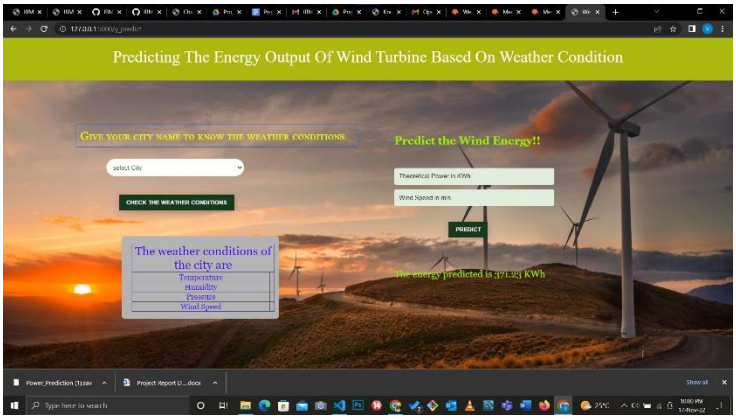
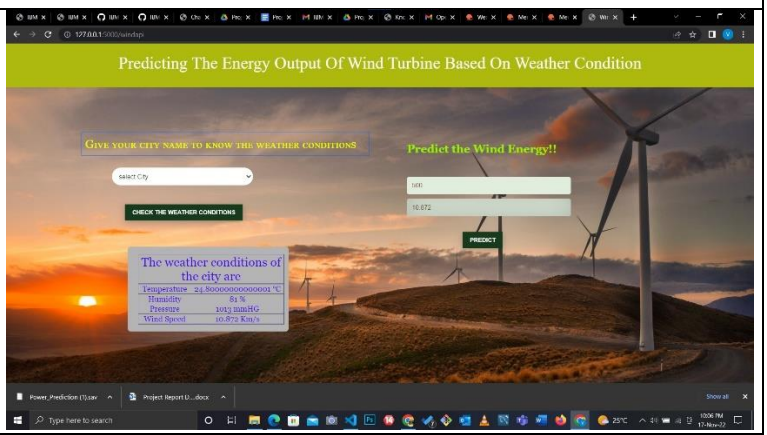
Project Development Phase
Model Performance Test

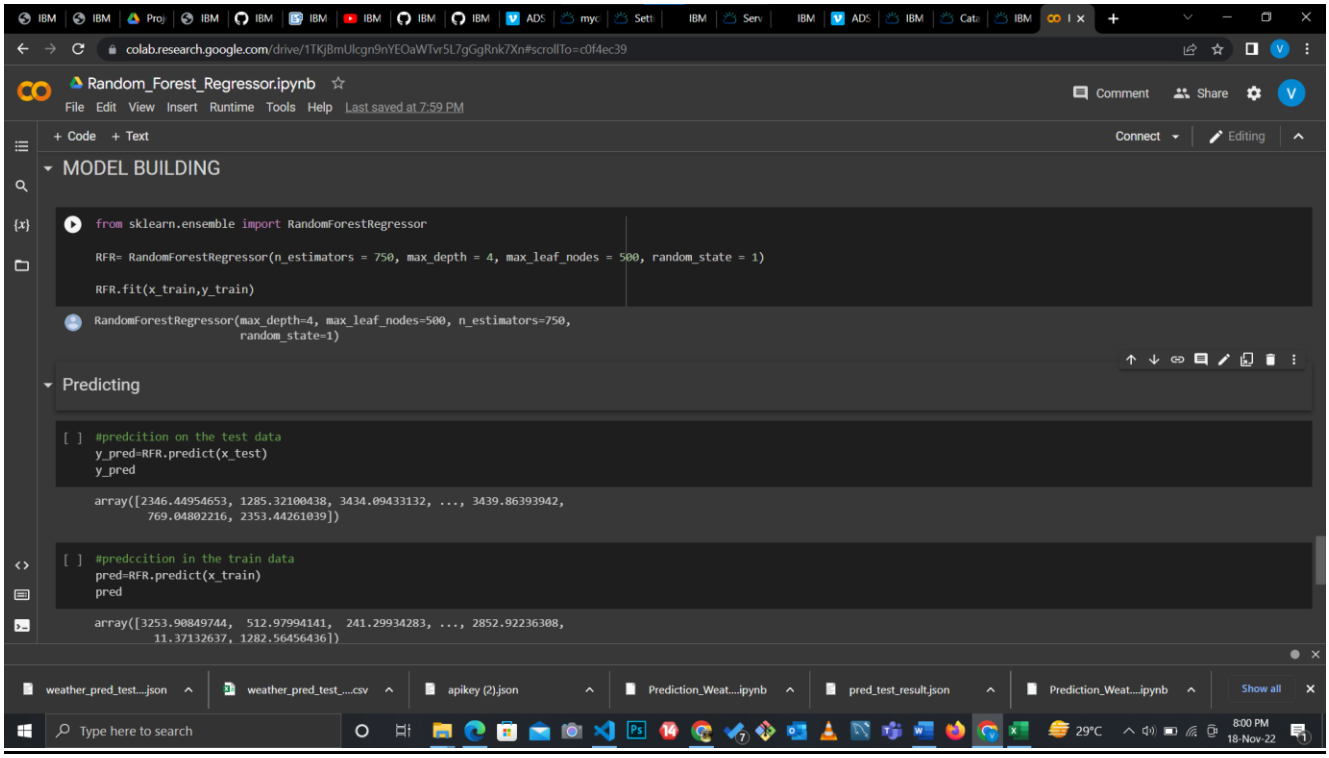
Date	17 November 2022
Team ID	PNT2022TMID21439
Project Name	Predicting the energy output of wind turbine based on weather condition
Maximum Marks	10 Marks

Model Performance Testing:

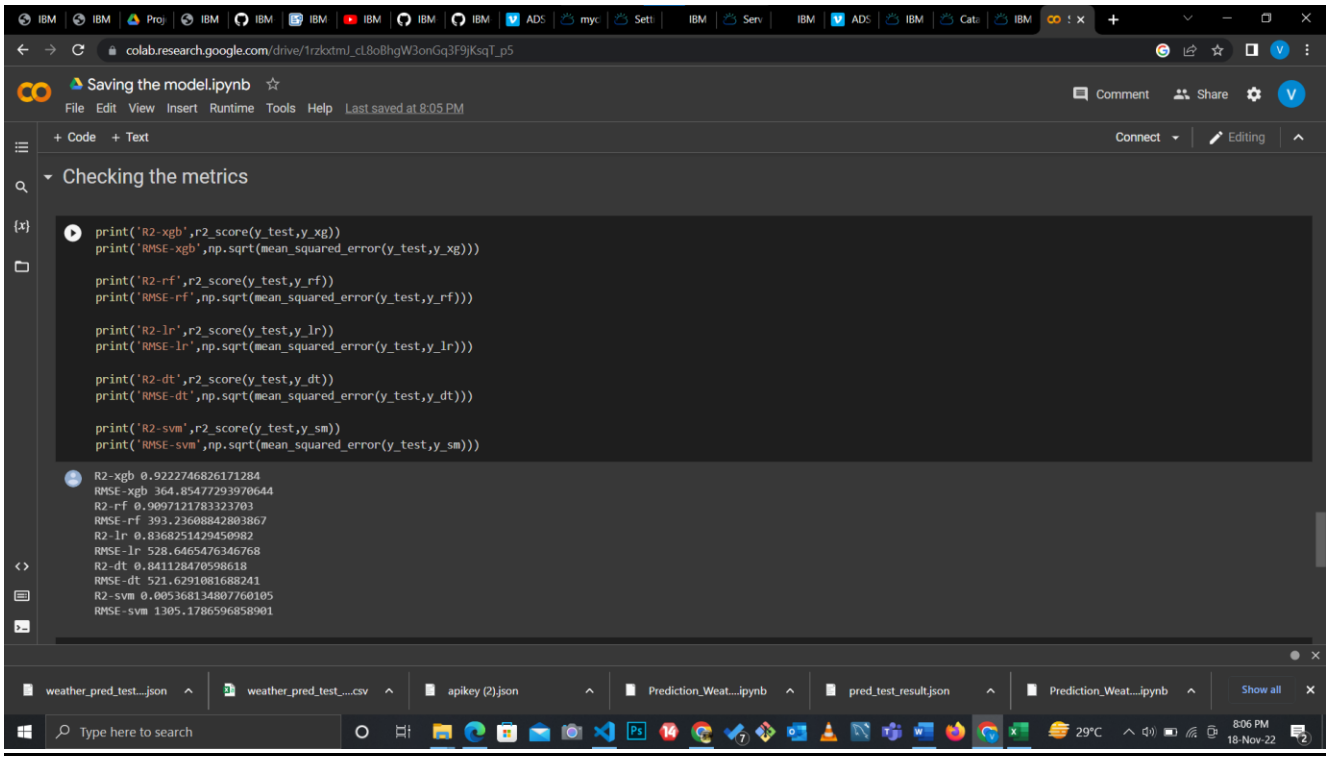
Project team shall fill the following information in model performance testing template.

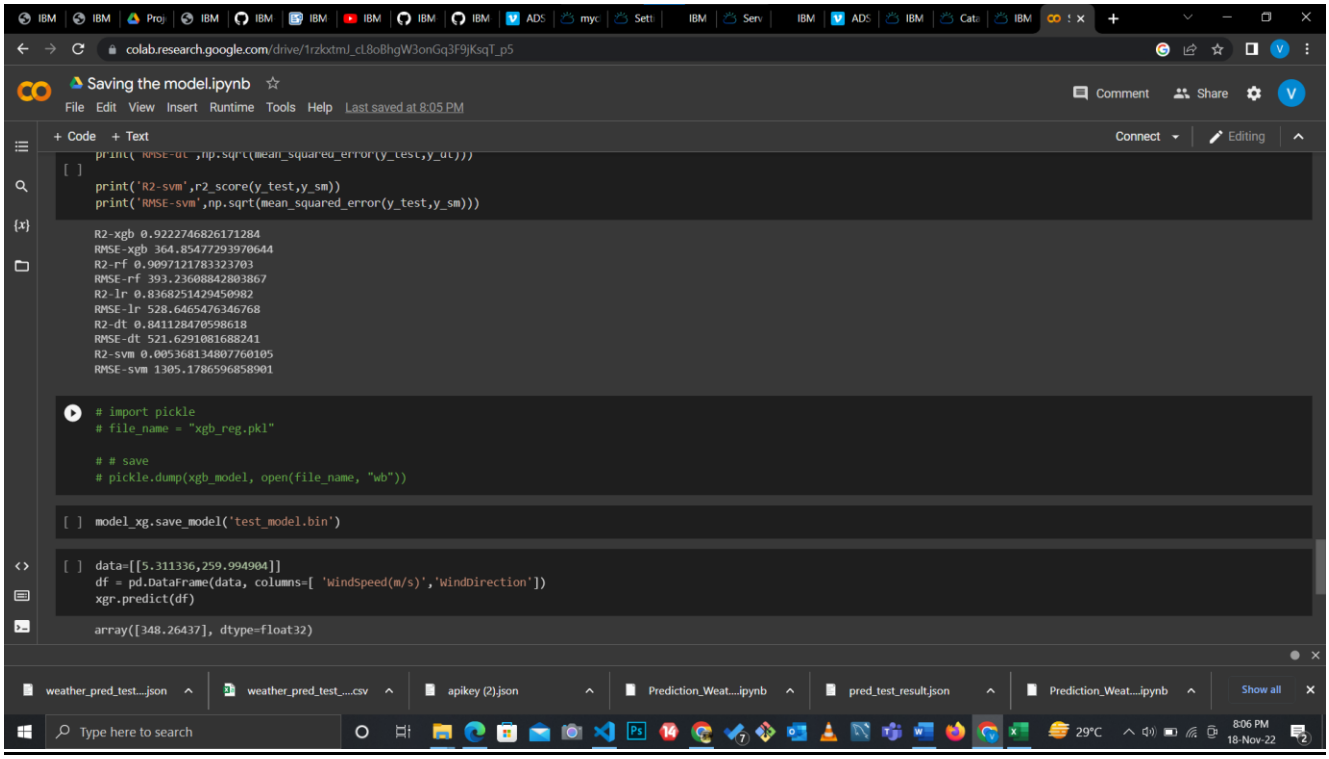
S.No.	Parameter	Values	Screenshot
1.	Metrics	**Regression Model:** MAE – 0.6, MSE – 0.3, RMSE – 0.4, R2 score - 0.7 **Classification Model:** Confusion Matrix - 4, Accuracy Score- 85 & Classification Report -	
2.	Tune the Model	Hyperparameter Tuning – 0.6 Validation Method – 0.8	

Performance Testing: Regression Model:



Evaluation Metrics: MAE - , MSE - , RMSE - , R2 score , Accuracy Score




colab.research.google.com/drive/1rzkxtmJ_cL8oBhgW3onGq3F9jKsqT_p5
Saving the model.ipynb
File Edit View Insert Runtime Tools Help Last saved at 8:05 PM
Comment
Share
+ Code + Text
Connect
Editing
print('RMSE-dt',np.sqrt(mean_squared_error(y_test,y_dt)))
print('R2-svm',r2_score(y_test,y_sm))
print('RMSE-svm',np.sqrt(mean_squared_error(y_test,y_sm)))
R2-xgb 0.9222746826171284
RMSE-xgb 364.85477293970644
R2-rf 0.9097121783323703
RMSE-rf 393.23608842803867
R2-lr 0.8368251429450982
RMSE-lr 528.6465476346768
R2-dt 0.84112847059861 8
RMSE-dt 521.6291081688241
R2-svm 0.005368134807760105
RMSE-svm 1305.1786596858901
# import pickle
# file_name = "xgb_reg.pkl"
# # save
# pickle.dump(xgb_model, open(file_name, "wb"))
model_xg.save_model('test_model.bin')
data=[[5.311336,259.994904]]
df = pd.DataFrame(data, columns=['WindSpeed(m/s)','WindDirection'])
xgr.predict(df)
array([348.26437], dtype=float32)
weather_pred_test....json
weather_pred_test_....csv
apikey (2).json
Prediction_Weat....ipynb
pred_test_result.json
Prediction_Weat....ipynb
Show all
Type here to search
29°C
8:06 PM
18-Nov-22