





Dear Ahmed Rabie

In the below Table you will see a specified table that includes the good, the bad & the improvements that can be done on your Classification Task

Correctly Done	Can Be Improved
 Handle Outlier Encoding Applying Good Algorithms 	 Apply Scaling (some of Algorithm are sensitive to scaling) You can apply other techniques for outlier as transformation (log), capping, fill by median (try and determine the good one) Handle multicollinearity using drop cols with high vif or pca (not necessary to increase performance, the integrity will be) You can try encoding using one-hot, label or manual encoder as type1:1, type2:2, You can use more robust models as random forest, xgbooost, adaboost, You can use grid-search for more hyper tunning You can apply cross-validation to know genera performance of model on all data Split data into train and test before any preprocessing Handle Imbalanced You can add more features as total_members, total_night, percent_can((p_c)/(p_c + p_not_c)

