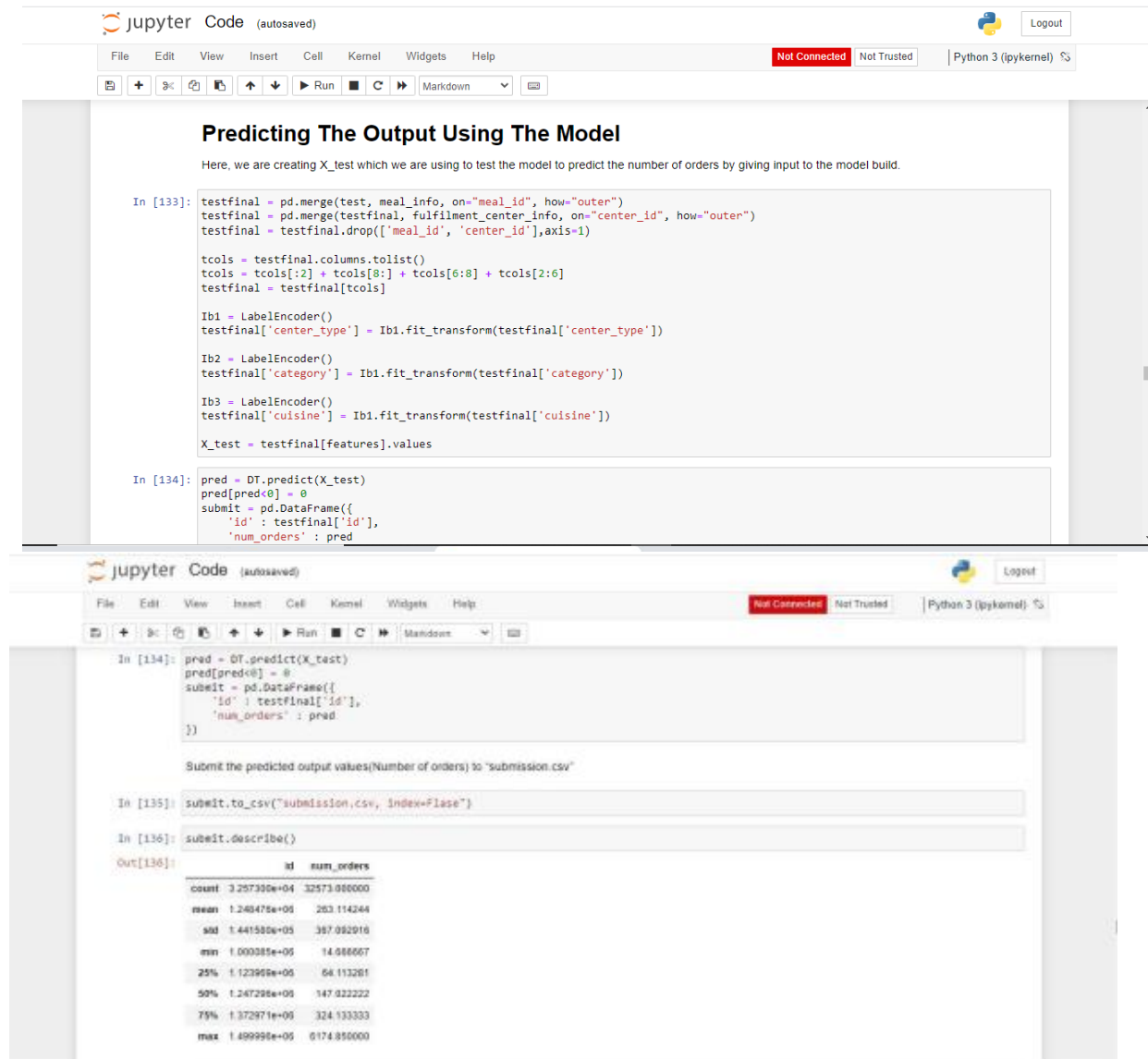


TEAM ID: PNT2022TMID51052

PROJECT NAME: DemandEst - AI powered Food DemandForecaster

Team Leader



The image displays two screenshots of a Jupyter Notebook interface, likely from a competition platform like Kaggle. The top screenshot shows the notebook titled "Predicting The Output Using The Model". The code in the first cell merges test data with meal and fulfillment center information, drops unnecessary columns, and uses LabelEncoders to transform categorical features like 'center_type', 'category', and 'cuisine'. The second cell uses a trained model to predict the number of orders for each item in the test set.

Predicting The Output Using The Model

Here, we are creating `X_test` which we are using to test the model to predict the number of orders by giving input to the model build.

```
In [133]: testfinal = pd.merge(test, meal_info, on="meal_id", how="outer")
testfinal = pd.merge(testfinal, fulfillment_center_info, on="center_id", how="outer")
testfinal = testfinal.drop(['meal_id', 'center_id'], axis=1)

tcols = testfinal.columns.tolist()
tcols = tcols[:2] + tcols[8:] + tcols[6:8] + tcols[2:6]
testfinal = testfinal[tcols]

Ib1 = LabelEncoder()
testfinal['center_type'] = Ib1.fit_transform(testfinal['center_type'])

Ib2 = LabelEncoder()
testfinal['category'] = Ib2.fit_transform(testfinal['category'])

Ib3 = LabelEncoder()
testfinal['cuisine'] = Ib3.fit_transform(testfinal['cuisine'])

X_test = testfinal[features].values

In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id': testfinal['id'],
    'num_orders': pred
})
```

The bottom screenshot shows the continuation of the notebook. The predicted values are submitted to a CSV file, and the output of the `submit.describe()` function is displayed.

```
In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id': testfinal['id'],
    'num_orders': pred
})

Submit the predicted output values(Number of orders) to 'submission.csv'


In [135]: submit.to_csv("submission.csv", index=False)

In [136]: submit.describe()

Out[136]:
```

	id	num_orders
count	3.257390e+04	32573.000000
mean	1.248475e+05	263.114244
std	1.441580e+05	387.082018
min	1.000385e+05	14.066667
25%	1.123959e+05	64.113281
50%	1.248298e+05	147.022222
75%	1.372971e+05	324.133333
max	1.499999e+05	6174.850000

Team Member 1

jupyter Code (autosaved)  Logout

File Edit View Insert Cell Kernel Widgets Help Not Connected Not Trusted Python 3 (ipykernel)

Run

Predicting The Output Using The Model

Here, we are creating X_test which we are using to test the model to predict the number of orders by giving input to the model build.

```
In [133]: testfinal = pd.merge(test, meal_info, on="meal_id", how="outer")
testfinal = pd.merge(testfinal, fulfilment_center_info, on="center_id", how="outer")
testfinal = testfinal.drop(['meal_id', 'center_id'],axis=1)

tcols = testfinal.columns.tolist()
tcols = tcols[:2] + tcols[8:] + tcols[6:8] + tcols[2:6]
testfinal = testfinal[tcols]


Ib1 = LabelEncoder()
testfinal['center_type'] = Ib1.fit_transform(testfinal['center_type'])

Ib2 = LabelEncoder()
testfinal['category'] = Ib1.fit_transform(testfinal['category'])

Ib3 = LabelEncoder()
testfinal['cuisine'] = Ib1.fit_transform(testfinal['cuisine'])

X_test = testfinal[features].values

In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id': testfinal['id'],
    'num_orders': pred
})
```

jupyter Code (autosaved)  Logout

File Edit View Insert Cell Kernel Widgets Help Not Connected Not Trusted Python 3 (ipykernel)

Run

```
In [134]: pred = DT.predict(X_test)
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    'id': testfinal['id'],
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})

Submit the predicted output values(Number of orders) to "submission.csv"

In [135]: submit.to_csv("submission.csv", index=False)


In [136]: submit.describe()














Out[136]:
```

	id	num_orders
count	3.257300e+04	32573.000000
mean	1.248476e+06	263.114244
std	1.441580e+05	367.092916
min	1.000085e+06	14.666867
25%	1.123969e+06	64.113281
50%	1.247296e+06	147.022222
75%	1.372971e+06	324.133333
max	1.499996e+06	6174.850000

Team Member 2

Jupyter Code (autosaved) Logout

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Predicting The Output Using The Model

Here, we are creating X_test which we are using to test the model to predict the number of orders by giving input to the model build.

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In [133]: testfinal = pd.merge(test, meal_info, on="meal_id", how="outer")
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testfinal = testfinal.drop(['meal_id', 'center_id'],axis=1)

tcols = testfinal.columns.tolist()
tcols = tcols[:2] + tcols[8:] + tcols[6:8] + tcols[2:6]
testfinal = testfinal[tcols]

Ib1 = LabelEncoder()
testfinal['center_type'] = Ib1.fit_transform(testfinal['center_type'])


Ib2 = LabelEncoder()
testfinal['category'] = Ib1.fit_transform(testfinal['category'])














Ib3 = LabelEncoder()
testfinal['cuisine'] = Ib1.fit_transform(testfinal['cuisine'])

X_test = testfinal[features].values

In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id' : testfinal['id'],
    'num_orders' : pred
```

Jupyter Code (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Not Connected Not Trusted | Python 3 (ipykernel) 

```
In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id' : testfinal['id'],
    'num_orders' : pred
})

Submit the predicted output values(Number of orders) to "submission.csv"
```

```
In [135]: submit.to_csv("submission.csv", index=False)
```

```
In [136]: submit.describe()
```

```
Out[136]:
```

	id	num_orders
count	3.257300e+04	32573.000000
mean	1.248476e+06	263.114244
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max	1.499996e+06	6174.850000

Team Member 3

jupyter Code (autosaved)

Logout

Python 3 (ipykernel)

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Run

Markdown

Predicting The Output Using The Model

Here, we are creating X_test which we are using to test the model to predict the number of orders by giving input to the model build.

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testfinal['center_type'] = Ib1.fit_transform(testfinal['center_type'])

Ib2 = LabelEncoder()
testfinal['category'] = Ib1.fit_transform(testfinal['category'])

Ib3 = LabelEncoder()
testfinal['cuisine'] = Ib1.fit_transform(testfinal['cuisine'])

X_test = testfinal[features].values

In [134]: pred = DT.predict(X_test)
pred[pred<0] = 0
submit = pd.DataFrame({
    'id' : testfinal['id'],
    'num_orders' : pred
})
```

jupyter Code (autosaved)

Logout

Python 3 (ipykernel)

File Edit View Insert Cell Kernel Widgets Help

Not Connected Not Trusted

Run

Markdown

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```

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```
In [135]: submit.to_csv("submission.csv, index=False")

In [136]: submit.describe()
```

```
Out[136]:
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	id	num_orders
count	3.257300e+04	32573.000000
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max	1.499996e+06	6174.850000