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WordCount.java
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import java.io.IOException;
import java.util.StringTokenizer;
import org.apache.hadoop.conf.Configuration;
import org.apache.hadoop.fs.Path;
import org.apache.hadoop.io.IntWritable;
import org.apache.hadoop.io.Text;
import org.apache.hadoop.mapreduce.Job;
import org.apache.hadoop.mapreduce.Mapper;
import org.apache.hadoop.mapreduce.Reducer;
import org.apache.hadoop.mapreduce.lib.input.FileInputFormat;
import org.apache.hadoop.mapreduce.lib.output.FileOutputFormat;
import java.util.HashSet;
import java.util.Set;
import java.util.Map;
        YOUSSEF NIDABRAHIM
    ZZ3 - F2
        MAP/REDUCE PATTERN FOR COUNTING WORDS
public class WordCount {
 public static class TokenizerMapper extends Mapper<Object, Text, Text, IntWrita</pre>
ble>{
   private final static IntWritable one = new IntWritable(1);
   private Text word = new Text();
   private Set<String> patternsToSkip = new HashSet<String>();
   public void map (Object key, Text value, Context context) throws IOException,
InterruptedException {
      StringTokenizer itr = new StringTokenizer(value.toString());
      while (itr.hasMoreTokens()) {
                        word.set(itr.nextToken());
                        String txt = word.toString();
                        txt = txt.toLowerCase();
                        txt = txt.replaceAll("\p{Punct}", "");
                        //txt = txt.replaceAll("[^a-zA-Z\p{L}]", "");
                        word.set(txt);
                        context.write(word, one);
 public static class IntSumReducer extends Reducer<Text, IntWritable, Text, IntWri</pre>
table> {
   private IntWritable result = new IntWritable();
   public void reduce(Text key, Iterable<IntWritable> values, Context context )
throws IOException, InterruptedException {
      int sum = 0:
      for (IntWritable val : values) {
        sum += val.get();
```

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     result.set(sum);
    context.write(key, result);
public static void main(String[] args) throws Exception {
  Configuration conf = new Configuration();
  Job job = Job.getInstance(conf, "word count");
  job.setJarByClass(WordCount.class);
   job.setMapperClass(TokenizerMapper.class);
   job.setReducerClass(IntSumReducer.class);
   job.setOutputKeyClass(Text.class);
   job.setOutputValueClass(IntWritable.class);
  FileInputFormat.addInputPath(job, new Path(args[0]));
  FileOutputFormat.setOutputPath(job, new Path(args[1]));
  System.exit(job.waitForCompletion(true) ? 0 : 1);
```