**IMPLEMENTATION:**

**MODULES:**

* User
* Admin
* Data Preprocessing
* Machine Learning

**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.Unsupervised learning techniques such as PCA and K-Mean are also useful in the attribute selection and outlier detection from the large 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 based on the algorithms. User can display the supervised and unsupervised results

**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 based on the algorithms is displayed. All algorithms execution complete then admin can see the overall accuracy in web page. Admin can display the unsupervised results.

**Data Preprocessing:**

A dataset can be viewed as a collection of data objects, which are often also called as a records, points, vectors, patterns, events, cases, samples, observations, or entities. Data objects are described by a number of features that capture the basic characteristics of an object, such as the mass of a physical object or the time at which an event occurred, etc. Features are often called as variables, characteristics, fields, attributes, or dimensions. The data preprocessing in this forecast uses techniques like removal of noise in the data, the expulsion of missing information, modifying default values if relevant and grouping of attributes for prediction at various levels.

**Machine learning**:

Several ML techniques are used to form digital support in diabetes care. These include support vector machine (SVM), Decision Tree (DT), random forest (RF), classification and regression trees, Logistic Regression (LR) k-nearest neighbor (KNN), neural network, K-Mean, Principle Component Analysis (PCA) based algorithm for better diabetes care. 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