
| Check for under-sized invalid |              | 62           | 62           | 63             | <b>62.33</b>                       | 13.44 |