For BayesOptSearch():

Evaluation metrics:

'loss' = 0.553885

Tuned hyperparameters:

'learning_rate' = 1.2323344486727979e-05

Any other models with higher loss but better evaluation accuracy/f1 score:

None existed as I could see for my model. For both classes, both the accuracy/f1 score were highest for the best model

Objective value variation:

Objective scores decreased from 0.658111 to 0.553885

For BasicVariantGenerator() (GridSearch):

Evaluation metrics:

'loss' = 0.6470239758491516

Tuned hyperparameters:

'learning_rate' = 1.62407e-05

Any other models with higher loss but better evaluation accuracy/f1 score:

None existed as I could see for my model. For both classes, both the accuracy/f1 score were highest for the best model

Objective value variation:

Objective scores decreased from 0.662731 to 0.647024

Advantages:

GridSearch is exhaustive and will look at every possible combination potential hyperparameters. BayesSearch takes best estimates using priors based on the last guess – this may or may not converge

Disadvantages:

GridSearch will exhaustively find the best hyperparameters but is very inefficient exponentially.

** The file 59383_roberta_hyperparameter_search_variant_gen.err/out details the error and output of GridSearch results.