

TEAM ID: PNT2022TMID17554

PROJECT NAME: DemandEst - AI powered Food DemandForecaster

Team Leader

The screenshot displays a Jupyter Notebook interface with two visible code cells. The first cell, labeled 'In [133]:', contains Python code for data preprocessing and model prediction. It merges 'meal_info' and 'fulfilment_center_info' into 'testfinal', drops unnecessary columns, and uses 'LabelEncoder' to transform categorical variables like 'center_type', 'category', and 'cuisine'. It then creates 'X_test' from the features and uses a Decision Tree model ('DT') to predict 'num_orders'.

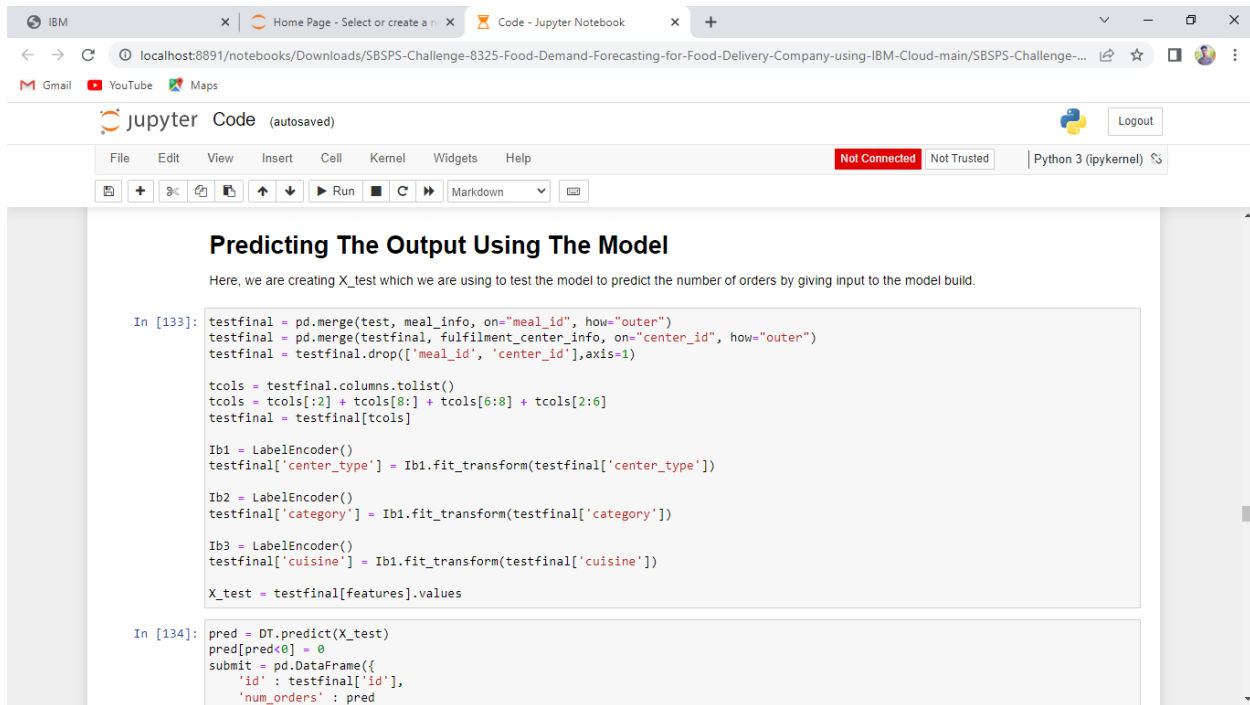
The second cell, labeled 'In [134]:', continues the prediction process, setting 'pred[pred<0] = 0' and creating a 'submit' DataFrame with 'id' and 'num_orders' columns.

Below the code cells, the output of the second cell is shown, labeled 'Out[136]:'. It displays a summary statistics table for the 'submit' DataFrame:

	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	14.666667
25%	1.123969e+06	64.113281
50%	1.247296e+06	147.022222
75%	1.372971e+06	324.133333
max	1.499996e+06	6174.850000

The notebook interface includes a top bar with 'jupyter Code (autosaved)' and a 'Logout' button. The bottom bar shows the file explorer and a 'Run' button. The status bar at the bottom indicates 'Not Connected', 'Not Trusted', and 'Python 3 (ipykernel)'.

Team Member 1



The screenshot shows a Jupyter Notebook interface with a browser window at the top. The notebook is titled "Predicting The Output Using The Model". Below the title, there is a text block stating: "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." The notebook contains two code cells. The first cell (In [133]:) contains the following code:

```
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[8:8] + tcols[6:8] + tcols[2:6]
testfinal = testfinal[tcols]

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

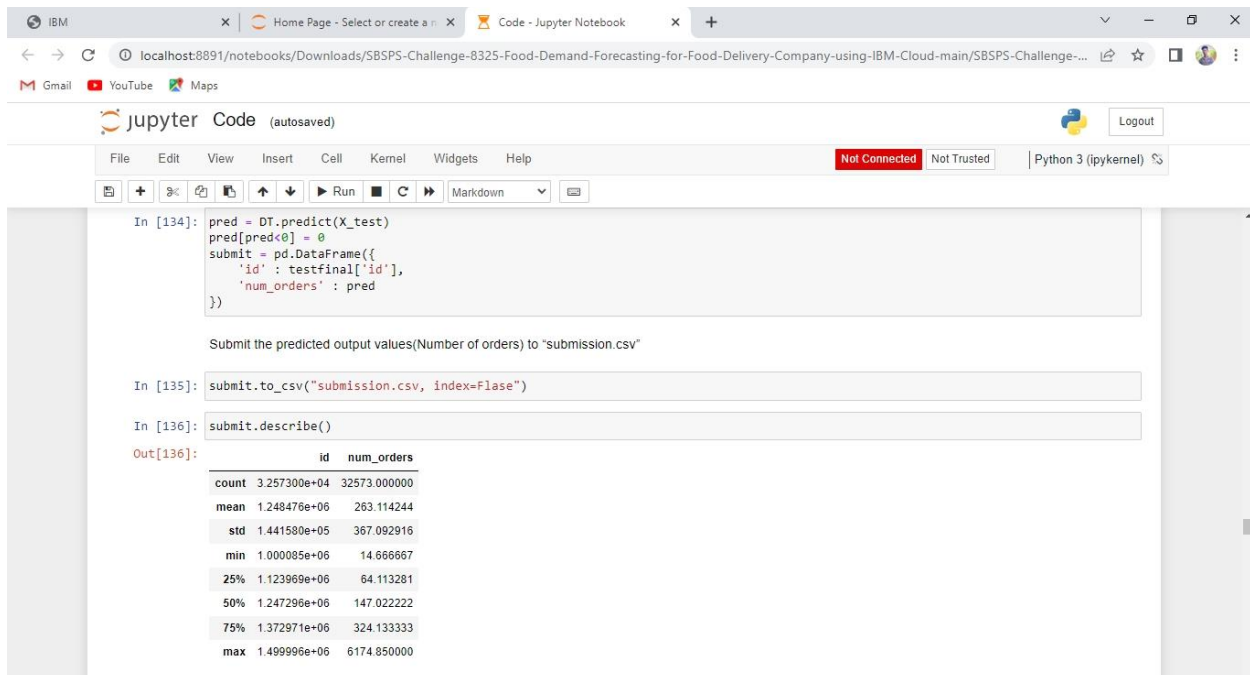
Ib2 = LabelEncoder()
testfinal['category'] = Ib1.fit_transform(testfinal['category'])

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

X_test = testfinal[features].values
```

The second cell (In [134]:) contains the following code:

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



The screenshot shows a Jupyter Notebook interface with a browser window at the top. The notebook is titled "Predicting The Output Using The Model". Below the title, there is a text block stating: "Submit the predicted output values(Number of orders) to 'submission.csv'". The notebook contains two code cells. The first cell (In [134]:) contains the following code:

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

The second cell (In [135]:) contains the following code:

```
submit.to_csv("submission.csv", index=False)
```

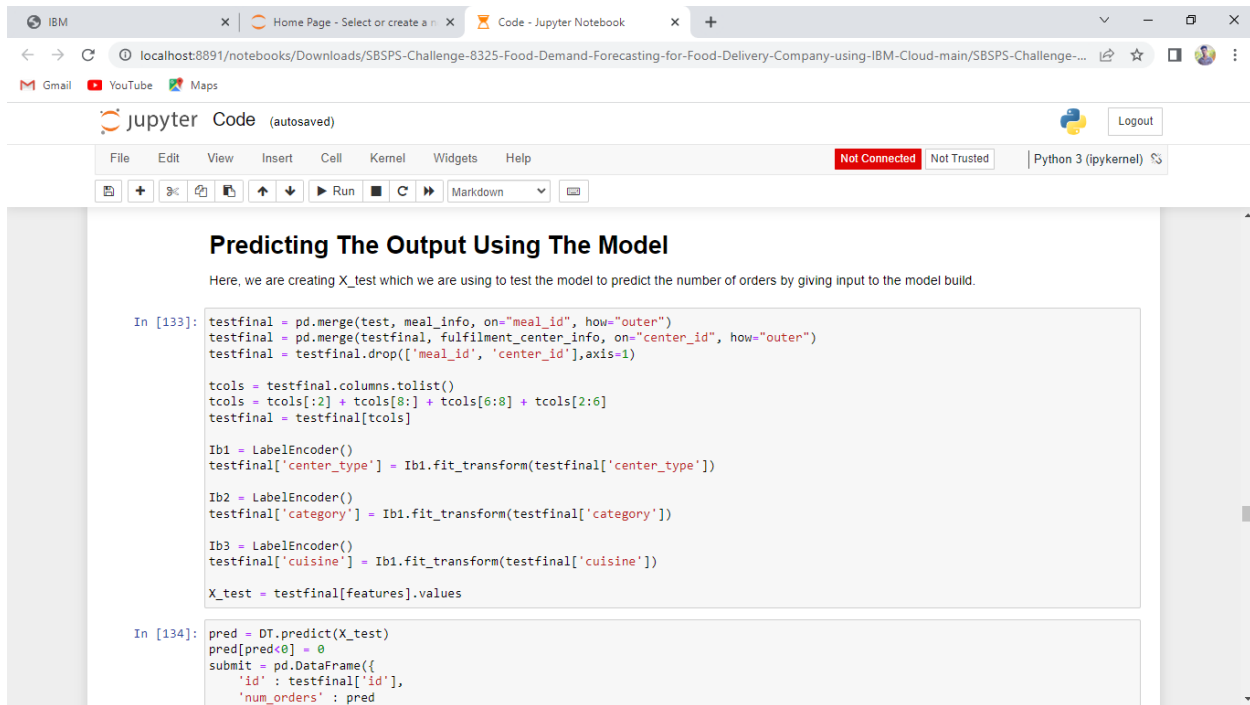
The third cell (In [136]:) contains the following code:

```
submit.describe()
```

The output of the third cell (Out[136]:) is a summary statistics table for the 'submit' DataFrame:

	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	14.666667
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



The screenshot shows a Jupyter Notebook titled "Predicting The Output Using The Model". The text above the code states: "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]

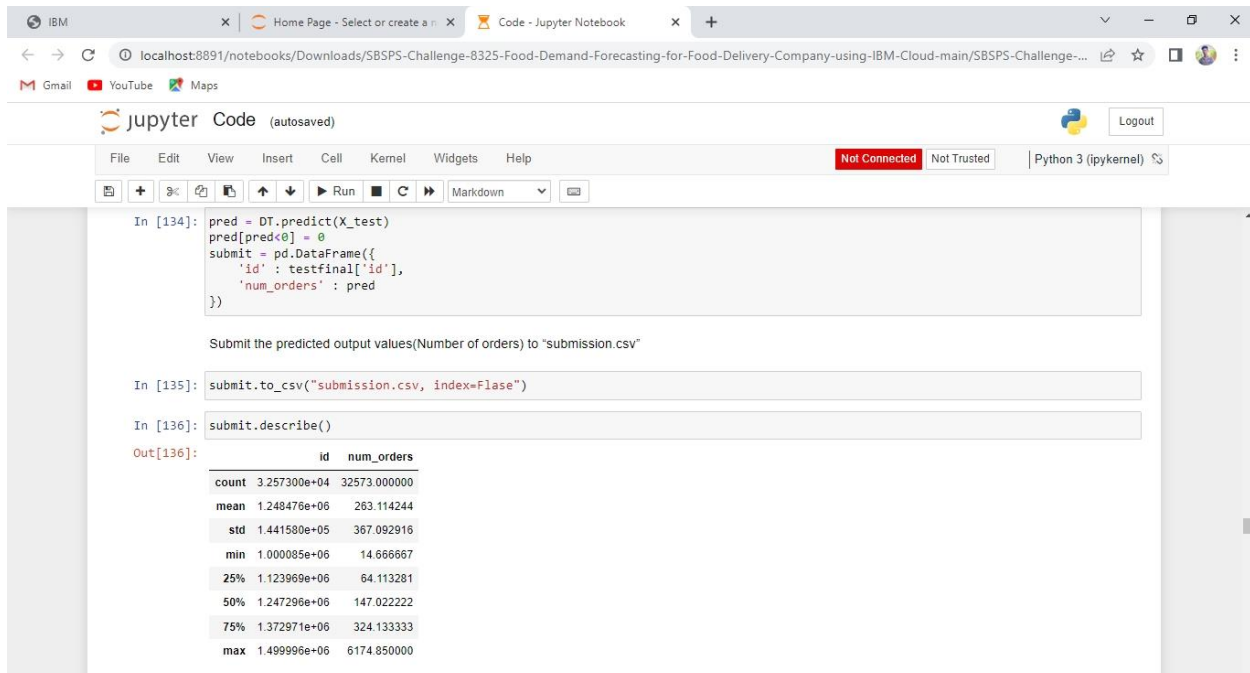
Ib1 = LabelEncoder()
testfinal['center_type'] = Ib1.fit_transform(testfinal['center_type'])

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
})
```



The screenshot shows the continuation of the Jupyter Notebook. The code for In [134] is repeated. Below the code, there is a text instruction: "Submit the predicted output values(Number of orders) to 'submission.csv'".

```
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"

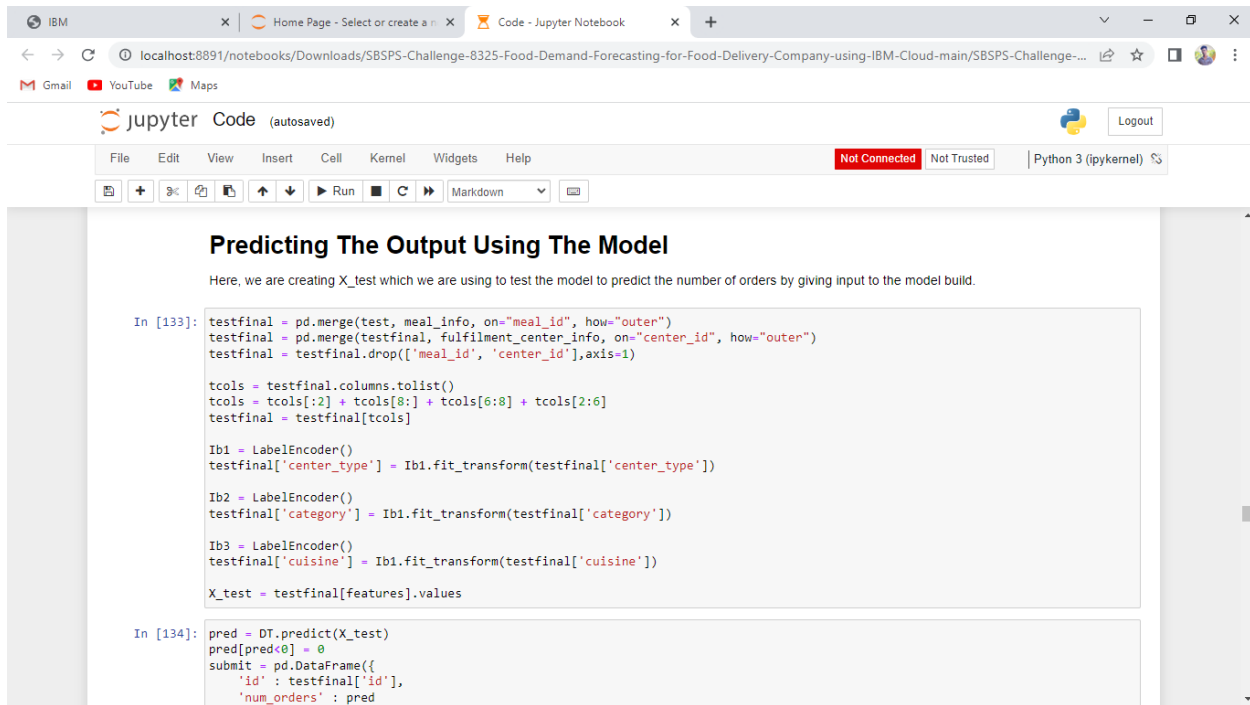
In [135]: submit.to_csv("submission.csv", index=False)

In [136]: submit.describe()

Out[136]:
```

	id	num_orders
count	3.257300e+04	32573.000000
mean	1.248476e+06	263.114244
std	1.441580e+05	367.092916
min	1.000085e+06	14.666667
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50%	1.247296e+06	147.022222
75%	1.372971e+06	324.133333
max	1.499996e+06	6174.850000

Team Member 3



The screenshot shows a Jupyter Notebook titled "Predicting The Output Using The Model". The notebook is running on a local host (localhost:8891) and is connected to a Python 3 (ipykernel) environment. The code in the notebook is as follows:

```
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[8:8] + tcols[6:8] + tcols[2:6]
testfinal = testfinal[tcols]

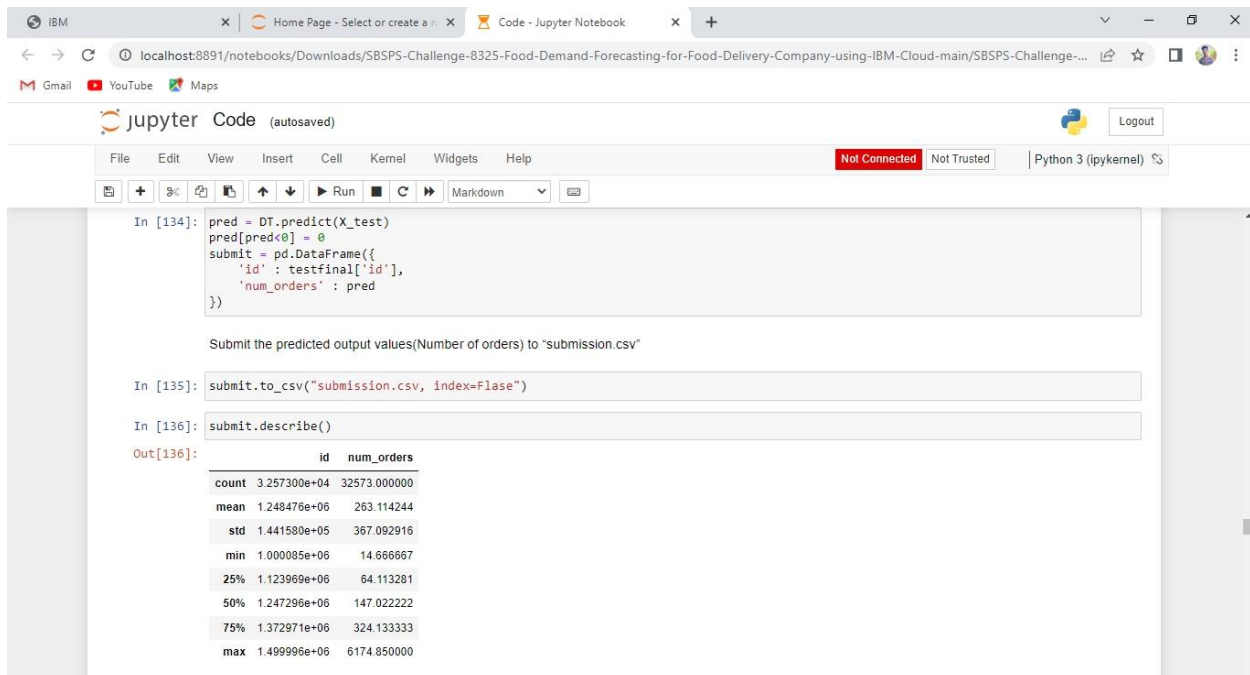
Ib1 = LabelEncoder()
testfinal['center_type'] = Ib1.fit_transform(testfinal['center_type'])

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
})
```



The screenshot shows a Jupyter Notebook titled "Submit the predicted output values (Number of orders) to 'submission.csv'". The notebook is running on a local host (localhost:8891) and is connected to a Python 3 (ipykernel) environment. The code in the notebook is as follows:

```
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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75%	1.372971e+06	324.133333
max	1.499996e+06	6174.850000