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Out of the first 10 queries, I was able to find the following number of errors while comparing the queries to their possible corresponding answers:

Error Type	Number Missed
Misspellings	2
Punctuation	18
Capitalization	6
Spacing	1
Tense	6
Plurality	1
Spelling Out Numbers	1

Punctuation seems to be the biggest culprit, and this is a very simple fix. We can just ignore punctuation, and we will probably significantly improve the performance.

Also, this is not counting synonyms, and the fact that the system is not looking for actual dates/years when it says the word in the query.

We can take these into consideration by finding words that are spelled similarly and/or providing a dictionary. We could also provide a thesaurus to find synonyms. The date/year problem would have to be fixed through either some sort of semantic mapping, or we can have a date-specific finder which looks for date-looking objects in the answers.

When I remove punctuation when I tokenize, in addition to whitespace, my MRR increases from 0.4375 to 0.5375. If I used a stemmer, my MRR metric would increase even farther. To implement this, I could change this annotator to import a file of stemmed words and use the Porter Stemming algorithm. Alternately, I used the Stanford Lemmatizer to stem the words which resulted in an MRR of 0.6917 when tokenized on whitespace and then put through the Stanford Lemmatizer, and 0.7125 when tokenized on whitespace and punctuation and then put through the Stanford Lemmatizer. In addition to the stemmer, another annotator would be added to the AAE that would import a file which would contain words with their synonyms, and I would replace words so that words with similar meaning have the same surface form and can be matched.