**IMPLEMENTATION:**

**MODULES:**

* User
* Admin
* Data Preprocessing
* Machine Learning Results

**MODULES DESCRIPTION:**

**User:**

The User can register the first. While registering he required a valid user email and mobile for further communications. Once the user register then admin can activate the user. Once admin activated the user then user can login into our system. User can upload the dataset based on our dataset column matched. For algorithm execution data must be in float format. Here we took Food Recipe Rating dataset. User can also add the new data for existing dataset based on our Django application. User can click the Classification in the web page so that the data calculated Accuracy, Precision, Recall and F1-Score based on the algorithms.

**Admin:**

Admin can login with his login details. Admin can activate the registered users. Once he activate then only the user can login into our system. Admin can view the overall data in the browser. Admin can click the Results in the web page so calculated Accuracy, Precision, Recall and F1-Score based on the algorithms is displayed. All algorithms execution complete then admin can see the overall accuracy in web page.

**Data Pre-processing:**

A python code was applied to remove the unnecessary attributes. After that the exact number of reviews and servings were found by scraping. Total Number of sentences in the instruction column was counted to find the number of instructions per recipe and that number was placed in the instruction’s column. After that, we got 5 attributes that are the number of reviews, % Make Again, number of ingredients, number of servings, and number of instructions. The% make again denotes the number of people who would make the dish again after having followed the recipe. After testing the result with each at-tribute and finding their correlation we discarded2 of the attributes and had a final dataset with 3 attributes (Servings, Ingredients, Instructions).

**Machine learning Results**:

Based on the split criterion, the cleansed data is split into 60% training and 40% test, then the dataset is subjected to six machine learning classifiers such as Decision Tree(DT), Naive Bayes(NB), linear regression, k nearest neighbour(KNN), random forest(RF), support vector machine(SVM). The accuracy of the classifiers was calculated and displayed in my results. The classifier which bags up the highest accuracy could be determined as the best classifier.