

Model Building

Model Evaluation

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Project Name	DemandEst - AI powered Food Demand Forecaster

Model Evaluation

```
In [67]: LR = LinearRegression()
LR.fit(x_train,y_train)
y_pred = LR.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: 129.8095924419418

```
In [68]: 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: 129.8095924419418

```
In [69]: EN=ElasticNet()
EN.fit(x_train,y_train)
y_pred=EN.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: 131.23278835846813

```
In [70]: DT=DecisionTreeRegressor()
DT.fit(x_train,y_train)
y_pred=DT.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: 62.85827099088529

```
In [71]: KNN=KNeighborsRegressor()
KNN.fit(x_train,y_train)
y_pred=KNN.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: 66.49955164596949

```
In [72]: GB=GradientBoostingRegressor()
GB.fit(x_train,y_train)
y_pred=GB.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: 97.11281806834916