

# What Needs to be Submitted

Create a single .zip (CSCI572\_HW4.zip) file which contains the following documents:

1. The external\_PageRankFile.txt which was used as input to Solr. (DO NOT to include EdgeList file).
2. There should be a report describing what you have done, and analyzing the results of the two ranking algorithms. This report should include:
  - Steps you followed to complete this assignment. Include the details of what tools you used to compute PageRank. Make sure to include details of initial configuration of PageRank algorithm you used (ex: alpha value, max number of iterations etc.). Should contain a minimum of 300 words.
  - Explanation regarding why some pages have higher PageRank values than others. (One paragraph).
  - Document the flow for any single query using screenshots: (Screenshot should contain first 10 results for the Lucene and PageRank)
    - ✓ Screenshot of initial page where you enter the query in input box.
    - ✓ Screenshot of page which shows the results for Lucene(Default).
    - ✓ Screenshot of page which shows the results for PageRank.
    - ✓ Screenshot of the actual webpage that opens when clicking on one of the result's link.
  - A table containing list of URLs of the top ten results produced by both ranking methods for each query.
  - An overlap graph showing the amount of overlap between the two ranking strategies for all queries. By overlap we mean the number of results that appear in the top ten under both ranking methods. Axes should be labelled correctly to indicate query name and overlap number. If no overlaps at all, do not plot an empty graph, but you must mention it in your report.
3. All the source code that you wrote for display for creating the web page that accepts the query, the program that sends the query to Solr and the program that processes the Solr results, i.e. PHP/NodeJS code. (DO NOT include the code you used to generate EdgeList and PageRank values). If any deviations from the specification, you should include a README file providing instructions on how to execute your code.

Submit your zipped file electronically to the csci572 account. Enter the following command from your UNIX prompt: **\$ submit -user csci572 -tag hw4 CSCI572\_HW4.zip**

NOTE: Report can be in PDF / doc, but PDF is preferred.