# **Keyword Emotion Analysis**

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### Overview

- Given documents represented by strings of text
- The framework analyzes each document's keywords and emotions using IBM Watson Natural Language API
- Gets most common keywords across all documents and maps those keywords to the percentages of each emotion

## Plug-Ins

#### Visual

- Word cloud
- Graphs!
- Emoji chart

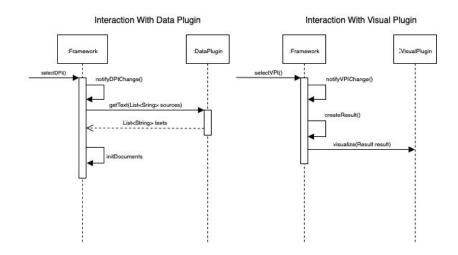
#### Data

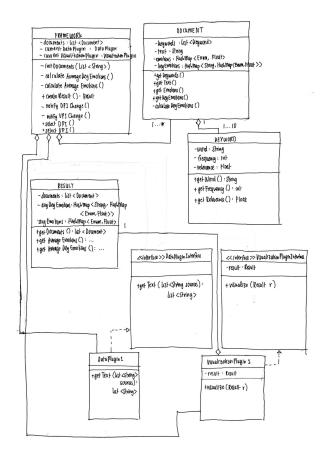
- Read from file
- API calls (Twitter, Facebook)
- Web scraping webpages





## **UML** Diagrams





### Project Structure

- framework
  - o core
    - Framework.java
    - FrameworkImpl.java
    - Document.java
    - Emotion.java
    - ResultChangeListener.java
    - DataPlugin.java
    - DisplayPlugin.java
  - o gui
    - FrameworkGui.java
- displayPlugin
  - DisplayPlugin1.java
- dataPlugin

### Flexibility Trade-Offs

- Assume that documents contain similar keywords
- Data plugins designed to draw from variety of sources
- Exposed document class for more flexible display plugins
- Limit emotion analysis to top ten keywords