

HW2 – Positional Inverted Index & Free-text Queries with Proximity Operator

1. File directory structure :

```
Kim-HW2
|_lib
|   |_kstem-3.4.jar
|_src
|   |_com.chohee
|       |_inverted_index_part1
|           |_Indexer.java
|           |_Parser.java
|           |_PositionLists.java
|           |_PostingLists.java
|       |_query_evaluation_part2
|           |_ProximityOperator.java
|           |_QueryEvaluation.java
|       |_SimpleSearchEngine.java
|       |_documents.txt
|       |_inverted_index_file.txt
|       |_result_file.txt
|       |_SimpleSearchEngine.sh
```

2. Class descriptions

a. Inverted_index_part1: A package for HW2 – Part1.

- i. Indexer.java
- ii. Parser.java
- iii. PositionLists.java
 - termFrequency:Integer
 - positions:List<Integer>
- iv. PostingLists.java
 - docFrequency:Integer
 - positionMap:Map<Integer, PositonLists>

b. Query_evaluation_part2: A package for HW2- Part2

- i. ProximityOperator.java
 - N:Integer
 - Term1:String
 - Term2:String

ii. QueryEvaluation.java

- proximityOperatorList:List<ProximityOperator>
- freeTerms:List<String>
- query:String

c. SimpleSearchEngine: A class for HW2- Part3

3. Usage

- Unzip Kim-HW2.zip
- Change Directory:
>>cd Kim-HW2/src
- Run .sh file
>>sh SimpleSearchEngine.sh