

Location Name Finder - Miner Documentation

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Chapter 1

Deprecated List

Member [FlickrMiner.FlickrMiner](#) ()

Skeleton method. Never implemented.

Member [FlickrMiner.main](#) (String args[])

Skeleton method. Never implemented.

Member [TweetMiner.startStreamAPI](#) ()

Member [Utils.DBAdapter.insertNerWord](#) (String word, String tag)

This method has since been deprecated due to NER no longer being used in the project.

Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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Chapter 3

Class Documentation

3.1 Utils.Constants Class Reference

Static Public Attributes

- static String **NER_TAG_LOCATION** = "LOCATION"
- static String **NER_TAG_PERSON** = "PERSON"
- static String **NER_TAG_ORGANIZATION** = "ORGANIZATION"

3.1.1 Detailed Description

Utilities constant class. Provides String and Integer constants for use throughout all of the classes in this part of the project.

Author

Billy Hickman

The documentation for this class was generated from the following file:

- src/Utils/Constants.java

3.2 Utils.DBAdapter Class Reference

Public Member Functions

- [DBAdapter](#) (String tweets_path, String ner_path)
- void [insertNerWord](#) (String word, String tag) throws SQLException
- void [insertTweetData](#) (String username, String text, double lat, double lng) throws SQLException

3.2.1 Detailed Description

This is a utilities class created to manage all communications with the database. It will provide facilities for different types of queries.

Author

Billy Hickman

3.2.2 Constructor & Destructor Documentation

3.2.2.1 Utils.DBAdapter.DBAdapter (String tweets_path, String ner_path)

Database adapter constructor. This method also forms the DB connection so that when another class holds an instance of this class it will also have a functioning DB connection.

3.2.3 Member Function Documentation

3.2.3.1 void Utils.DBAdapter.insertNerWord (String word, String tag) throws SQLException

Inserts a word into the database that has been detected with Stanford's NER. It inserts the word and an associated tag, e.g. LOCATION, PEOPLE, ORGANIZATION. It will update the counter by first selecting and checking if a result already exists.

Parameters

<i>word</i>	The word detected to be an entity.
<i>tag</i>	The associated tag, e.g. LOCATION, PEOPLE, ORGANIZATION

Exceptions

<i>SQLException</i>	Couldn't insert
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Deprecated This method has since been deprecated due to NER no longer being used in the project.

3.2.3.2 void Utils.DBAdapter.insertTweetData (String username, String text, double lat, double lng) throws SQLException

Inserts a Tweet into the database. It will store all of the details related to this Tweet including all location details. Note, that this insert is performed according to the variable tweets_db_path which is a runtime constant.

Parameters

<i>text</i>	Tweet text
<i>username</i>	Tweet username
<i>lat</i>	Latitude as a double
<i>lng</i>	Longitude as a double

Exceptions

<i>SQLException</i>	Tweet insertion failure.
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The documentation for this class was generated from the following file:

- src/Utils/DBAdapter.java

3.3 FlickrMiner Class Reference

Public Member Functions

- [FlickrMiner](#) ()

Static Public Member Functions

- static void [main](#) (String args[])

3.3.1 Detailed Description

This is a skeleton class that is ready for the Flickr API communication to be implemented.

Author

Billy Hickman

3.3.2 Constructor & Destructor Documentation

3.3.2.1 FlickrMiner.FlickrMiner ()

Deprecated Skeleton method. Never implemented.

3.3.3 Member Function Documentation

3.3.3.1 static void FlickrMiner.main (String args[]) [static]

Deprecated Skeleton method. Never implemented.

The documentation for this class was generated from the following file:

- src/FlickrMiner.java

3.4 TweetAdder Class Reference

Public Member Functions

- [TweetAdder](#) ()
- void [startTheMiningProcess](#) ()

Static Public Member Functions

- static void [main](#) (String args[])

3.4.1 Detailed Description

A class created to load CSV data into the database. It is a parser for the CSV data that will have been provided by Cardiff University. It will load CSV data that is pipe (|) value seperated.

Author

Billy Hickman

3.4.2 Constructor & Destructor Documentation

3.4.2.1 TweetAdder.TweetAdder ()

Constructs this class and creates a DB connection.

3.4.3 Member Function Documentation

3.4.3.1 `static void TweetAdder.main ( String args[] )` `[static]`

Entry point to this part of the application which starts the processing of the CSV file.

Parameters

<i>args</i>	
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3.4.3.2 void TweetAdder.startTheMiningProcess ()

Start mining for Tweets in the CSV file. The CSV file is hard coded as a parameter. It loops through each row and retrieves specific values. This method expects a certain CSV file format.

The documentation for this class was generated from the following file:

- src/TweetAdder.java

3.5 TweetMiner Class Reference

Public Member Functions

- [TweetMiner](#) (Double lat, Double lng, String tweets_database, String ner_database, Double distance_arg)
- void [startStreamAPI](#) ()

Static Public Member Functions

- static void [main](#) (String args[])

3.5.1 Detailed Description

This the class which will mine tweet's. It completes all of the stages involved in mining social media posts. It relies on the Twitter API library 'twitter4j'. This class operates independently of other classes and modules.

Author

Billy Hickman

3.5.2 Constructor & Destructor Documentation

3.5.2.1 TweetMiner.TweetMiner (Double lat, Double lng, String tweets_database, String ner_database, Double distance_arg)

Constructs the Tweet miner with all of the required member variables.

Parameters

<i>lat</i>	Latitude double.
<i>lng</i>	Longitude double.
<i>tweets_database</i>	The name of the table to store Tweets.
<i>ner_database</i>	The name of the table to store NER words (not used).
<i>distance_arg</i>	The distance between the top left and top right of the bounding box.

3.5.3 Member Function Documentation

3.5.3.1 static void TweetMiner.main (String args[]) [static]

Start point.

3.5.3.2 void TweetMiner.startStreamAPI ()

This is the method which will trigger the streaming API to start. It sets up the Twitter stream with the associated Twitter API details. It also filters query inside a particular bounding box. Triggered when a new status enters the system. Checks to see whether it has geo coordinates and also performs a second stage of bounding box filtering.

SUB METHOD (DEPRECTAED) Processing any NER (Named Entity Recognition) in a tweet. It will get the classified string and strip out location words.

Parameters

<i>status</i>	The Twitter4J status object.
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SUB METHOD (DEPRECTAED) used to find the classified word being passed as a parameter. This string will have already been classified by the stanford NER.

Parameters

<i>tag</i>	The classification tag
<i>classified_string</i>	The string which has already been tagged and classified.

Deprecated

The documentation for this class was generated from the following file:

- src/TweetMiner.java

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