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News Website: LA Times

Steps followed for Spell Correction, Autocomplete, and adding snippets:

- Configuration settings for Autocomplete:
  - Updated the solrconfig.xml file based on the changes suggested in the homework specifications.
  - Reloaded the core after the update in the Solr Admin panel.
- Configuration and implementation of Spell Correction:
  - Updated the solrconfig.xml file based on the changes suggested in the homework specification.
  - Reloaded the core after the update in the Solr Admin panel.
  - o Downloaded the SpellCorrector.php file based on Peter Norvig's code.
  - Generated the big.txt file that contains all the content of all the html files of the news site.[Jsoup]
  - o Added code for spell correction in the ui.php file.
- Implementation of Autocomplete:
  - o Included jquery and jquery ui to the code.
  - Used jquery autocomplete function to add query suggestions as per user's input.
  - o Removed stopwords to enhance query suggestions
- Implementation of Snippets:
  - Included simple\_html\_dom.php to get html
  - Generate snippets relevant to user query
  - o Added regex to remove special characters

Some queries with spelling error and the corrected queries by the Spell Checker:

1. Showing results for: donald trump (corrected query)

Search instead for: donald trum (spelling error in query)

2. Showing results for: california (corrected query)

Search instead for: calfornia (spelling error in query)

3. Showing results for: november (corrected query)

Search instead for: Novembr (spelling error in query)

4. Showing results for: illegal immigration (corrected query)

Search instead for: illegal immgration (spelling error in query)

| 5. | Showing results for: terrorism (corrected query) |           |                   |                           |
|----|--|-----------|-------------------|---------------------------|
|    | Sea  | arch inst | ead for: terrorsm | (spelling error in query) |
|    | Autocomplete results for some queries:           |           |                   |                           |
|    | 1. Incomplete query: Donal                       |           |                   |                           |
|    |  | 0         | donal             |                           |
|    |  | 0         | Donald            |                           |
|    |  | _         | donations         |                           |

- donations
- o donated
- o donation
- 2. Incomplete query: calif
  - o calif
  - o california
  - o Californians
- 3. Incomplete query: novem
  - november
  - novel
  - o novels
  - o novelist
  - o novelty
- 4. Incomplete query: ill
  - 0 ill
  - illegal 0
  - o island
  - o illegally
  - o Islamic
- 5. Incomplete query: ter
  - o ter
  - 0 text
  - turbine 0
  - trb 0
  - tertiarynavbar