Report of HW5

1. **Spelling Correction:**

   I adopt a version of Norvig's spelling program named "SpellCorrector.php" written in PhP and run it on my server. Then I build a maven project, using Tika as a Maven dependency to extract text content from every html files in the downloaded directory ABCNewsDownloadData. Pushing every word in the text file named " keywords.txt". Then change the "big.txt" to "keywords.txt" in "SpellCorrector.php". Then by calling the function SpellCorrector::correct($query) in my php file "solr.php" I can find the corrected query.

2. **Autocomplete:**

   Firstly, adding a search component to solrconfig.xml and tell it to use the SuggestComponent, then adding a request handler to solrconfig.xml. After that, reloaded the core in solr. Then in "solr.php", I used JQuery to implement the autocomplete. I used AJAX to request data from another php file named "request.php", in "request.php", I get data through "file_get_contents" from solr core named "myexample", which I built before. Finally, I can get the autocomplete suggestion for my query. And for the situation of multiple query items, I split query into single word, and for each word, get the autocomplete suggestion of them, then combine all the autocomplete suggestions.

3. **Snippets:**

   Firstly, I download "simple_html_dom.php" from the github. Then, in "solr.php", I extract the name of html file and then according to the name I extract the content of html file in my local directory. Then using regular expression to deal with the content of the html file. Then using the function of stripos() to find the position where the query first appeared, then substring that sentence as the snippets. Showing it in the results.

4. **Five Examples of Misspelled Terms**

   (1) Obeme (Obama)

Search: Obame [Submit] ●Lucene ○RankFile

Showing results for obama

Search instead for Obame

Results 1 -10 of 3477:

1. State of the Union 2011: President Obama's State of the Union Add

http://abcnews.go.com/politics/obama/

/Users/yilinwang/Downloads/solr-6.5.0/crawl_data/90f14484-96b4

President Obama delivers the State of the Union address ending hi:

... **obama**'s State of the Union Address - ABC News Sections Secti

(2) Illegal immigretion (Illegal immigration)

Search: illegal immigretion [Submit] ○Lucene ●RankFile

Showing results for illegal immigration

Search instead for illegal immigretion

Results 1 -10 of 174:

1. Nightline: Late Evening News - ABC News

http://abcnews.go.com/Nightline

/Users/yilinwang/Downloads/solr-6.5.0/crawl_data/fda0ae3d-50fc-4f63-a109-b82ecad3e5fe.h

ABC's 'Nightline' is late-night television's news program featuring Juju Chang, Dan Harris and

(3) Snapchot (Snapchat)

Search: Snapchot [Submit] ⦿ Lucene ◯ RankFile

Showing results for snapchat

Search instead for Snapchot

Results 1 -10 of 95:

1. Snapchat Videos at ABC News Video Archive at abcnews.com

   http://abcnews.go.com/topics/news/technology/snapchat.htm?mediatype=Image

   /Users/yilinwang/Downloads/solr-6.5.0/crawl_data/0cb21b42-d443-4664-8a99-15c2eb20e81f.html

   Browse, search and watch Snapchat videos and more at abcnews.com

   ... **snapchat** Videos at ABC News Video Archive at abcnews.com Home> Topics> News> Technology> **snap**

(4) NBB (NBA)

Search: NBB [Submit] ◯ Lucene ⦿ RankFile

Showing results for nba

Search instead for NBB

Results 1 -10 of 526:

1. Sports News & Articles � Scores, Pictures, Videos - ABC News

   http://abcnews.go.com/Sports

   /Users/yilinwang/Downloads/solr-6.5.0/crawl_data/6c9532ee-9a60-4d4f-b297-c9350d8fe5b6

   Find the latest sports news and articles on the NFL, MLB, NBA, NHL, NCAA college footba

   ... **nba**rank Rising Stars: Your list of the **nba**'s top players under 25 Our #**nba**rank panel of ex

(5) Doneld Trump (Donald Trump)

Search: [Doneld Trump] [Submit] ⦿Lucene ○RankFile

Showing results for [donald trump](#)

Search instead for [Doneld Trump](#)

Results 1 -10 of 7317:

1. [Donald Trump Jr. Videos at ABC News Video Archive at abcnews.com](#)

   [http://abcnews.go.com/topics/business/CEOs/donald-trump-jr.htm](#)

   /Users/yilinwang/Downloads/solr-6.5.0/crawl_data/0c395e07-8d48-48f1-8a09-ad062be76428.html

   Browse, search and watch Donald Trump Jr. videos and more at abcnews.com

   ... **donald trump** Jr. Videos at ABC News Video Archive at abcnews.com Home> Topics> Business> Ceo

5. Five Example of Autocomplete

(1) Brexit

Search: [Brexi] [Submit] ⦿Lucene ○RankFile

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brexit
breitbart
breitbart.htm
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1. [D ...](#) os at ABC News Video Archive at abcnews.com

   [http://abcnews.go.com/topics/business/CEOs/donald-trump-jr.htm](#)

   /Users/yilinwang/Downloads/solr-6.5.0/crawl_data/0c395e07-8d48-48f1

(2) NBA

Search: [NB] [Submit] ⦿Lucene ○RankFile

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1. [D ...](#) eos at ABC News Video Archive at abcnews.com

   [http://abcnews.go.com/topics/business/CEOs/donald-trump-jr.htm](#)

   /Users/yilinwang/Downloads/solr-6.5.0/crawl_data/0c395e07-8d48-48f1-8a09-ad(

   Browse, search and watch Donald Trump Jr. videos and more at abcnews.com

(3) Illegal Immigrant

Search: Illegal Immig [Submit] ◉Lucene ○RankFile

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illegal immigration.htm

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http://abcnews.go.com/topics/business/CEOs/donald-trump-jr.htm

/Users/yilinwang/Downloads/solr-6.5.0/crawl_data/0c395e07-8d48-48f1-8a0...

Browse, search and watch Donald Trump Jr. videos and more at abcnews.co...

(4) California

Search: Califo [Submit] ◉Lucene ○RankFile

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Search i...

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1. D...   ...at ABC News Video Archive at abcnews.com

http://abcnews.go.com/topics/business/CEOs/donald-trump-jr.htm

/Users/yilinwang/Downloads/solr-6.5.0/crawl_data/0c395e07-8d48-48f1-8a09-

Browse, search and watch Donald Trump Jr. videos and more at abcnews.com

... **donald trump** Jr. Videos at ABC News Video Archive at abcnews.com Hom...

2. Donald Trump's Inauguration in Photos Photos - ABC News

(5) Russia

Search: Russi [Submit] ◉Lucene ○RankFile

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Search i...   ...mp

Results

1. D...   ...eos at ABC News Video Archive at abcnews.com

http://abcnews.go.com/topics/business/CEOs/donald-trump-jr.htm

/Users/yilinwang/Downloads/solr-6.5.0/crawl_data/0c395e07-8d48-48f1-8a09-a

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