CS 410: Text Information Systems  
Group Project Documentation  
Team Green Koalas

Team Members:

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Project Installation:

*The following instructions have been tested with Python2.7 on Linux and MacOS*

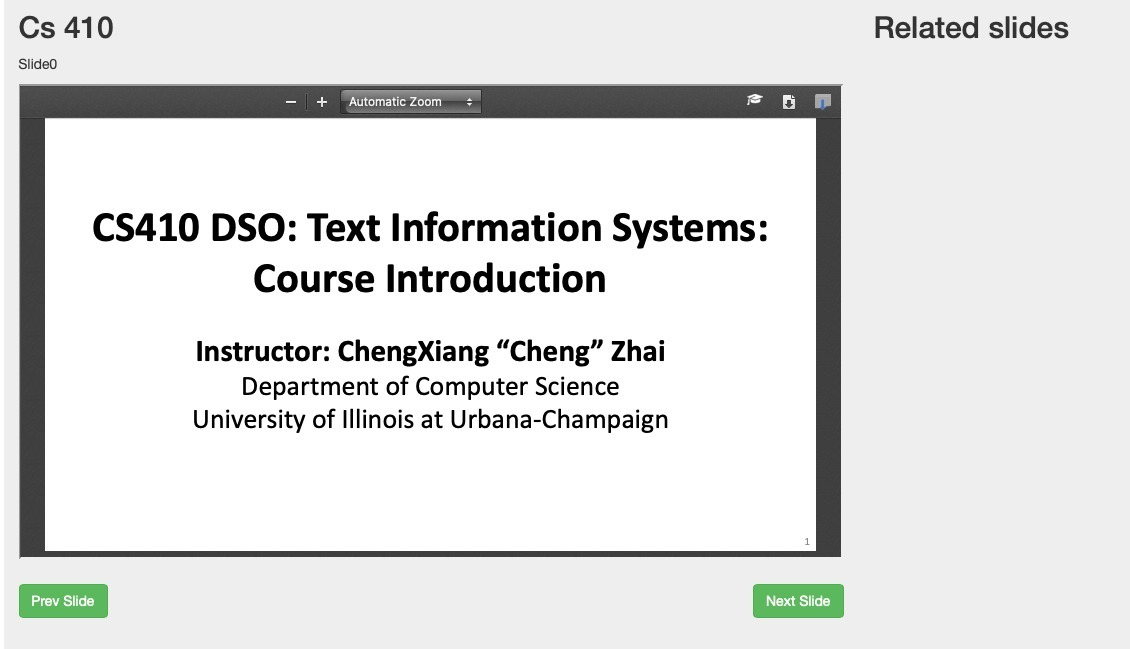
1. Source code (including Team Green Koala enhancements) can be found at https://github.com/CS410Fall2020/CourseProject
2. You should have ElasticSearch installed and running --  
   https://www.elastic.co/guide/en/elasticsearch/reference/current/targz.html
3. Create the index in ElasticSearch by running python create\_es\_index.py from EducationalWeb/
4. Download tfidf\_outputs.zip from here -- https://drive.google.com/file/d/19ia7CqaHnW3KKxASbnfs2clqRIgdTFiw/view?usp=sharing
5. Unzip the file and place the folder under EducationalWeb/static
6. Download cs410.zip from here -- https://drive.google.com/file/d/1Xiw9oSavOOeJsy\_SIiIxPf4aqsuyuuh6/view?usp=sharing
7. Unzip the file and place the folder under EducationalWeb/pdf.js/static/slides/
8. From EducationalWeb/pdf.js/build/generic/web, run the following command: gulp server
9. In another terminal window, run python app.py from EducationalWeb/
10. The site should then be available at http://localhost:8096/

How to use:

The EducationalWeb system was developed by some of the students in Prof. Zhai's research group for navigating through course slides. At present, it only contains the slides for CS410, but could be expanded in the future to include other courses.

Below are some of the features of the EducationalWeb tool:

* Choosing a lecture using the drop-down list in the navigation bar
* Sequentially navigating through the lectures/slides using the Next and Prev buttons at the bottom of a slide
* Searching for relevant slides using the search bar at the bottom of a slide
* Navigating to a related/recommend slide from the column on the right
* Finding an explanation of a term/phrase on the slide by highlighting it and then clicking on the "Explain selected text" button on the top-right of a slide. It will try to retrieve a relevant section from Professor's textbook that contains an explanation of the selected phrase.
* Downloading the current slide being viewed by clicking on the “Download” button, to the right of the “Explain selected text” button.
* Downloading all slides for the lecture for the current slide being viewed by clicking on the “Download All” button, to the right of the “Download” button.  
  (\*\*\*NOTE: this is the function that was added by Team Green Koalas\*\*\*)



Explain selected text

Download

Download All

Implementation:

After creating a new button for the Download All function, we created three new functions. The first retrieved the URL of the current slide, and formatted it to just use the path. The second, getURLs, created a list of possible file names, based on the directory name and the standard file naming convention. The third, zipItUp(), loops through each possible file name and adds it (if it exists) to a zip file (“slide-series.zip”) and downloads it through the user’s browser.

Because we had difficulty getting a server-side directory listing from the client-side javascript, we had to adjust our implementation