Review Based Recommendation System

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Introduction

- Consumer reviews, opinions and shared experiences in the use of a product is a powerful source of information about consumer preferences that can be used in recommender systems.

- Despite the importance and value of such information, there is no comprehensive mechanism that formalizes the opinions selection and retrieval process and the utilization of retrieved opinions due to the difficulty of extracting information from text data.

- In this project we make new recommender system that is built on consumer product reviews is proposed. A prioritizing mechanism is developed for the system. The proposed approach is illustrated using the case study of a recommender system for mobile phones.
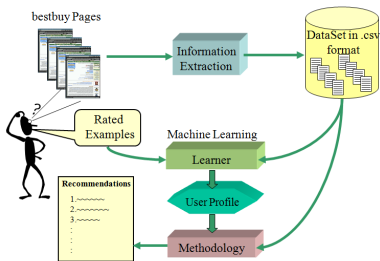
Architecture of Proposed System

Figure : Architecture of Recommendation System

Data Source

- From http://www.bestbuy.com/

Figure : iPhone 6 Review

Data Source

- From http://www.bestbuy.com/

Figure : Samsung Galaxy Note 4 Review

Technology Stack for the Project

- Software Configuration:
  - Data Mining Tool (Weka)
  - R
  - Ecllipse (Hadoop)
  - Notepad++

- Hardware Configuration
  - Intel(R) Core(TM) i5-2430M CPU @ 2.40Ghz
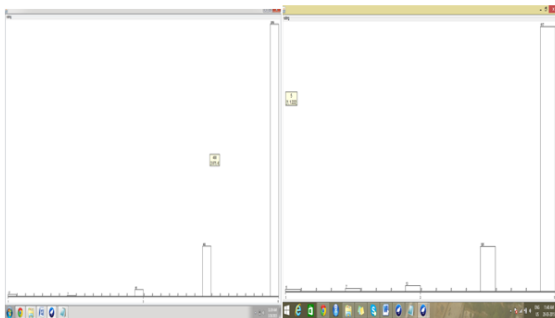 - RAM 8.00 GB
  - OS 64 bit
- Methodology
  - Clustering
  - Text Mining
  - Map Reduce Programming

Result of Clustering In Weka Tool
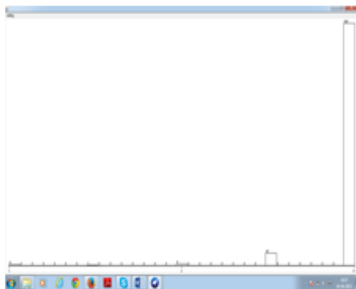
- Comparison between iPhone 6 and Samsung Galaxy Note 4
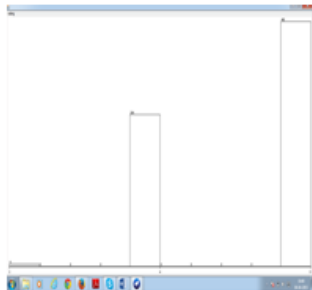

Rating of Iphone 6   Rating of Samsung Galaxy Note 4
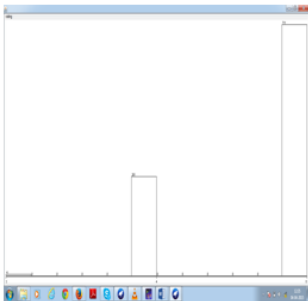
- Colour wise comparison of iPhone 6
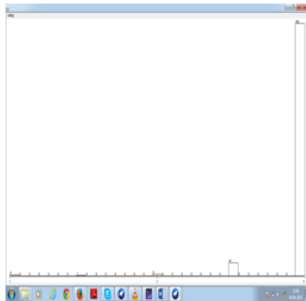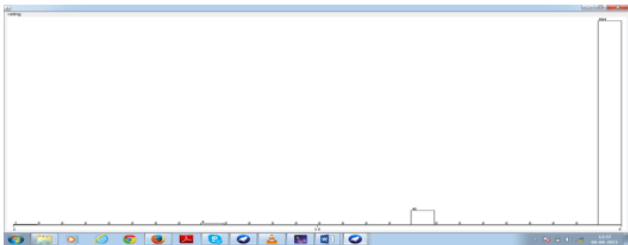

Rating of Gold

Rating of Silver

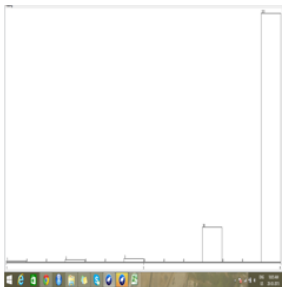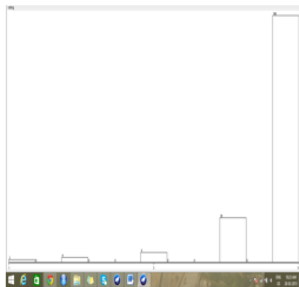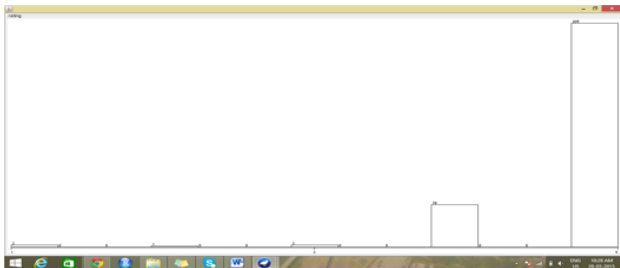- Service Provide Wise Comparison of iPhone 6

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Sprint

- Service Provide Wise Comparison of Samsung Galaxy Note 4
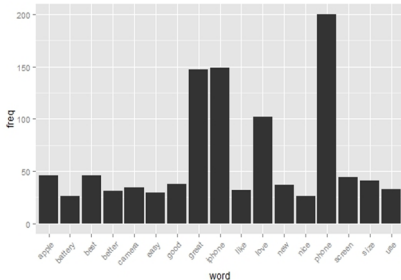

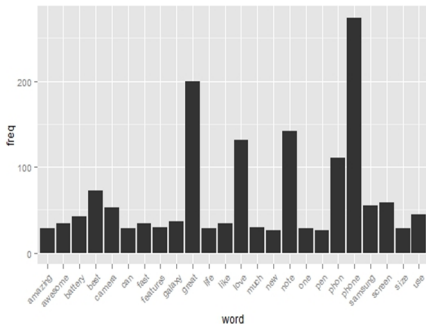**Version Wireless**

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Result of Text Mining in R

- Features Extraction From iPhone 6 Review

Result of Text Mining in R

- Features Extraction From Samsung Galaxy Note 4 Review

Result of Map-Reduce Programming

- Clustering iPhone 6 and Samsung Galaxy Note 4 Review into Negative and Positive Review

File: /home/shree/hadoop/workspace/TextOutput-Iphone/part-r-00000   Page 1 of 1
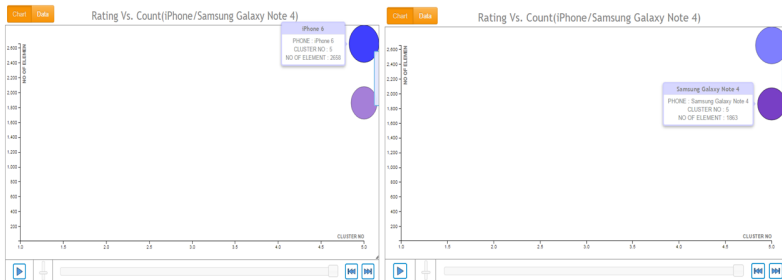
```
Cluster Negative        5
Cluster Positive        172
```

File: /home/shree/hadoop/workspace/TextOutput-Samsung/part-r-00000   Page 1 of 1

```
Cluster Negative        5
Cluster Positive        165
```

Visulization of iPhone 6 and Samsung Galaxy Note 4

- Visulization of iPhone 6 and Samsung Galaxy Note 4 Rating

Visulization of iPhone 6 and Samsung Galaxy Note 4

- Visulization of iPhone 6 and Samsung Galaxy Note 4 Feature Extraction