**IMPLEMENTATION:**

**MODULES:**

* User
* Admin
* Machine Learning

**MODULES DESCRIPTION:**

**User:**

The User can register 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 int or float format. Here we took   
Kaggle dataset for testing purpose. User can also add the new data for existing dataset based on our Django application. User can click the Data Preparations in the web page so that the data cleaning process will be starts. The cleaned data and its required graph will be displayed.

**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 Users and he can view overall data in the browser and he load the data. Admin can view the training data list and test data list. Admin can load the data and view forecast results.

**Machine learning**:

Based on the data split criterion, the preprocessed dataset is divided into 80% training and 20% testing. The system applies machine learning classifiers such as Random Forest, SVM, and Logistic Regression to predict employee promotions accurately. Feature extraction and model fine-tuning help improve prediction accuracy. The evaluation process ensures unbiased and data-driven HR decision-making. Through thorough analysis and contextual insights, the system enhances fairness and efficiency in employee promotion recommendations, reducing manual bias and improving organizational growth.