

SONETA: a tool for supporting SMEs social presence



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Presentation Outline

- ▶ Social media data
- ▶ Social media tools
- ▶ SONETA
- ▶ Architecture, implementation & development of SONETA
- ▶ Evaluation of SONETA
- ▶ Future Steps
- ▶ Demo

Use case scenario: Find out what users mainly talk about in a specific region

- ▶ How can we gain insight?
- ▶ Locality
 - ▶ 3.000 tweets/day in the region of Achaia
- ▶ Big picture
 - ▶ Go one level up and see what is important

Information Visualization and SMEs

- ▶ “The use of computer supported, interactive, visual representations of abstract data to amplify cognition”
- ▶ **Main Purpose:**
 - ▶ “The purpose of visualization is insight not pictures”
- ▶ **How information visualization can help business**
 - ▶ Monitor your brand
 - ▶ Find out what users mainly talk about (targeted advertisement)
 - ▶ Find out how users respond to business decisions (e.g. a new product campaign or an advertisement)
 - ▶ Track opinion leaders
 - ▶ Competitive analysis

social media search and analysis tools

- ▶ **Search and monitoring tools**
 - ▶ Search for keywords/phrases
 - ▶ Top users (based on followers, likes, posts, etc)
 - ▶ Top keywords
 - ▶ Trends
 - ▶ Mentions
 - ▶ Comparison to competitors
- ▶ **Analysis tools**
 - ▶ Given a term, find most related keywords and top users
 - ▶ Graphical illustrations and time charts
 - ▶ Track the strength, passion, sentiment, reach, growth of the brand, company, etc
 - ▶ Audience and overall user engagement
 - ▶ ROI analytics

Important features

- ▶ Locality
- ▶ Comparative data analysis over time
- ▶ Access to actual social media data
- ▶ Support for non English text

SONETA soneta.hci.ece.upatras.gr

- ▶ A social networking tool for supporting SMEs social presence on Twitter
- ▶ Features
 - ▶ Search on Twitter stream for tweets containing specific keywords posted from a specific location
 - ▶ Quantitative results of tweets per day
 - ▶ Comparative results of top keywords on a daily basis
 - ▶ Access tweets stream containing important keywords

Use case scenario: Find what users mainly talk about in a specific region

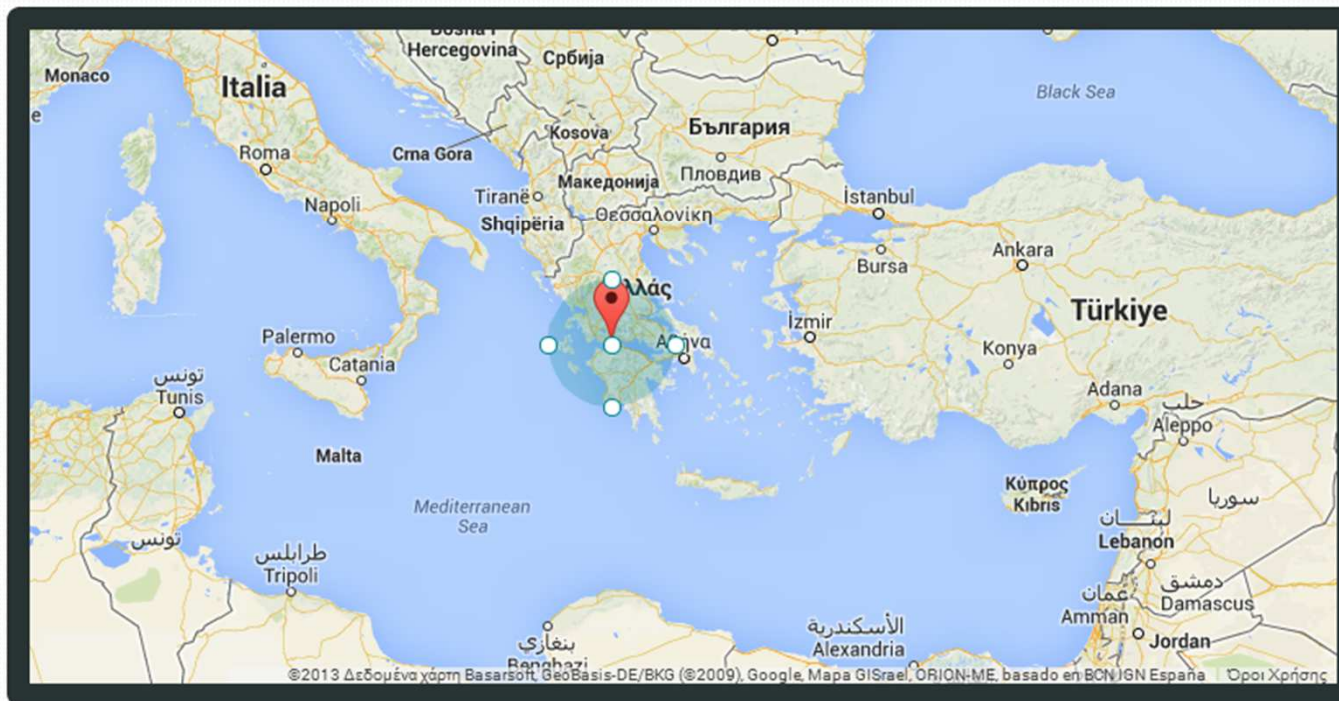
keywords

enter keywords

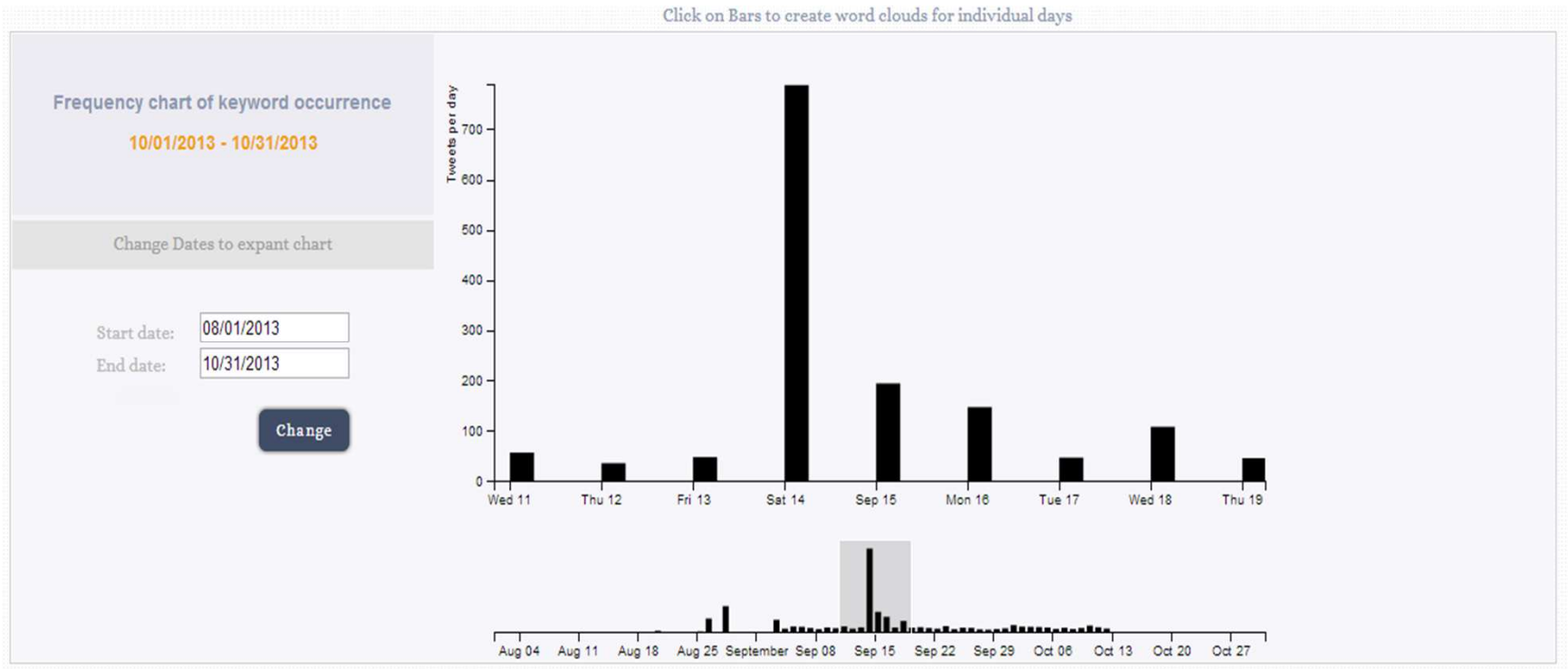
write more than one keywords for searching
all of them use the OR operator for searching
for one of the keywords or use "*" for search
the exact phrase

add location

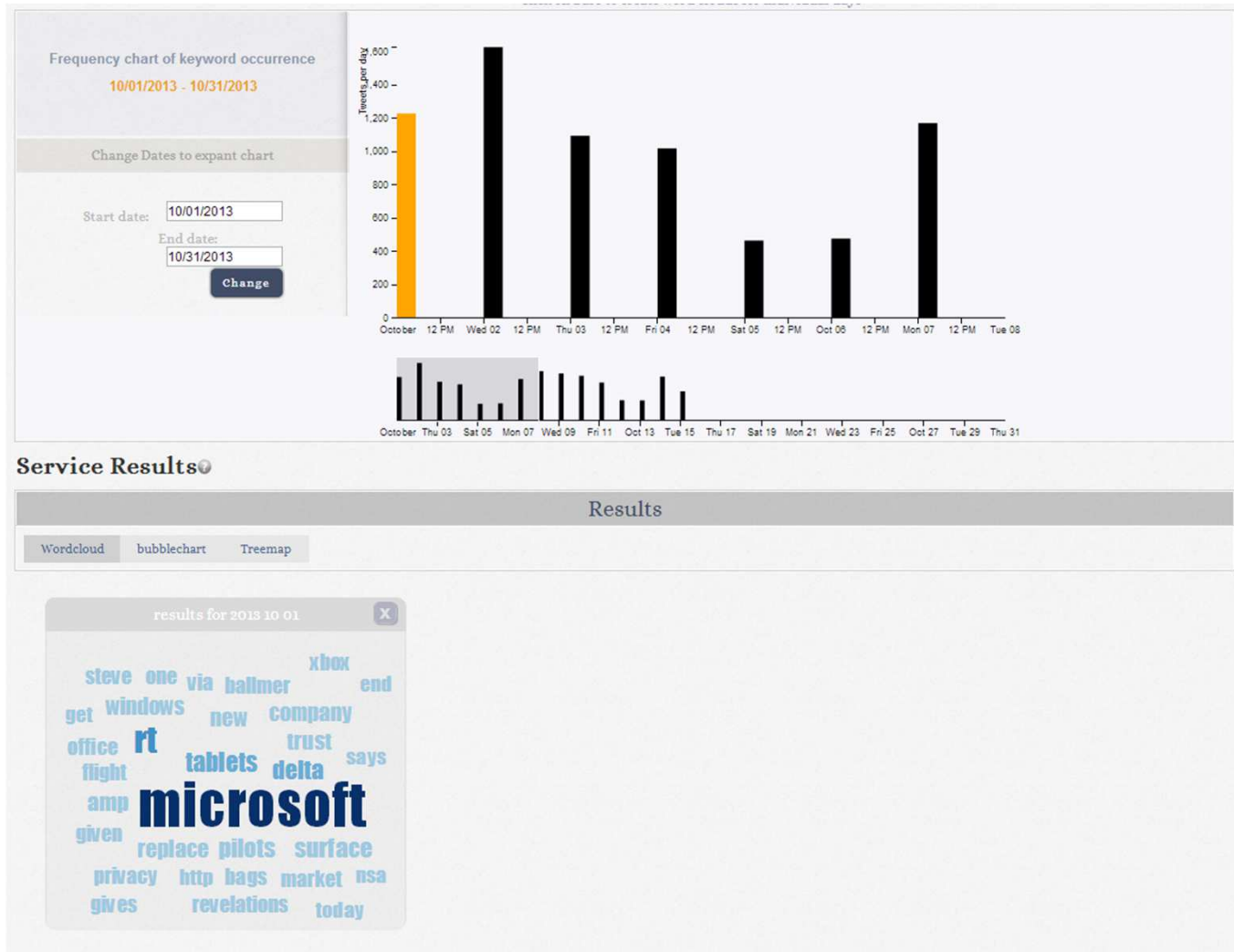
include location

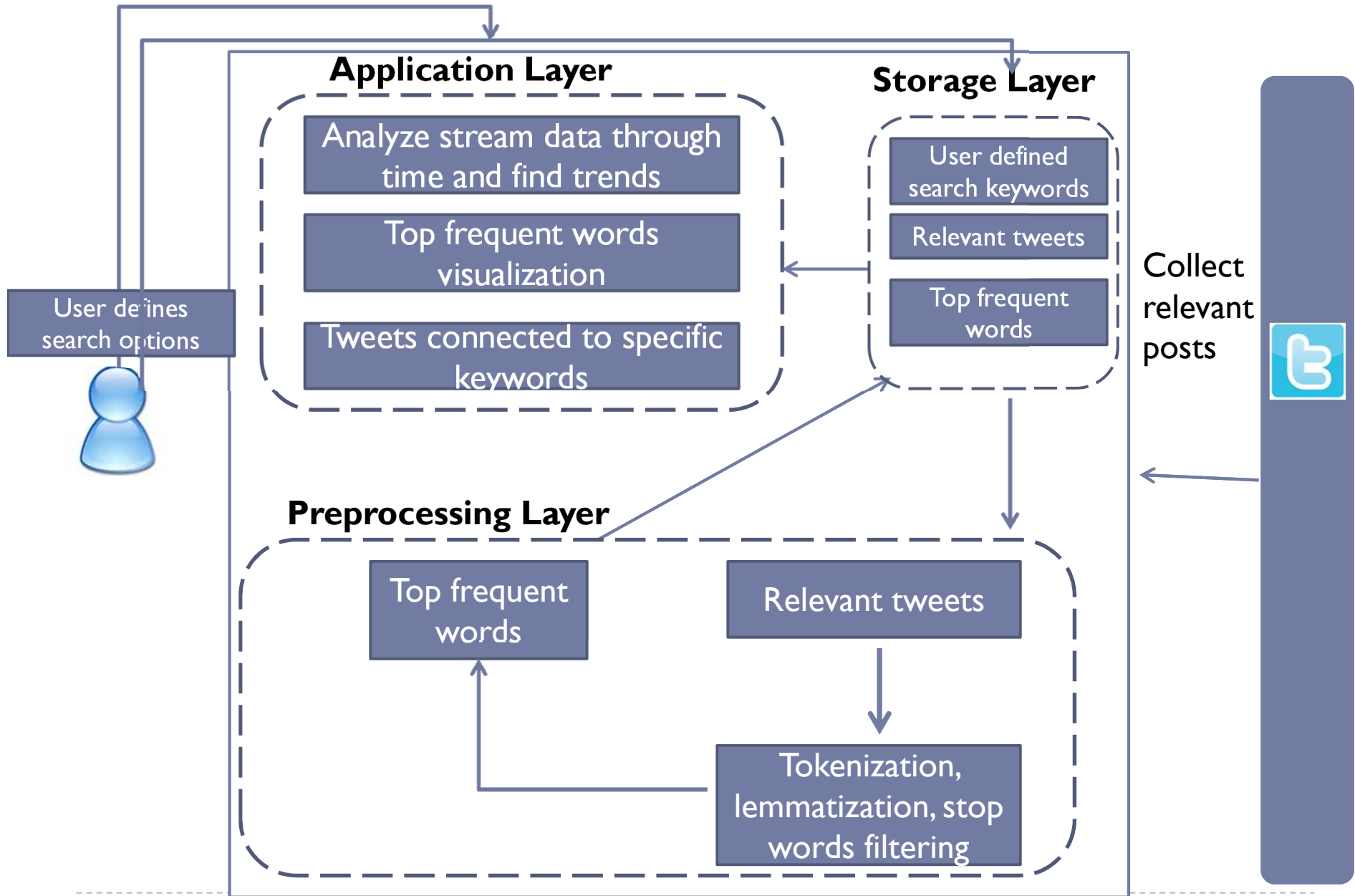


Use case scenario: Find what users mainly talk about in a specific region



Use case scenario: Find what users mainly talk about in a specific region





Implementation

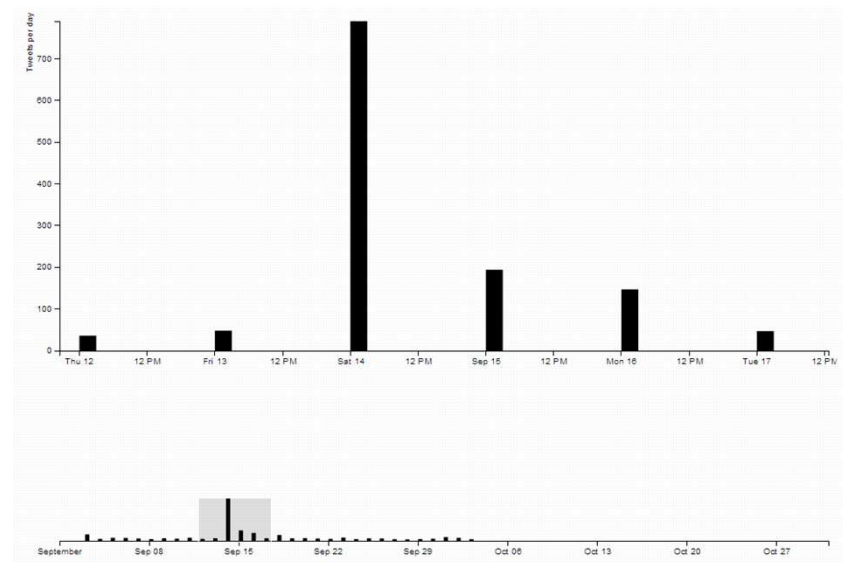
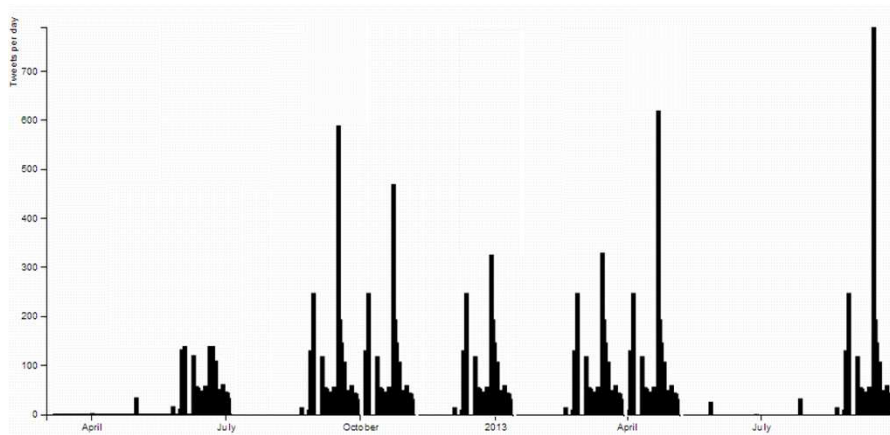
- ▶ **Communication Layer**
 - ▶ Twitter Search API 1.1
 - ▶ Cron job to retrieve results
 - ▶ Specific keywords
- ▶ **Storage Layer**
 - ▶ MySQL
 - ▶ Designed in such way that new components and services
- ▶ **Preprocessing Layer**
 - ▶ PYTHON
 - ▶ Remove links
 - ▶ Remove stop words
 - ▶ Get tweets stored parse them and find the most frequent words
- ▶ **Presentation Layer**
 - ▶ D3.JS
 - ▶ GOOGLE MAPS
 - ▶ HTML5
 - ▶ JQUERY

Development Cycle

- ▶ 5 experts
- ▶ Meetings on a weekly basis
- ▶ Analysis, design, implementation, testing, evaluation



Development Cycle (2)



Evaluation

- ▶ 3 companies from Greece used SONETA for a period of 1 month
- ▶ Geolocation and words visualization was identified as a valuable tool for tracking most discussed subjects in a region
- ▶ Selected Results
 - ▶ (+)“It helped me increase my followers on Twitter by looking for trending conversations in specific regions as well as in Greece in general. Taking part in these conversations gave me the chance to have 115 additional followers in a matter of a week.”
 - ▶ (+)“tag cloud is nice because it is a kind of data filter”
 - ▶ (+)“Getting to explore it made me start a new process of finding trends related to our SME’s activities.”
 - ▶ (+)“I was able to identify trends that were associated with software quality and gave me ideas for searching the web for related content to post.”
 - ▶ (-)Not very intuitive
 - ▶ (-)Needs better usability

Future steps

- ▶ Add use case examples on SONETA
- ▶ Sentiment Analysis
- ▶ More than one social media networks
- ▶ Add Streaming data

Demo

- ▶ <http://soneta.hci.ece.upatras.gr>

Thank you