**Review Analysis**

**Developer Documentation**

1. Installing the required platforms

- MongoDB (http://docs.mongodb.org/manual/installation/)

- Netbeans (https://netbeans.org/community/releases/80/install.html)

1. Inserting database files

To use the software, the developer needs to insert two files containing the database following a certain pattern.

* File one

The first file should be named "meta", it will contain metadata about each review. This file must have the .csv format, in addition the metadata should be separated by a semicolon.

Here is the dictionary data of this file:

|  |  |  |
| --- | --- | --- |
| **Column** | **Description** | **Example** |
| username | Name of the user that did the review | John123 |
| reviewId | String that identifies a review | 129302135 |
| userId | String that identifies a user | 1028584510 |
| appId | String that identifies a product | 284075743 |
| date | Date of the review | Mar 20 2012 |
| unixTimeStamp | Date in unixTimeStamp | 1332201600 |
| appVersion | Version of the app | 1.2 |
| numberOfHelpful | Determined by the votes that other users have regarding this review | 2 |
| starts | The rating that the user gave to a product (0-5) | 2 |
| totalVotes | Number of people that voted to classify that review as helpful. | 2 |

It is very important to follow the format of the date and the sequence of the metadata, once the system was developed using this format.

Each line of the archive meta.csv should follow this sequence of information: *“appId, reviewId, userId, username, stars, appVersion, date, numberOfHelpful, totalVotes, unixTimeStamp*” and look like this:

“*284075743;129302135;1028584510;Aceofcamp;2;1.2;Mar 20 2012;2;2;1332201600”*

You should let the database file inside of the same folder that the script for inserting is. Then, you can run the script called script\_insertMeta.py.

Once you have ran the file, a database called "reviewanalysis" will be created, and a collection named "meta" will store all your data.

If you want to check it, you can open the mongo shell and type the following instructions:

* “use reviewanalysis”
* db.meta.find()

Then, you will have a list of objects like this:

{ "\_id" : ObjectId("5596d7bcff0d812b7d5da01e"), "username" : "John123", "reviewId" : "129302135", "userId" : "1028584510", "appId" : "284075743", "date" : "Mar 20 2012", "unixTimeStamp" : "1332201600", "appVersion" : "1.2", "numberOfHelpful" : "2", "stars" : "2", "totalVotes" : "2" }

* File two

You should follow the same instructions to insert the file to into the database. However, it should be named “review”, and it will have the text of the review. As the first one, this file must have the .csv format; in addition, the metadata should be separated by a semicolon.

Here is the dictionary data of this file:

|  |  |  |
| --- | --- | --- |
| **Column** | **Description** | **Example** |
| content | The comment made by the user about a product | Third level is too hard to complete. Dislike |
| title | Title of the review | Too hard |
| reviewId | String that identifies a review | 129302135 |
| appId | String that identifies a product | 284075743 |

Each line of the archive text.csv should follow this sequence of information: *“appId, reviewId, title, content*” and look like this: *“284075743;129302135;Too hard;Third level is too hard to complete. Dislike”.*

You should let the database file inside of the same folder that the script for inserting is. Then, you can run the script called script\_insertReview.py.

Once you have uploaded the file, a collection named "review" will be created to store all your data. If you want to check it, you must follow similar steps as the previous example:

* “use reviewanalysis”
* db.review.find()

Then, you will have a list of objects like this:

{ "\_id" : ObjectId("557f95f9ff0d8140f3abd6be"), "content" : "Third level is too hard to complete. Dislike", "title" : "Too hard", "reviewId" : "129302135", "appId" : "284075743" }

3. Running mapreduce script

Open the terminal and go to the folder that is located the script. After it, you just need to run this command:

*mongo localhost:27017/reviewanalysis mapreduce.js*

And then, a new collection will be created to store the results of the mapreduce.

4. Running the project

After those steps, everything is ready to run the project. You should open the project at Netbeans and run the file called index.jsp.

