SearchEngine

User Interface
Add a log?

+void maintainance()
+void interactiveMode()
+void stressTest()
-AVLTree data
-HashTable data
-bool bAVL //true for AVL mode, false for Hash Table
-void query(string andOr, string searchterms, bool NOT=false, string notterms)

Parser

-id: Long
-ClassAttribute: Long

+void createDictionary()
+void ReadRawFile() // XML Parse - Preprocess words - dic.addWord() - create MF(Dictionary)
+void createMF(Dictionary*) //creates MFI.xml
+void MFIReadIn() //reads in MFI.xml to Hash or AVL
-string preprocessword() // remove stopword (return "" if stopword) and stem word

Dictionary

Contains AVL Tree of Words

-void addWord() //creates a new word
-bool checkExist(string)
+void insert(string name, string uuid)
-update(string uuid)
+calcFreq()
+createMFI()
-AVLTree words //organized by alpha of name

AVL Tree

Hash Table

-AVLTree* ???

XML Parser

Stemmer

Word

Contains AVL Tree of all of the uuids containing the word

-string name
-AVLTree filerecords //by uuid
-long totalOccurrences
-add(filerecord) //adds a new file record
+update(filerecord) //adds a new FR or increases FR occurences
+calcfrequency

friend filerecords

FileRecord

-string fileID
-double freq //occur/totalOccur
-long occur //number of occurrences in a word