Guidelines for using featureextraction code package

Overview

The feature extraction package contains the following classes:

- *TweetFeatureExtractor*: Performs the Tweet feature extraction.
- *UserFeatureExtractor*: Performs the User feature extraction.
- *TextUtils*: Contains auxiliary methods useful for the feature extraction.
- *Vars*: Contains the values of the path variables.
- *DatasetFeaturesExtractor*: Handles the whole feature extraction process. Responsible for connecting with Twitter and calling the methods for feature extraction.

It also contains the folder *resources* where the necessary files for the feature extraction are.

As the above code was developed as a maven project, the *pom.xml* file with the necessary dependencies is also provided. If you plan not to use the project as maven, please be sure that you include in the class path the associating jar files.

Steps

In order to extract *Tweet* and *User* features for a tweet, you need to use the *DatasetFeatureExtractor main* class. It is advisable to follow the next steps:

1. Specify the tweet ID for which to extract the features, as following:

```
String tweetId = "578401801818542080";
```

2. Then, call the *public void extractFeatures(String tweetId)* method, which extracts the features:

```
extractFeatures(tweetId);
```

3. In this method, create a connection with Twitter, by using a *Twitter* object. To get this connection done, please fill in your personal credentials into the *public Twitter connectToTwitterAPI()* method. After that, by calling the *showStatus* Twitter method, you are provided with the *Status* object that contains the information of the tweet:

```
Status status = twitter.showStatus(Long.parseLong(tweetId));
```

In the same way, to get the *User* object of the user who posted the tweet, you should call the *showUser* Twitter method:

```
User user = twitter.showUser(status.getUser().getId());
```

4. For the tweet feature extraction, create a *TweetFeatureExtractor* object

```
TweetFeatureExtractor ife = new TweetFeatureExtractor();
```

and call the *public void extractTweetFeatures(Status status)* method

```
ife.extractTweetFeatures(status);
```

to get the tweet feature extraction done.

In the same way, for the user feature extraction, create a *UserFeatureExtractor* object

```
UserFeatureExtractor ufe = new UserFeatureExtractor();
```

and call the *public void extractUserFeatures(User user)* method

```
ufe.extractUserFeatures(user);
```

to get the user feature extraction done.

In both cases, the results of the feature extraction will be printed to the console.