Sentiments of Tweets using Hashtags - Apache Storm

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Overview Of Apache Storm

- Real time fault tolerant data processing system
- Consists of streams of tuples flowing through topologies
- Topologies are directed graphs
- Vertices further split into sprouts and bolts
Architecture Overview of Apache Storm
Overview Of Project

- Take a stream of tweets from the UK
- Separate them by key cities
- Analyse the tweets for their sentiment
- Associate that sentiment with the hashtags in the tweet
- Determine context hashtags are used in
Architecture

Filtered Twitter Sprout → Hashtag Filter Bolt → Location Calculator Bolt → Sentiment Calculator Bolt → Database
Example - #Conservative vs #Labour

- Different sentiments in different areas of the country for the same hashtag
- Could be used to identify where key supporters of parties are before an election
Example - #job #jobs #economy

- Compare how people feel about jobs and the economy based on the sentiment in their tweets
- Estimate average GDP is those regions
Future Work

- Finish background research
- Install and set-up Apache Storm
- Start work on implementation
- Evaluate results - make changes
- Compare to other systems - Naiad
- Complete write-up