Course Announcements

- Bacon due in 3 days.
- Term project teams should be established.
  - You’ll get your mentor TA this weekend.
  - Email them, meet.
  - Make a regular schedule, especially next week.
- Concentration Declaration Infosession Thursday 5pm CIT 368
  - Interested in declaring a CS concentration?
  - Don’t know how to find an advisor?
  - Intimidated by ASK?
Autocorrect Review

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CSCI032 (cs0320)

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Today, we’ll look at three implementations of Autocorrect

- Two by students, Zak Wegweiser and Wennie Zhang
- And one by me, experimenting with a design that might be too complex, but I hope illustrates an idea.
Nice things we looked for

- README states that Trie cannot handle all unicode chars, OR
- Trie can handle all unicode chars
- Trie implements Collection or Set<String>
- Interface (or abstract superclass) for Suggesters
- Interface for Rankers or implements Comparator<String>
- Ability to make composite suggestion generators (ex: prefix+led suggester)
- Trie implements both contains() and add() methods
- Trie implements a search()/suffixes() method that returns a subtree
- Trie implements delete() (doesn’t have to garbage collect nodes)
- Implemented a Compact Trie
- Node object does not store its own letter (redundant)
- Separates command loop nicely.
- Trie accepts a CharSequence rather than a String
- Closes files properly in a finally block or try with resources
Some bad things we looked for

- Trie stores full String in leaves
- LED is brute force
- Whitespace does not use the Trie
- Prefix does not use the Trie
Lay of the land, me

- Oldish, so autocorrect only.
- 21 source files, 979 lines (plus an experiment)
- 10 more system tests (we gave out 18)
- Three packages: autocorrect, collect, text
  - collect: Trie, Pair
  - text: Corpus, Bigram, Completer
  - autocorrect: Main, Rankers, Autocorrect*
Notes on our Main.java

- 'Project’ abstractions neatens things up.
- Corpus holds information about a language. (Trie, Bigrams inside)
- Next places to look: Corpus, Autocorrector (Gui/Cli)