**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 rainfall 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 MAE, MSE, LOSS, R2 score, accuracy 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 MAE, MSE, LOSS, R2 score, accuracy based on the algorithms is displayed. All algorithms execution complete then admin can see the overall accuracy in web page.

**Multiple linear regression (MLR):**

the Multiple Linear Regression (MLR) model to predict four weather parameters which are (maximum and minimum temperature, relative humidity, and the category of rainfall).They have applied two methods to predict rainfall forecasting rainfall, which are Autocorrelation Function (ACF) and projected error. Both methods implemented four different regression algorithms (Bayesian Linear Regression, Boosted Decision Tree Regression, Decision Forest Regression and Neural Network Regression, with different time horizons (daily, weekly, ten days and monthly),The results showed that Boosted Decision Tree Regression is the best regression developed for M1, with the highest coefficient of determination, but in M2 the overall model performance gives a good result of each category except for 10- days with Boosted Decision Tree Regression and Decision Forest Regression.

**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 artificial neural network (ANN), multiple linear regression (MLR). The MAE 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.