

# IRWA Project

## Part 4: User interface and web analytics

### Context

The aim of this last project part is to implement all the seen ranking mechanisms into a fully functional web application.

### Web application

#### 1. Search page

The main framework for this page was given, nonetheless we made a few changes. First we added the possibility to choose between ranking mechanisms when performing the search. We also made a few changes to the header file in order to make other pages accessible from the main index.

#### 2. Tweet details page

This page will open when the user selects one of the proposed results. All the information of the tweet will be displayed. We had to modify some of the core code related to data reading, so that we also store the profile and background picture's URLs. Needless to say we also had to modify the different stylesheets to improve the display. Another thing we added is the possibility to "See the tweet in its context", which basically sends the user to the original tweet on Twitter.com.

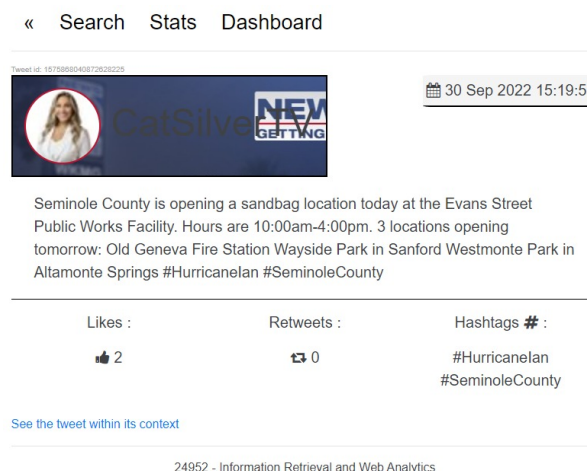


Figure 1: Example of tweet detail

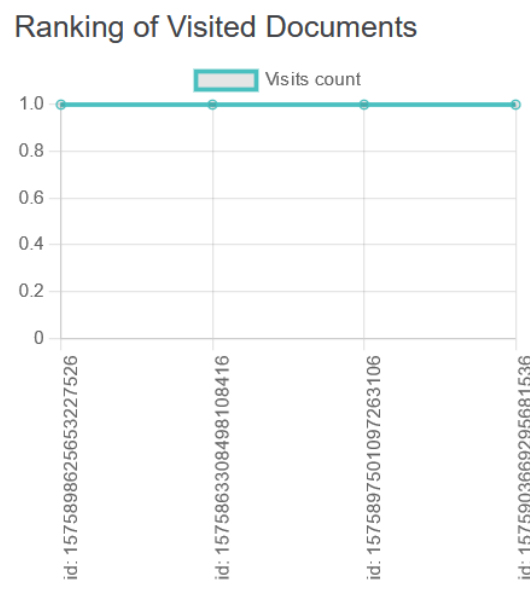
### 3. Stats page

This simple page will display all the tweets that have been accessed by the users. Moreover it will display the number of views each of the documents had.

### 4. Dashboard

This page isn't related to any specific document. It reveals general statistics gained from the usage of our application. The data is stored mainly as objects in our local mongoDBs.

In our case we added a graph showing which are the most visited tweets (ranked by popularity).



*Figure 2: Number of visits per visited document*

Also, we added a pie chart where we determine the origin of the users accessing the app. In our case the entire graph belongs to Spain as all tests were done from here.

Visitors origins

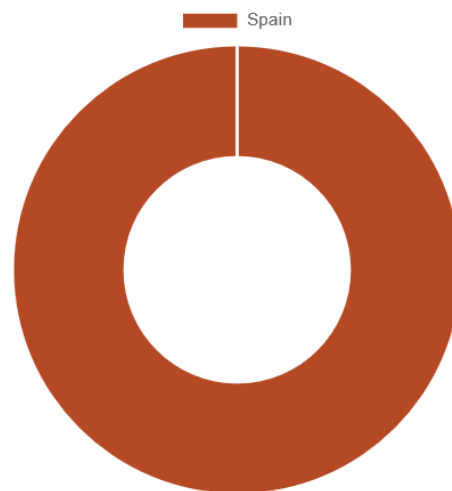


Figure 3: Pie chart of the origin of the users

Lastly we added two more charts in which the popularity of the reflected queries is represented.

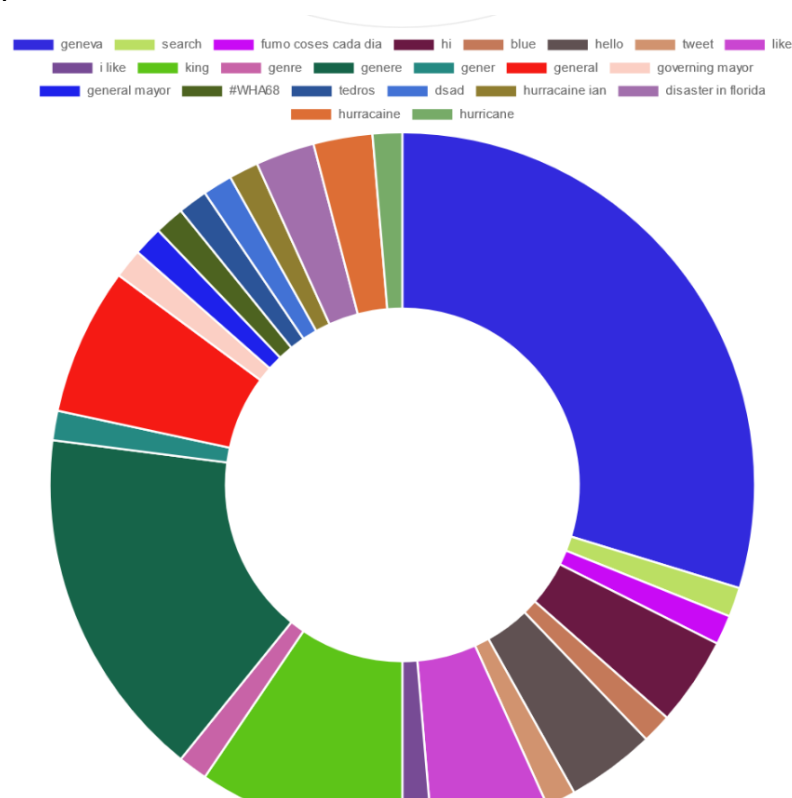


Figure 4: Query relevance by popularity

Main difficulties in this part appeared when formatting and sending the data to an html page using JavaScript. Minor incompatibilities appeared which were fixed by using JSON as a common ground between python and JS.

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## Conclusion

This last part of the project got pretty challenging. A lot of new concepts were to take into account. Nonetheless it has been nice to see algorithms in action on a real use-case. Overall all the project parts were nicely connected and gave us some degree of freedom to experiment by ourselves.