Customer Service Analyzer

Seminar Automatic Question Answering Using IBM Watson [SemWatson]

Application to analyze customer support conversation

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Outline

- General idea
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- Advantages
- Technology Stack
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- Demo
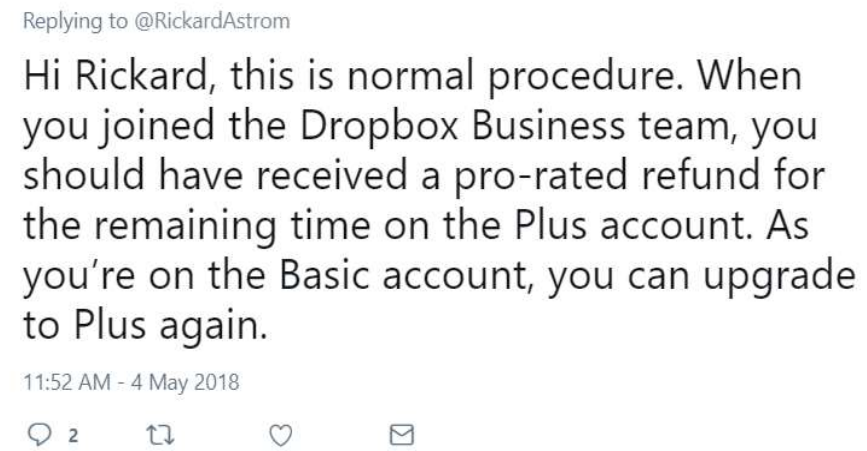- Future Improvements

General idea of project

- Given the increasing popularity of customer service dialogue on Twitter, analysis of conversation data is essential to understand trends in customer and agent behavior for the purpose of improving customer service interactions.
    - Measure customer satisfaction
    - Evaluate agent performance
    - See how conversations start verses how they finish

- Using "Customer Service Analyzer" we can analyze conversations between customers and customer service agents.

Dropbox Support on Twitter:

Example :
Frustrated Customer

Dropbox Support on Twitter:

Example:
Satisfied Customer

Input
- Customer support conversations on twitter
- Source Twitter API

Service
- Tone analyzer for customer engagement
- Watson API

Output
- Tones detected for every utterance
- Frustrated, Sad, Satisfied, Excited, Polite, Impolite and sympathetic.

Display charts with tones of customer vs agent.
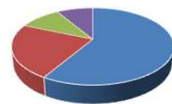
- 1. Satisfied
- 2. Polite
- 3. Frustrated
- 4. Sad
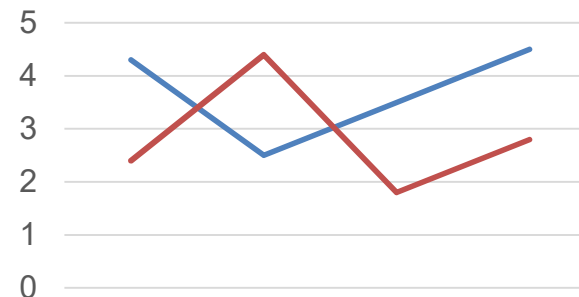
Who will get benefited from this App?

Customer Service Manager

- To monitor customer support conversations.

- To assess customer satisfaction.

- Track progression of tones throughout the conversation. ("frustration" to "satisfied").

- To improve how their teams interact with customers.

- To decide if agents need more training in content or in communication style.

- To find patterns in the tones of successful agents. To learn from it to replicate it more broadly.

Technology Stack
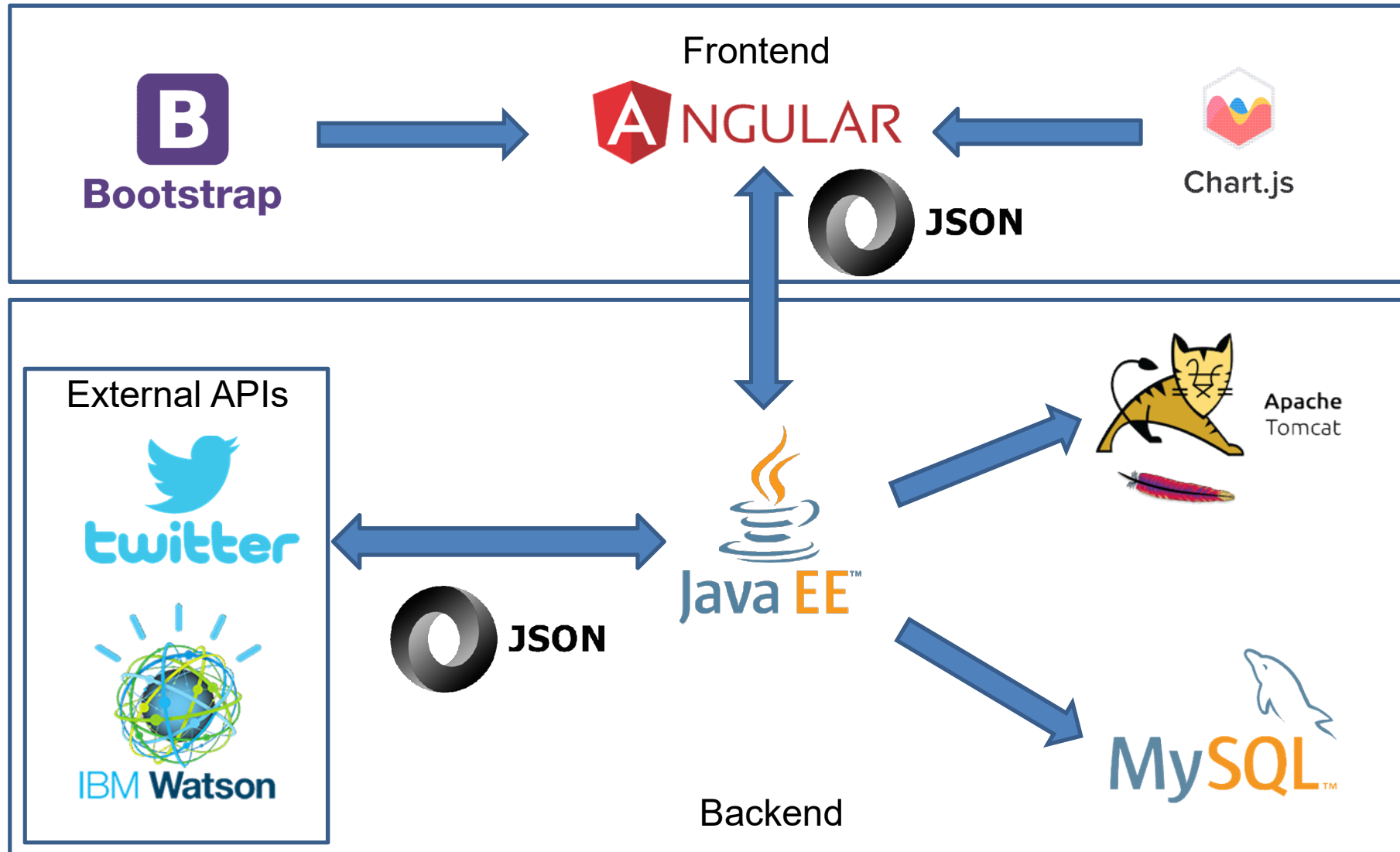
Implemented Features

- Search customer-care brand using twitter API and save it in database.

- View all the tweets that were saved.

- Assign tones to each tweet using Watson Tone Analyser.

- Generate chart which shows tones of agent vs customer for every conversation.

- Generate chart which shows tones based on customer's/agent's statement at first/end of conversation.

- Overall summary to show comparison between different customer care brands.

Demo Time

Future Improvements

- Creating a chatbot – acts as a personal assistant for person who uses this application.

- Enable real time tweets update and allow user to post tweets.

- Analyze calls(Audio saved in database) of customer support – (speech to text conversion using IBM Watson).

Thank You !