CUSTOMER REVIEW ANALYTICS:

- 1) Identify and dump product and vendor pages from several websites like flipkart,amazon etc.
 - a) Understand tools like scrapy, selenium etc.
 - i) Scrapy: contains mechanisms for crawling and scraping
 - ii) Selenium : contains mechanisms to render javascript and ajax enabled web pages

http://stackoverflow.com/questions/17975471/selenium-with-scrapy-for-dynamic-page

b) Get the sitemap for the site to be scraped or create one manually . Sitemaps give the overall structure of the website .

Ex: http://www.flipkart.com/sitemap o other 2015-08-17 1.xml.gz Contains the many links that act like holders for a huge list of products . (or)

The topmost menu in flipkart contains many categories like electronics,men,women etc . Now extract the links given in these menu items and you will find similar holders to many product links as described above while using sitemap .

- c) Dump the product and vendor information pages locally.
- 2) Extract required product information from product pages in the dump .
 - a) Name
 - b) Rating
 - c) Vendor information
 - d) Customer reviews
- 3) For every product generate (key,value) pairs that indicate the aspect and the sentiment of the user for that particular aspect of the product .
- 4) Generate a product Hierarchy and extend the aspect sentiments to higher levels of hierarchy. For example, if we have aspect sentiments for "Samsung Galaxy On5" then one can first generate the terms 1) "Samsung" 2) "Samsung Galaxy" etc from this product name and then extend the aspect sentiments to these higher levels of product categorisation. So, if battery life has negative sentiment for "Samsung Galaxy On5" then it will be reflected to an overall negative sentiment for "Samsung Galaxy" and "Samsung" as well. In this way, we can give a better picture of performance of the mobile for both the manufacturer as well as the user.

The part on how we actually perform aspect based sentiment analysis will be provided in the solution document.