

Team: Adam Wiemerslage
Alex Killian
Kenneth Wapman

Title: Multifaceted Dictionary

Description: A dictionary application that allows users to insert new words, update existing words, handle collisions when an inserted word matches an existing word, and removal of words. Dictionary will be backed by a database. This dictionary will go beyond the uses of a typical dictionary by providing a number of robust word insertion methods, such as adding words in bulk via a CSV. In addition, we want this dictionary to do a number of NLP inspired analyses on the words and definitions, such as stemming, and similarity via word vectors.

Actors: user

Functionality:

- User can add word with definition
- User can add multiple definitions to a word
- User can add forms of a word (run/runs)
- User can look up word
- User can look up definition (somehow)
- User can remove word
- User can update word definition
- User can add multiple word/definitions from different sources (CSV, XML, TSV)
- When adding a word, user is prompted for clarification if a collision occurs with existing word (uses Porter Stemmer)

Stretch Functionality:

- When adding a word that collides with multiple entries in the dictionary, list possible ways to resolve that collision sorted by a metric based on the similarity of the definition
- Look up similar words by utilizing word vectors
- Ability to add words from sources requiring internet access