OOD1

Class Search Engine

Attributes:

- index - An index of documents

Services:

- addDoc - Adds a document to the index
- search - Finds a document in the index and returns it based on if it finds the query in document contents, supports multi word searches

Class Document

Attributes:

- name - The name of the document
- contents - The contents of the document
- index - an index of each word and the lines it is on

Services:

- print - Prints out the document and its contents
- makeIndex - creates an index for the document
- contains - checks if the document's index contains a word

Class StopList

Attributes:

- stopList - list of stopwords

Services:

- removeStopWord - Checks if an input contains any stopwords and returns the stripped input

OOD2 (Java)

Class Search Engine

Attributes:

- index - HashMap<Document> index;

Services:

- addDoc
    - void addDoc(doc)
      HashMap.add(doc);
- search
    - public Document search(query)
      query.removeStopWord();
      for args in query
              Look for document with the query in it
              return doc;
      return null; //if no doc found

Class Document

Attributes:

- name - String name
- contents - String contents
- index - HashSet index (words)

Services:

- create
    - public Document (Name name, Contents contents)
      this.Name = name;
      this.contents = contents;
      index = createIndex(contents);
- makeIndex
    - public HashSet makeIndex(String content)
      //Iterate through the document
      //put each word in the HashSet if not a duplicate

- contains
    - public boolean contains(word)
      return index.contains(word);

Class StopList

Attributes:

- stopList - HashSet stopList

Services:

- removeStopWord
    public void removeStopWord(String s)
    //iterate through the string and remove stopwords

for (String word : suit.split(" "))???