**LIBRARIES USED:**

**RTextTools**

RTextTools is a machine learning package for automatic text classification that makes it simple for novice users to get started with machine learning, while allowing experienced users to easily experiment with different settings and algorithm combinations. The package includes nine algorithms for ensemble classification (svm, slda, boosting, bagging, random forests, glmnet, decision trees, neural networks, maximum entropy), comprehensive analytics, and thorough documentation.

**e1071**

Functions for latent class analysis, short time Fourier transform, fuzzy clustering, support vector machines, shortest path computation, bagged clustering, naive Bayes classifier, ...

**dplyr**

dplyr is an R package for working with structured data both in and outside of R. dplyr makes data manipulation for R users easy, consistent, and performant. With dplyr as an interface to manipulating Spark DataFrames, you can: Select, filter, and aggregate data.

**tidytext**

Using tidy data principles can make many text mining tasks easier, more effective, and consistent with tools already in wide use. In this package, we provide functions and supporting data sets to allow conversion of text to and from tidy formats, and to switch seamlessly between tidy tools and existing text mining packages. Check out our book to learn more about text mining using tidy data principles.

**NbClust**

NbClust package provides 30 indices for determining the number of clusters and proposes to user the best clustering scheme from the different results obtained by varying all combinations of number of clusters, distance measures, and clustering methods.

**tm**

A framework for text mining applications within R.

**SnowballC**

An R interface to the C libstemmer library that implements Porter's word stemming algorithm for collapsing words to a common root to aid comparison of vocabulary. Currently supported languages are Danish, Dutch, English, Finnish, French, German, Hungarian, Italian, Norwegian, Portuguese, Romanian, Russian, Spanish, Swedish and Turkish.

**wordcloud**

Use for generating pretty word clouds.

**RColorBrewer**

Provides color schemes for maps (and other graphics) designed by Cynthia Brewer.