TEAM ID: PNT2022TMID48753

PROJECT NAME: DemandEst - AI powered Food Demand Forecaster

Team Leader

Model Evaluation

We're going to use x_train and y_train obtained above in train_test_split section to train our regression model. We're using the fit method and passing the parameters as shown below. Finally, we need to check to see how well our model is performing on the test data.

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For testing the model we use the below method,

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XG.fit(X_train, y_train)
y_pred = XG.predict(X_val)
y_pred[y_pred<0] = 0
from sklearn import metrics
print('RMSLE:', 100*np.sqrt(metrics.mean_squared_log_error(y_val, y_pred)))
```
```
RMSLE: 70.06429878638917
```

In [127]:
```
L = Lasso()
L.fit(X_train, y_train)
y_pred = L.predict(X_val)
y_pred[y_pred<0] = 0
from sklearn import metrics
print('RMSLE:', 100*np.sqrt(metrics.mean_squared_log_error(y_val, y_pred)))
```
```
RMSLE: 128.9558620089095
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In [128]:
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EN = ElasticNet()
EN.fit(X_train, y_train)
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RMSLE: 130.93230794494932
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In [129]:
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DT = DecisionTreeRegressor()
DT.fit(X_train, y_train)
y_pred = DT.predict(X_val)
y_pred[y_pred<0] = 0
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print('RMSLE:', 100*np.sqrt(metrics.mean_squared_log_error(y_val, y_pred)))
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RMSLE: 62.750116693228705
```

In [130]:
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KNN = KNeighborsRegressor()
KNN.fit(X_train, y_train)
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```
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RMSLE: 67.27613082623152
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In [131]:
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GB = GradientBoostingRegressor()
GB.fit(X_train, y_train)
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RMSLE: 130.93230794494932

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RMSLE: 99.04866931366767

Team Member 1

Model Evaluation

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In [129]: DT = DecisionTreeRegressor()
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          from sklearn import metrics
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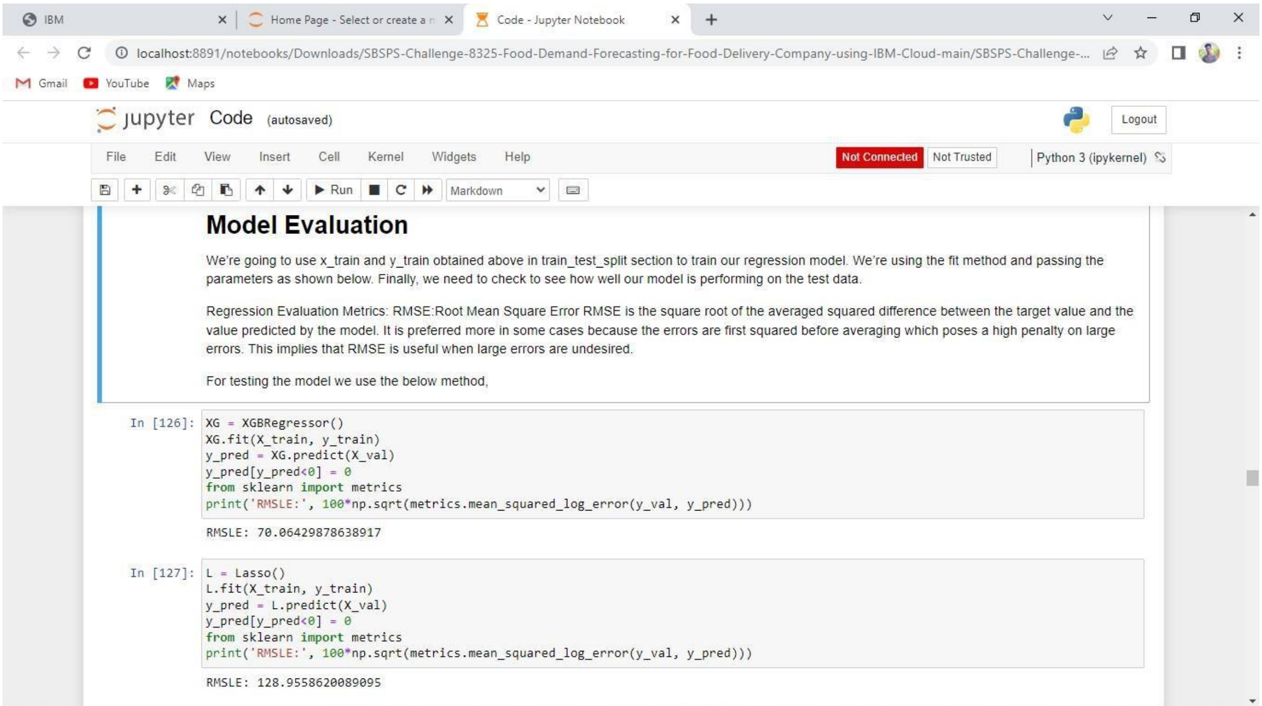
          RMSLE: 99.04866931366767
```

Team Member 2



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Model Evaluation

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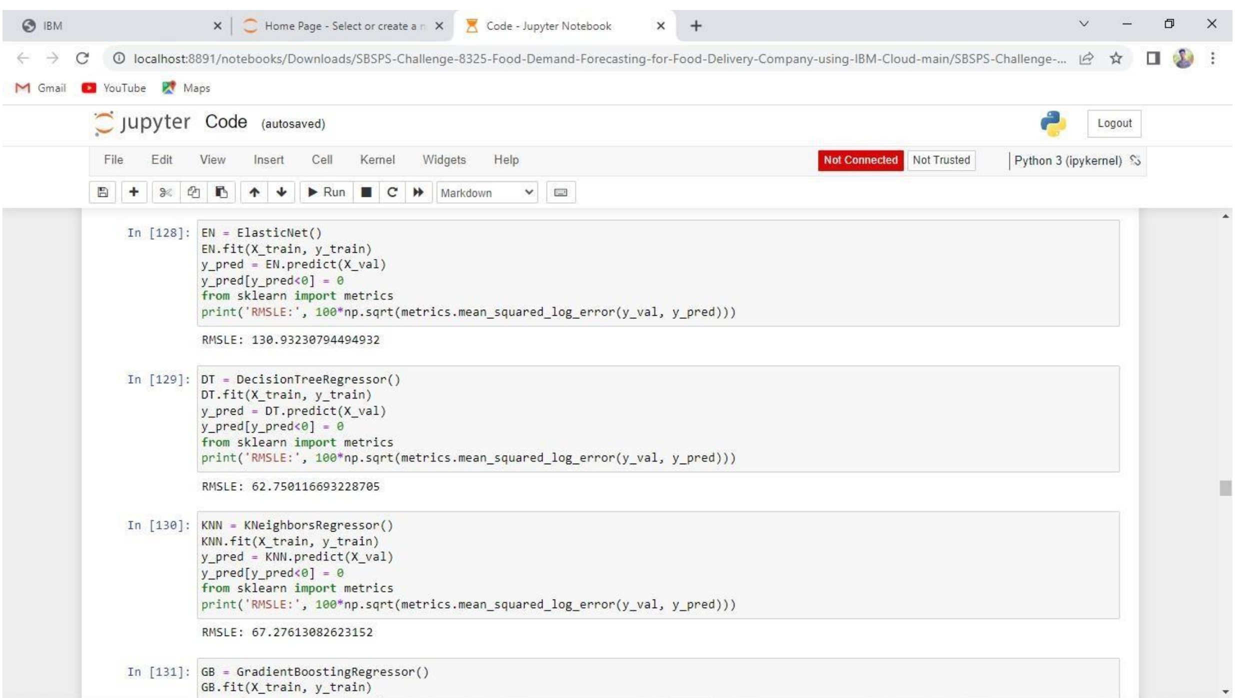

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          RMSLE: 99.04866931366767
```

Team Member 3

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Team Member 4

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