**ReadMe**

1. The Naïve Bayes and Logistic Regression Classifier was coded in JAVA.
2. The Main file kxs161730\_ML2 contains 3 files namely – SourceCode, Report.docx and ReadMe.docx file
3. The **SourceCode** folder contains all the Java files. The Source code has following files –
   * + TextClassifier.java
     + ClassifiableInterface.java
     + Classifier.java
     + ClassifierException.java
     + CommonClassifier.java
     + Contants.java
     + LogisticRegression.java
     + Naivebayes.java
     + TextInstance.java
     + TextName.java
     + TextUtility.java
     + Utilities.java
     + DataSet(containing the test & training data and the list of Stopwords used)
4. The main Java file which has the main function is **TextClassifier.java** which is in the **SourceCode** folder
5. Steps to compile -   
   cd kxs161730\_ML2  
   cd SourceCode  
   **javac TextClassifier.java**
6. Steps to execute **Naïve Bayes** is -   
   **java TextClassifier DataSet NB**

* There are two parameters here :   
  - First is the **DataSet** which is name of the folder which has all the train and test data sets  
  - Second is **NB** (which is the shortform for Naïve Bayes here)  
  -Both the parameters have to be provided otherwise it will throw an error.

1. Steps to execute **Logistic Regression** is -   
   **java TextClassifier DataSet LR 0.01 0.8 100**
   * + - There are 5 parameters that must be provided here –   
         - First is the **DataSet** which is name of the folder which has all the train and test data sets  
         - Second is **LR** (which is the shortform for Logistic Regression here)  
         - Third is the **Learning Rate** which is 0.01 here.  
         - Fourth is the **Lambda** which is 0.8 here  
         - Fifth is the **Number of Iterations** which is 100 in the above example