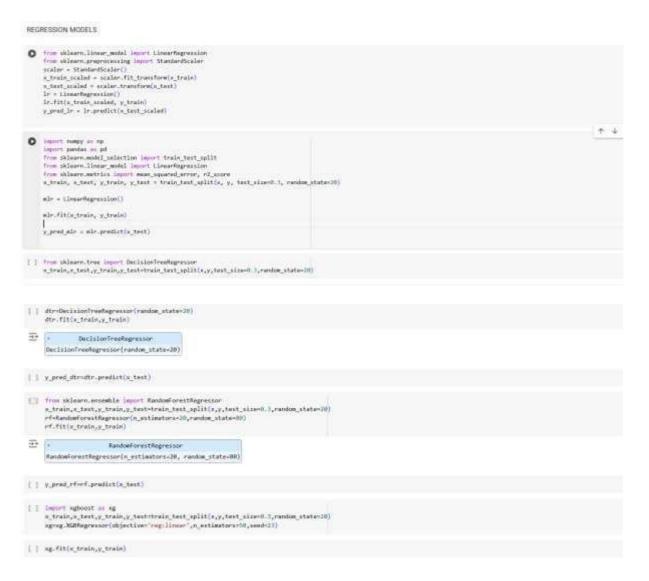
## **Model Development Phase Template**

Date	8 July 2024
Team ID	740109
Project Title	Identification Of Methodology Used In Real
	Estate Property Valuation
Maximum Marks	4 Marks

## **Initial Model Training Code, Model Validation and Evaluation Report**

The initial model training code will be showcased in the future through a screenshot. The model validation and evaluation report will include classification reports, accuracy, and confusion matrices for multiple models, presented through respective screenshots.

## **Initial Model Training Code:**



```
mg.fit(x_train,y_train)
   D .
                                                                                                                                  XXXIIegressor
                    [ ] y_pred_xg-xg.predict(x_test)
 [ ] from sklearn.ensemble locart GradientHoostingRepressor
 \label{eq:continuous_problem} \begin{picture}(t, t) = the continuous of the contin
 [\ ]\ x\_train_xu\_test_xy\_train_xu\_testrivain\_text\_split(x_xy,text\_sizer0.3,randos\_stater20)
| | gbr.fit(s_train,y_train)
  🕀 | GradientBoostingRegressor
                    GradientSocotingSegressor(learning_rate:1, n_estimators:18)
[ ] y_pred_gbright.predict(x_test)
 | | from sklearn.ansamble import AdaBoostRagrassor
 | | adr-AdaGoostRegressor(n_estimators=10,1earning_rate=1,nandom_state=20)
    «_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.1,random_state=20)
   adr.fit(a_train,y_train)
    37
                                                                                                         AdaboutRegressor
                      AdaSocitRegressor(learning_rate=1, n_extinators=10, random_state=20)
 [ ] y_pref_adr-adr-predict(s_test)
   COMPARE ALL MODELS
[] print("The accuracy of Linear Regression:",r2_score(y_pred_lr,y_test))
print("The accuracy of multilinear regression:",r2_score(y_pred_slr,y_test))
print("The accuracy of Decision Tree Regression:",r2_score(y_pred_slr,y_test))
print("The accuracy of Mandew forest Regression",r2_score(y_pred_sly_test))
print("The accuracy of Xidocot Regression",r2_score(y_pred_sly_test))
print("The accuracy of Gradient Scorting Regression",r2_score(y_pred_sdr,y_test))
print("The accuracy of Adabaset Regression",r2_score(y_pred_sdr,y_test))
   The accuracy of Linear Regression: 0.4188456128748489
The accuracy of multilinear regression: 0.4188456128748489
The accuracy of Decision True Regression: 0.6978919103505948
The accuracy of Random Ferest Regression: 0.7882737318459597
The accuracy of Xuboost Regression: 0.7832905871657219
The accuracy of Gradient Boosting Regression 0.5931650408263717
The accuracy of Adabaset Regression 0.6931654073778685
```

## **Model Validation and Evaluation Report:**

Model	Classification Report	Accur acy	Confus ion Matrix
Decisio n Tree Regress ion	The accuracy of Decision Tree Regression: 0.69709	69%	-
Rando m forest regressi on	The accuracy of Random Forest Regression 0.78827373	78%	-
Linear regressi on	The accuracy of Linear Regression: 0.41804661	41%	-
Ada boost regressi on	The accuracy of Adaboost Regression 0.68936347	68%	-
Xgboos t regressi on	The accuracy of XGBoost Regression 0.73370366716572	73%	-
Multi linear regressi on	The accuracy of multilinear regression: 0.418046	41%	