

Twitter Sentiment Analysis

FIT5147 - Data Exploration and Visualisation

Roopak TJ

Student ID : 29567467

- * Online application for social networking and micro blogging
- * Platform for different kind of Analytics
- * Sentiment Analysis ?

Lokh Sabha Elections 2019

Indian General Body Elections



Why this topic ?

- * Polar opinion
- * Trending Topic

Technologies Used

Data Extraction : Tweepy package python

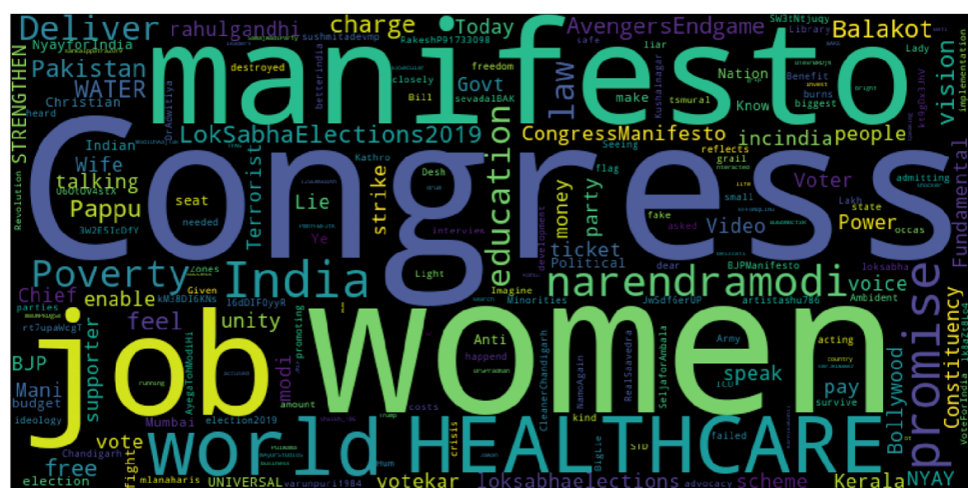
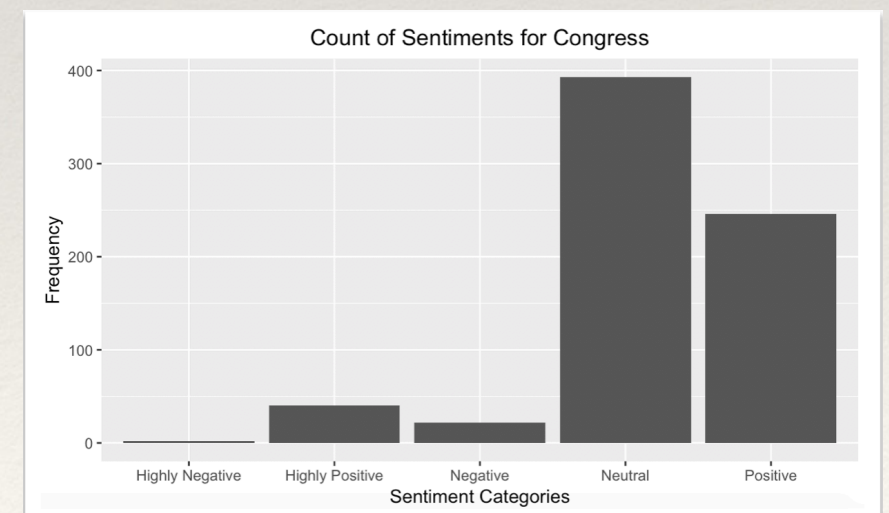
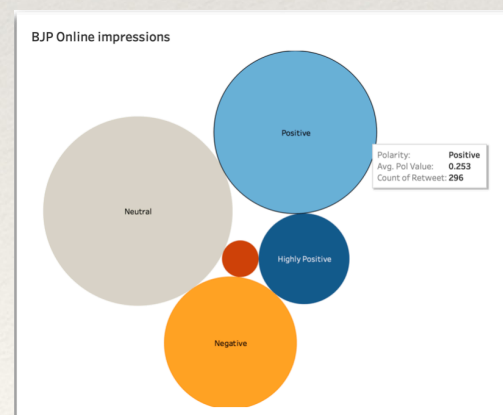
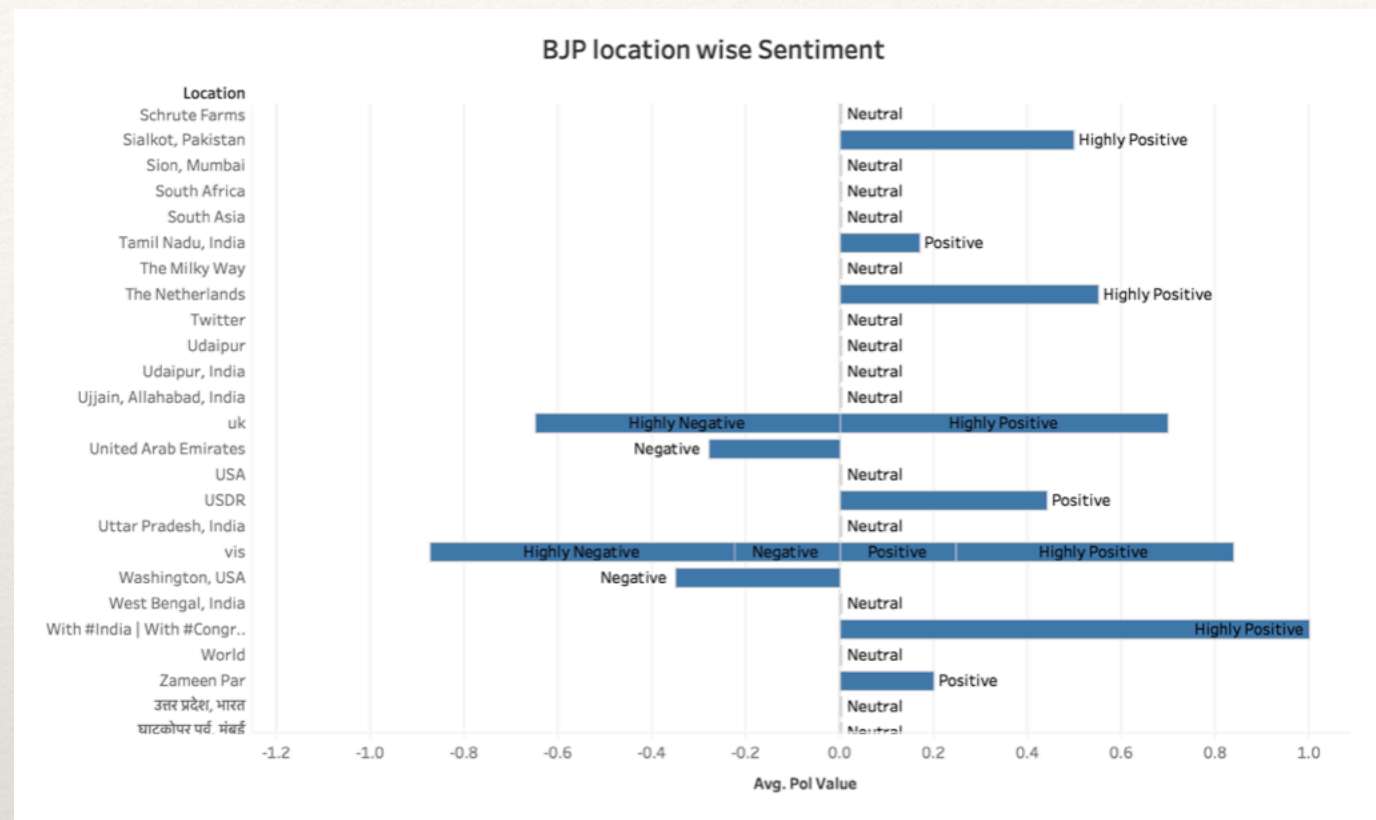
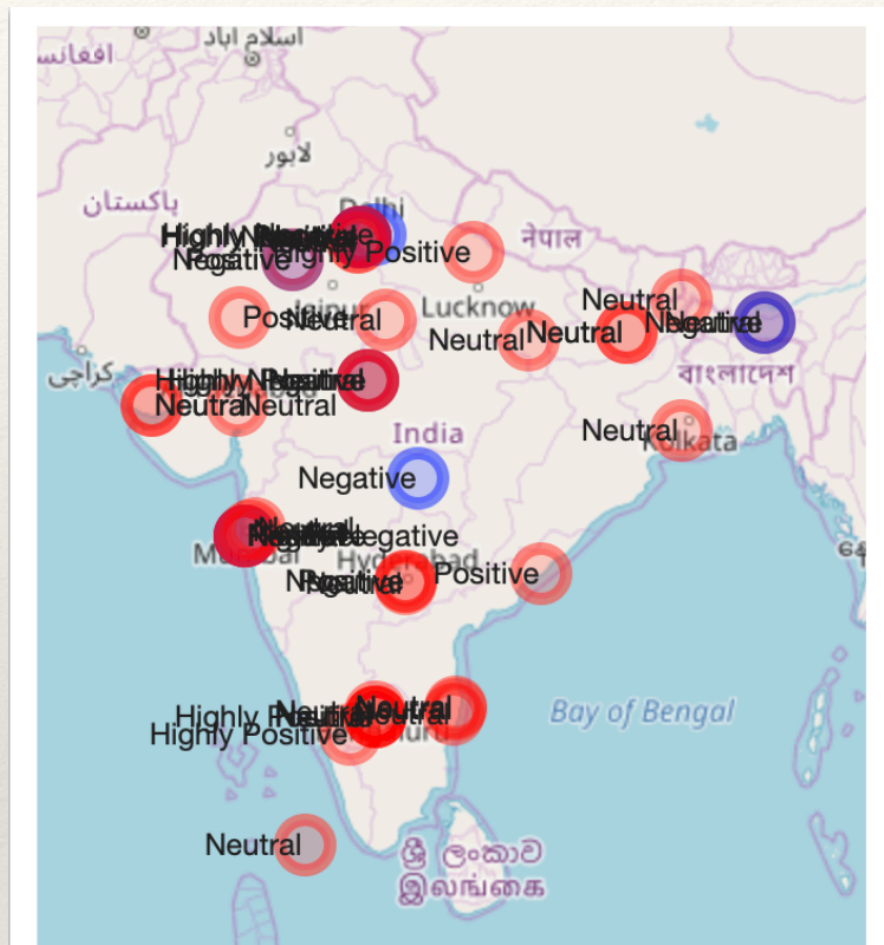
Data Format : JSON format

Data Storage and Manipulation: R and Python Pandas

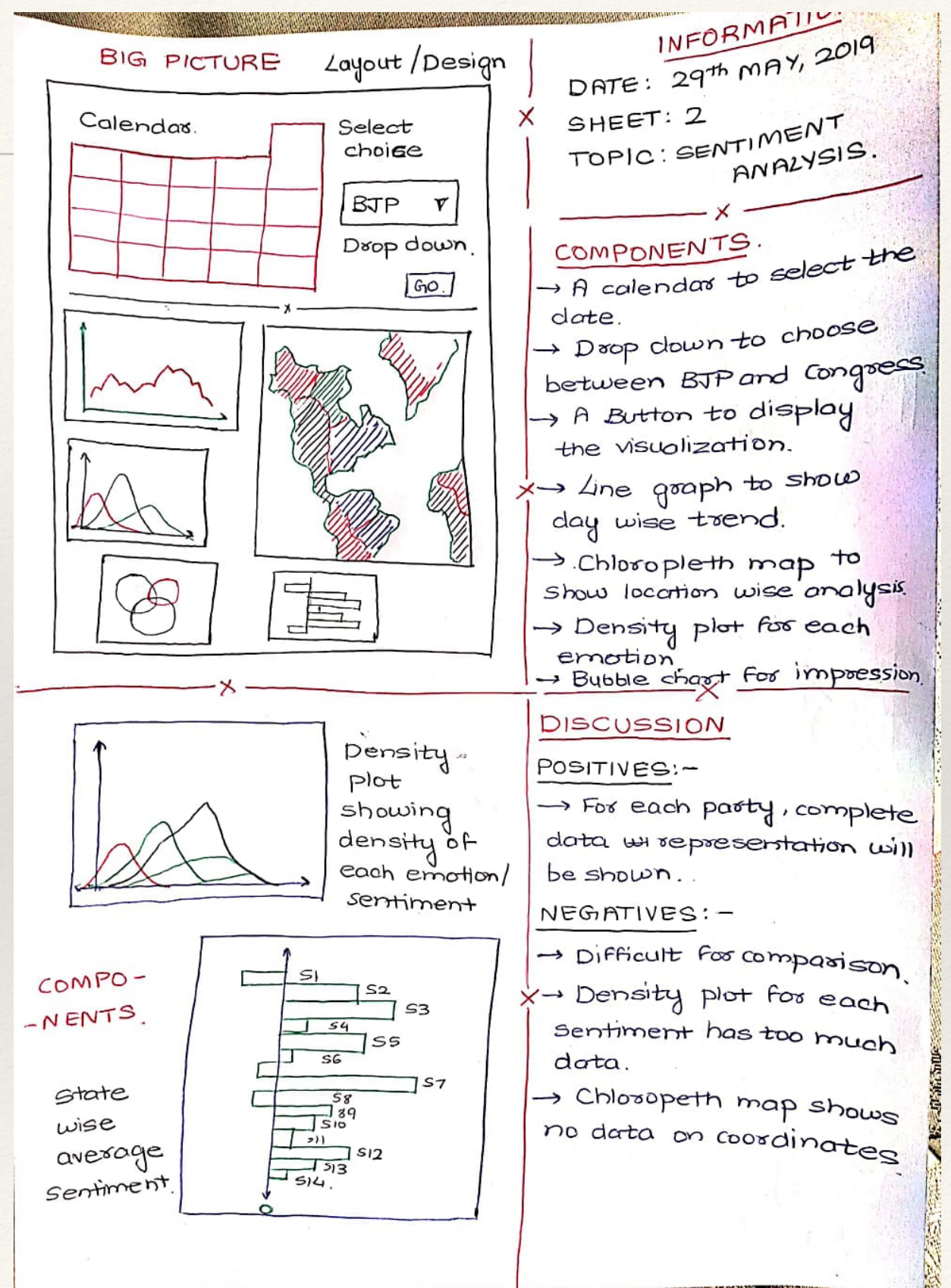
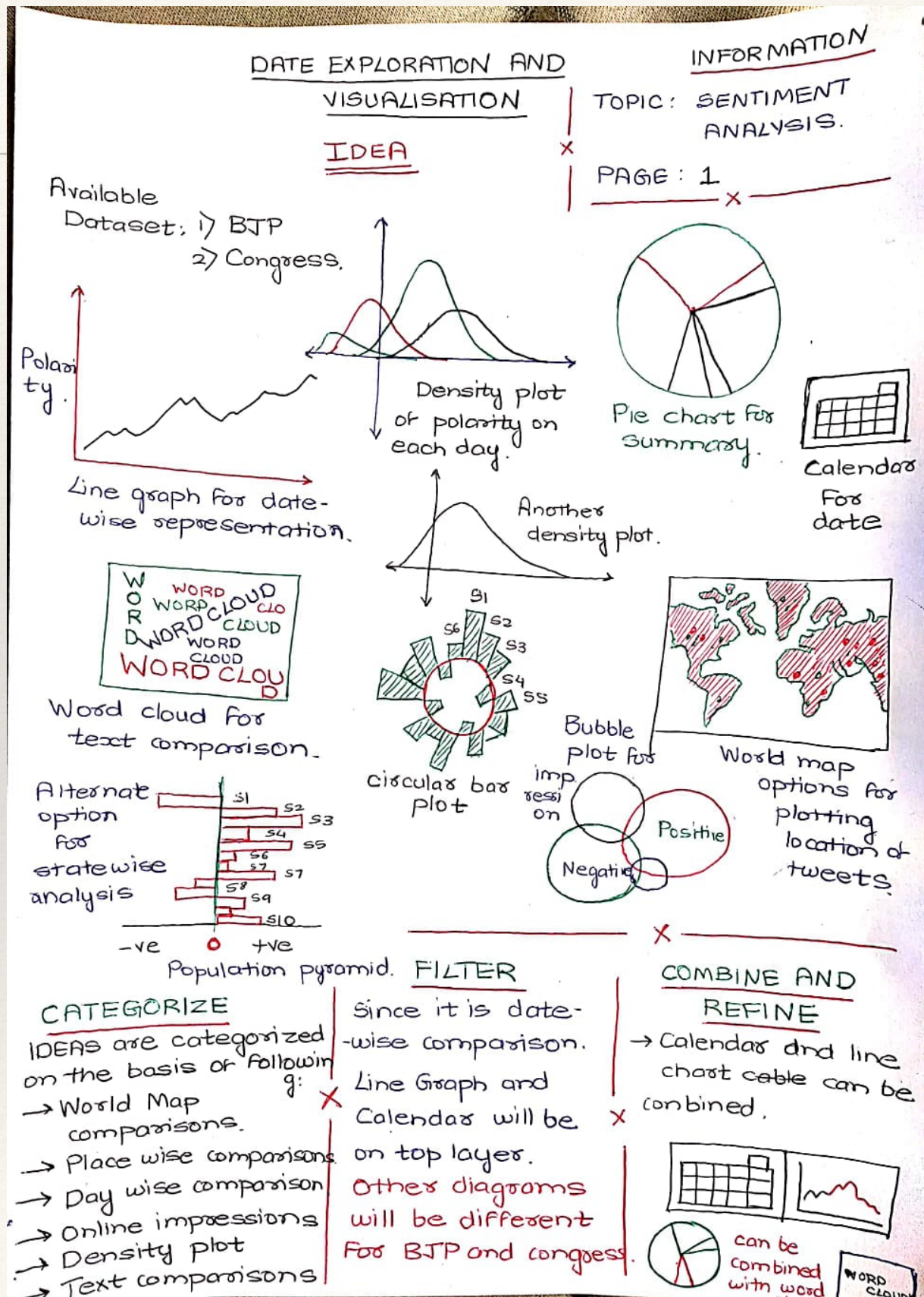
Sentiment Analysis: TextBlob python package and NLP

Visualisation: R, Python and D3

Some Visualisation Samples

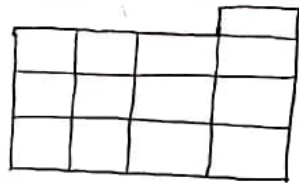


5 Design Sheets



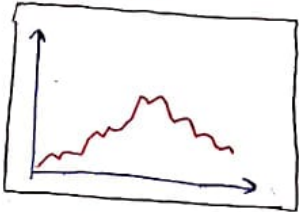
BIG PICTURE

LAYOUT

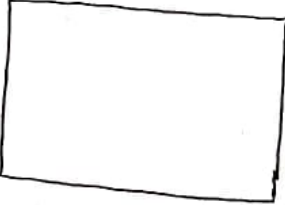
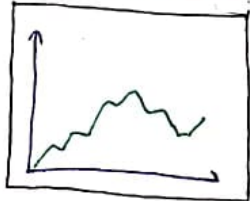


GO

BTP



CONGRESS



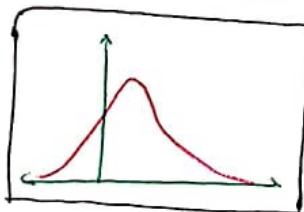
DETAIL



DETAIL

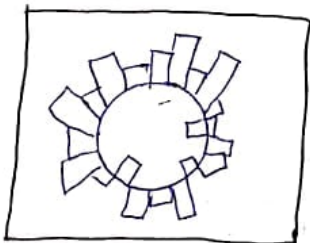
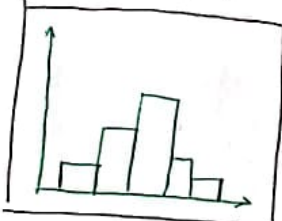
NEXT PAGE

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Density plot.

Polarity bar chart.



State

WORD CLOUD

W WORD CLOUD
O WORD W
R CLOUD
D CLOUD

INFORMATION

DATE: 29th MAY, 2019

SHEET: 43

TOPIC: SENTIMENT ANALYSIS.

COMPONENTS

- 1> Multi-paged application.
- 2> Basic comparison on single page. Detailed visualisation on the other page.
- 3> Single density plot, instead of plot for each polarity used.

DISCUSSION

POSITIVE:-

- 1> Basic comparison added.
- 2> Replacing pie chart with bar-chart gives more clarity.

NEGATIVE:

- 1> Complete visualisation of comparison is not available.

2>

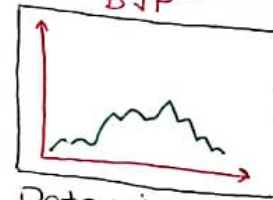
BIG PICTURE

Layout/Design

Select Date

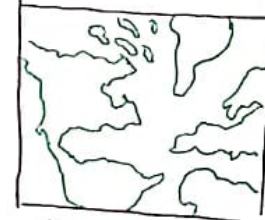
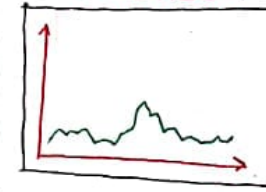


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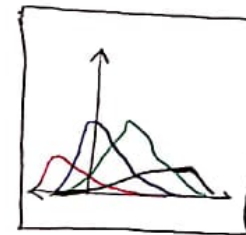
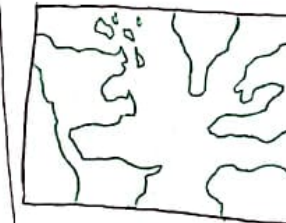


Date wise average

CONGRESS

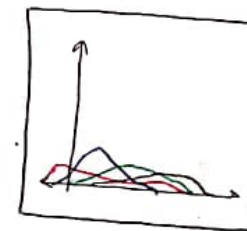


WORLD MAP



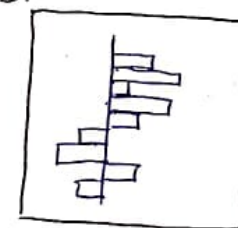
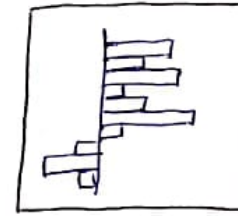
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STATE WISE ANALYSIS



INFORMATION

DATE: 29th MAY, 2019

SHEET: 44

TOPIC: SENTIMENT ANALYSIS.

COMPONENTS

- 1> Single page direct comparison representation.
- 2> World map with label used instead of choropleth to locate tweet coordinates.
- 3> Pie chart used to show polarity.

DISCUSSION

POSITIVE:

- 1> Complete comparison.
- 2> World map with label shows more clear data.

NEGATIVE:

- 1> In pie-chart actual values are not clear for similar amount.
- 2> Too much information on a single page.

FINAL DESIGN

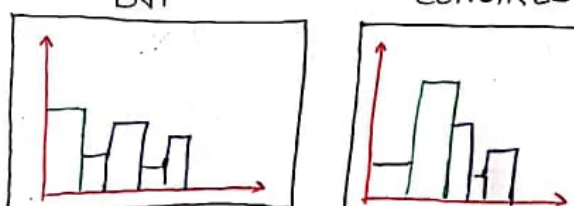
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Select the date

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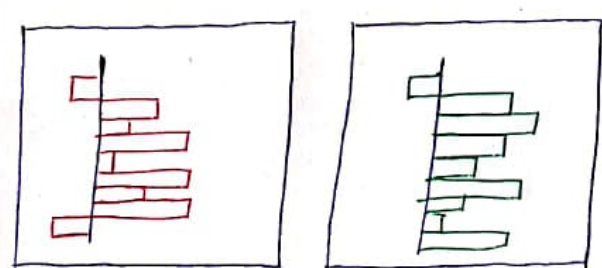
BTP CONGRESS



CHOOSE THE COMPARISON

2

COM STATEWISE COMPARISON



INFORMATION

TOPIC: SENTIMENT ANALYSIS

PAGE : 5
REALIZATION

COMPONENT

- Multipage interface
- First page having a calendar and basic comparison.
- Other comparison included in drop down menu for users to select.

DETAIL

Following chart will be used for each comparison:

1) Text comparison

WORD CLOUD.

2) Location comparison.

WORLD MAP WITH LABEL.

3) PLACE-WISE COMPARISON.

POPULATION PYRAMID.

4) DISTRIBUTION

DENSITY PLOT.

5) ONLINE IMPRESSION
BUBBLE CHART.