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Batch code: LISUM28

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Submitted to GitHub.

## EXPLORER

✓ FLASK APPLICATION SKL...    


- > static

- > templates

 app.py

dataset\_explore.ipynb

≡ diabetes\_model.pkl

 model.py

≡ requirements.txt

app.py

 app.py > ...

💡 Click here to ask Blackbox to help you code faster

```

1  from flask import Flask, request, render_template
2  import joblib
3
4  app = Flask(__name__)
5  model = joblib.load('diabetes_model.pkl')
6
7  @app.route('/', methods=['GET', 'POST'])
8  def index():
9      if request.method == 'POST':
10         # Extract data from form
11         data = [float(request.form.get('feature'+str(i))) for i in range(10)]
12
13         # Make prediction
14         prediction = model.predict([data])[0]
15
16         return render_template('index.html', result=prediction)
17     return render_template('index.html', result=None)
18
19 if __name__ == '__main__':
20     app.run(debug=True)
21

```

## > OUTLINE

## > TIMELINE

EXPLORER

FLASK APPLICATION SKL...

static

templates

app.py

dataset\_explore.ipynb

diabetes\_model.pkl

model.py

requirements.txt

OUTLINE

TIMELINE

dataset\_explore.ipynb

Code | Markdown | Run All | Clear All Outputs | Outline

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```
from sklearn import datasets
diabetes = datasets.load_diabetes(scaled=False)
import pandas as pd
print(diabetes.keys())
```

[26]

Python

dict\_keys(['data', 'target', 'frame', 'DESCR', 'feature\_names', 'data\_filename', 'target\_filename', 'data\_module'])

Click here to ask Blackbox to help you code faster

```
print(diabetes.DESCR)
```

[29]

Python

```
**Data Set Characteristics:**

:Number of Instances: 442

:Number of Attributes: First 10 columns are numeric predictive values

:Target: Column 11 is a quantitative measure of disease progression one year after baseline

:Attribute Information:
  - age      age in years
  - sex
  - bmi      body mass index
  - bp       average blood pressure
  - s1       tc, total serum cholesterol
  - s2       ldl, low-density lipoproteins
  - s3       hdl, high-density lipoproteins
  - s4       tch, total cholesterol / HDL
  - s5       ltg, possibly log of serum triglycerides level
  - s6       glu, blood sugar level

Note: Each of these 10 feature variables have been mean centered and scaled by the standard deviation times the square root of `n_samples` (i.e. the sum of squares of each column totals 1).

Source URL:
https://www4.stat.ncsu.edu/~boos/var.select/diabetes.html

For more information see:
Bradley Efron, Trevor Hastie, Iain Johnstone and Robert Tibshirani (2004) "Least Angle Regression," Annals of Statistics (with discussi
(https://web.stanford.edu/~hastie/Books/LARS/LeastAngle\_2002.pdf)
```

Cell 1 of 5 | Blackbox | Tablaine Starter



...


## > TIMELINE

## EXPLORER

## FLASK APPLICATION SKLEARN DIABETES ...

- > static

- > templates

 app.py

dataset\_explore.ipynb

≡ diabetes\_model.pkl

 model.py

≡ requirements.txt

M

 `app.py` 

 app.py > ...

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21

```

PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR COMMENTS

 zsh     ...  

```
(Venv1) Yusuf@MacBook-Pro Flask Application Sklearn Diabetes Prediction % python3 model.py
```

## > OUTLINE

## > TIMELINE



## EXPLORER

## FLASK APPLICATION SKLEARN DIABETES ...


- > static

- > templates

 app.py

dataset\_explore.ipynb

≡ diabetes\_model.pkl

 model.py

```

≡ requirements.txt

```

app.py

 app.py > ...

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PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR COMMENTS

 Python     ...  

```
• (Venv1) Yusuf@MacBook-Pro Flask Application Sklearn Diabetes Prediction % python3 model.py
```

```
(Venv1) Yusuf@MacBook-Pro:~/Flask Application Sklearn Diabetes Prediction % python3 app.py
```

```
* Serving Flask app 'app'
```

```
* Debug mode: on
```

**WARNING:** This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.

```
* Running on http://127.0.0.1:5000
```

Press CTRL+C to quit

- \* Restarting with stat

```
* Debugger is active!
```

\* Debugger PIN: 104-783-242

## > OUTLINE

## > TIMELINE

# Diabetes Prediction

Age in Years	↕
Sex (1 = Male, 2 = Female)	↕
Body Mass Index	↕
Average Blood Pressure	↕
TC - Total Serum Cholesterol	↕
LDL - Low-Density Lipoproteins	↕
HDL - High-Density Lipoproteins	↕
TCH - Total Cholesterol / HDL	↕
LTG - Log of Serum Triglycerides Level	↕
GLU - Blood Sugar Level	↕
Predict	

# Diabetes Prediction

50

1

10

90

10

10

10

10

10

10|

10

Predict

Quantitative measure of disease progression one year after baseline:  
-127.37697477595123



# Diabetes Prediction

Age in Years

Sex (1 = Male, 2 = Female)

Body Mass Index

Average Blood Pressure

TC - Total Serum Cholesterol

LDL - Low-Density Lipoproteins

HDL - High-Density Lipoproteins

TCH - Total Cholesterol / HDL

LTG - Log of Serum Triglycerides Level

GLU - Blood Sugar Level

Predict

Quantitative measure of disease progression one year after baseline:  
550.5528197638109

The image shows a VS Code editor interface. On the left, the Explorer sidebar shows a project named 'FLASK APPLICATION SKL...' with files like 'static', 'templates', 'app.py', 'dataset\_explore.ipynb', 'diabetes\_model.pkl', 'Flask Deployment Screenshots.pdf', 'model.py', and 'requirements.txt'. The main editor window shows 'app.py' with the following code:

```
1 from flask import Flask, request, render_template
2 import joblib
3
4 app = Flask(__name__)
5 model = joblib.load('diabetes_model.pkl')
6
7 @app.route('/', methods=['GET', 'POST'])
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19
20 if __name__ == '__main__':
21     app.run(debug=True)
22
```

The terminal at the bottom shows the command 'python3 app.py' being executed, with output indicating the server is running on http://127.0.0.1:5000 and showing various log messages including warnings and detected changes.