

Search Engine OOD I

Class Inverted Index

attributes:

- | | | |
|-----------|---|--|
| directory | - | a map of words and the documents that contain them |
| stop list | - | a set of stop words |
| documents | - | a set of documents |

services:

- | | | |
|-------------------|---|---|
| index | - | index()
maps words to the documents that contain them |
| add document | - | addDocument(Document document)
adds document to the set of documents |
| single word query | - | singleWordQuery(String word)
searches the directory for a single word |
| multi word query | - | multiWordQuery(String words)
searches the directory for multiple words |
| dump | - | dump()
prints the current inverted index to standard out |

Class Stop List

attributes:

- | | | |
|-----------|---|---------------------|
| stop list | - | a set of stop words |
|-----------|---|---------------------|

services:

- | | | |
|---------------|---|--|
| read file | - | StopList(String filename)
constructor which reads in stop list |
| contains word | - | containsWord(String word)
determines if a given word is a stop word |

Class Document

attributes:

- | | | |
|-----------|---|---|
| name | - | a string |
| full text | - | an object containing the document's original text |
| words | - | a set of words from the document |

services:

- | | | |
|-----------|---|--|
| read file | - | Document(String filename)
constructor which reads in stop list |
| display | - | display()
prints the document's name and contents to standard out |

Class CLI

attributes:

none

services:

usage

- usage()
prints the correct program usage to standard out

main

- main(String[] args)
perform operations on queries from standard in