

# Flask Deployment Screenshots

Sentiment Analysis Project  
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# 1. Deployed Flask Application in VS Code with the running endpoint

The screenshot displays the Visual Studio Code interface with a Flask application running. The Explorer sidebar on the left shows the project structure for 'CAPSTONE\_NEW', including files like `__pycache__`, `pickle_file`, `templates`, `index.html`, `app.py`, `heroku_url.txt`, `model.py`, `Procfile`, `README.md`, `requirements.txt`, `sample30.csv`, and `sentiment_based_product...`. The main editor window shows the `app.py` file with the following code:

```
1 #from cgi import text
2 from flask import Flask,render_template,request
3 import model
4 app = Flask(__name__)
5
6 valid_userid = ['00sab00','1234','zippy','zburt5','joshua','dorothy w','rebecca','walker557','samantha',
7
8 @app.route('/')
9 def view():
10     return render_template('index.html')
11
12 @app.route('/recommend',methods=['POST'])
13 def recommend_top5():
14     print(request.method)
15     user_name = request.form['User Name']
```

The TERMINAL panel at the bottom shows the output of the application:

```
[nltk_data] Downloading package punkt_tab to
[nltk_data]   C:\Users\ushas\AppData\Roaming\nltk_data...
[nltk_data]   Package punkt_tab is already up-to-date!
[nltk_data] Downloading package stopwords to
[nltk_data]   C:\Users\ushas\AppData\Roaming\nltk_data...
[nltk_data]   Package stopwords is already up-to-date!
[nltk_data] Downloading package wordnet to
[nltk_data]   C:\Users\ushas\AppData\Roaming\nltk_data...
[nltk_data]   Package wordnet is already up-to-date!
[nltk_data] Downloading package omw-1.4 to
[nltk_data]   C:\Users\ushas\AppData\Roaming\nltk_data...
[nltk_data]   Package omw-1.4 is already up-to-date!
* Serving Flask app '__name__'
* Debug mode: off
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
```

The status bar at the bottom indicates the file is at line 1, column 1, with 4 spaces, UTF-8 encoding, and LF line endings. It also shows the Python version as 3.10.4 64-bit and the Go Live extension.

## 2. Endpoint Running is the Browser

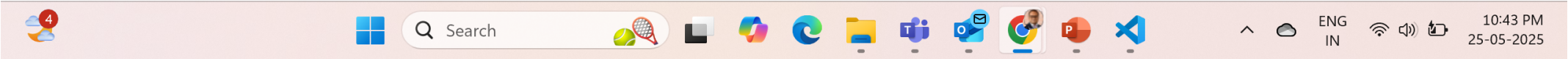


# Product recommendation System

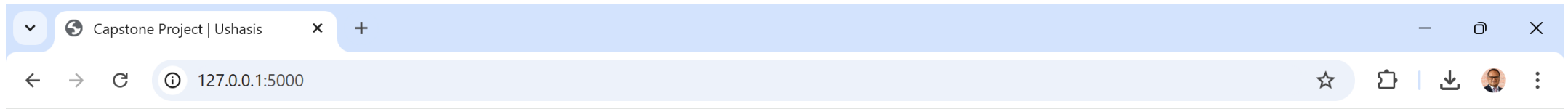
User Name

Submit

Sample username, please enter one at a time : rebecca joshua samantha dorothy w



### 3. Entry of the query username 'zippy' in the endpoint in browser



## Product recommendation System

User Name

Sample username, please enter one at a time :

#### 4. Top 5 products recommended by the app based on sentiment analysis for user 'zippy'



The screenshot shows a web browser window. The address bar contains the URL `127.0.0.1:5000/recommend`. The browser tab is titled "Capstone Project | Ushasis".

# Product recommendation System

User Name

Username

Submit

Sample username, please enter one at a time : rebecca joshua samantha dorothy w

## Recommended products

## Clorox Disinfecting Wipes Value Pack Scented 150 Ct Total

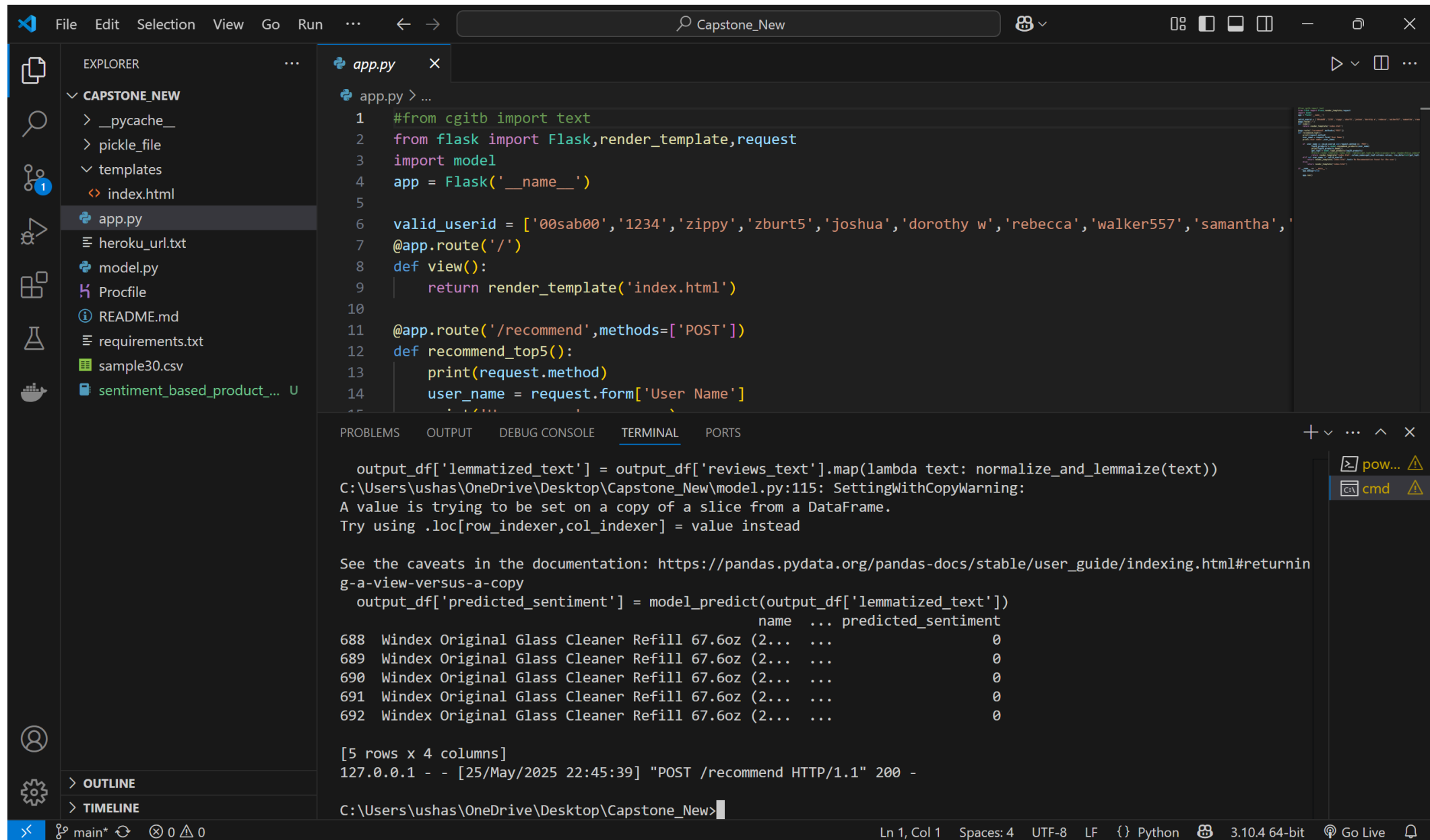
Planes: Fire Rescue (2 Discs) (includes Digital Copy) (blu-Ray/dvd)

## Clorox Disinfecting Bathroom Cleaner

Stargate (ws) (ultimate Edition) (director's Cut) (dvdvideo)

Red (special Edition) (dvdvideo)

## 5. Terminal output of the running app in VS Code when the top 5 products are recommended for user 'zippy'



The screenshot shows the Visual Studio Code interface with a project named 'Capstone\_New'. The Explorer sidebar on the left shows the file structure, including 'app.py' which is currently open in the editor. The code in 'app.py' is a Flask application with a route for '/recommend' that returns the top 5 recommended products for a given user. The terminal at the bottom shows the output of the application, displaying a warning about pandas indexing and a table of recommended products for the user 'zippy'.

```
1 #from cgitb import text
2 from flask import Flask,render_template,request
3 import model
4 app = Flask(__name__)
5
6 valid_userid = ['00sab00','1234','zippy','zburt5','joshua','dorothy w','rebecca','walker557','samantha','
7 @app.route('/')
8 def view():
9     return render_template('index.html')
10
11 @app.route('/recommend',methods=['POST'])
12 def recommend_top5():
13     print(request.method)
14     user_name = request.form['User Name']
```

output\_df['lemmatized\_text'] = output\_df['reviews\_text'].map(lambda text: normalize\_and\_lemmaize(text))  
C:\Users\ushas\OneDrive\Desktop\Capstone\_New\model.py:115: SettingWithCopyWarning:  
A value is trying to be set on a copy of a slice from a DataFrame.  
Try using .loc[row\_indexer,col\_indexer] = value instead

See the caveats in the documentation: [https://pandas.pydata.org/pandas-docs/stable/user\\_guide/indexing.html#returning-a-view-versus-a-copy](https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

```
output_df['predicted_sentiment'] = model_predict(output_df['lemmatized_text'])
          name ... predicted_sentiment
688 Windex Original Glass Cleaner Refill 67.6oz (2... ... 0
689 Windex Original Glass Cleaner Refill 67.6oz (2... ... 0
690 Windex Original Glass Cleaner Refill 67.6oz (2... ... 0
691 Windex Original Glass Cleaner Refill 67.6oz (2... ... 0
692 Windex Original Glass Cleaner Refill 67.6oz (2... ... 0
```

[5 rows x 4 columns]  
127.0.0.1 - - [25/May/2025 22:45:39] "POST /recommend HTTP/1.1" 200 -

C:\Users\ushas\OneDrive\Desktop\Capstone\_New>

Thank You