Hierarchy of procedural

dealWithDangling

calOutgoing

generatePageRank(int maxIter, double tol,double dampingFactor)

generatePageRank()

tfWeigh

idfWeigh

weigh

weigh

querySingleKeyword

rank

rank

search(ArrayList<String> keywords, String rankMethod, String invertedPath, String forwardPath)

approve

search(String keywords, String rankMethod)

printResult

main

current system design

tfWeigh

idfWeigh

querySingleKeyword

Unit Testing

querySingleKeyword

rank

weigh

tfWeigh

idfWeigh

generatePageRank()

weigh

calOutgoing

dealWithDangling

search(ArrayList<String> keywords, String rankMethod, String invertedPath, String forwardPath)

System Testing

querySingleKeyword

search(ArrayList<String> keywords, String rankMethod, String invertedPath, String forwardPath)

search(String keywords, String rankMethod)

rank

Integration Testing

generatePageRank(int maxIter, double tol,double dampingFactor)

querySingleKeyword

ArrayList<String> search(ArrayList<String> keywords, String rankMethod, String invertedPath, String forwardPath)

tfWeigh

idfWeigh

weigh

calOutgoing

dealWithDangling

search(String keywords, String rankMethod)

rank

weigh

idfWeigh

idfWeigh