## **Dry beans Classification Baseline model**

<u>Features</u> - The most predictive features were chosen for the model: 'Area', 'Perimeter', 'MajorAxisLength', 'MinorAxisLength', 'ConvexArea', 'EquivDiameter', 'AspectRation', 'Eccentric Convex Area', 'Extent', 'Compactness', 'ShapeFactor1', 'ShapeFactor2', 'ShapeFactor3' Model - KNN model was used as a baseline model

Accuracy score: 72.24% Precision score: 0.7339 Recall score: 0.7197

\*Further feature engineering and other models will be used to find a better accuracy

## KNN Regression confusion matrix 600 0 0 0 9 1.3e+02 98 38 DERMASON SIRA 0 1e+02 0 0 0 0 0 450 2 SEKER 90 0 2.2e+02 0 20 0 Actual Class 0 0 6.4e+02 0 32 43 HOROA 300 0 15 9 0 68 26 2.2e+02 CALI 150 BARBUNYA 75 7 2.6e+02 85 0 0 3.9e+02 BOMBAY 60 49 25 DERMASON SIRA SEKER HOROA CALI BARBUNYA BOMBAY **Predicted Class**