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--- app.py ---
from flask import Flask, render_template
app = Flask(__name__)

@app.route('/')
def dashboard():
    return render_template('index.html')

if __name__ == '__main__':
    app.run(debug=True)

--- templates/index.html ---
<!DOCTYPE html>
<html>
<head><title>Cosmetic Insights Dashboard</title></head>
<body>
    <h1>Cosmetic Insights Dashboard</h1>
    <iframe src="https://public.tableau.com/views/CosmeticInsights/Dashboard1"
width="1000" height="800"></iframe>
</body>
</html>

--- data_preparation.py ---
import pandas as pd
from textblob import TextBlob

df_reviews = pd.read_csv('reviews.csv')
df_reviews['sentiment'] = df_reviews['review_text'].apply(lambda x:
TextBlob(x).sentiment.polarity)

df_products = pd.read_csv('products.csv')
df_products['category'] = df_products['category'].astype('category').cat.codes

df_reviews.to_csv('reviews_cleaned.csv', index=False)
df_products.to_csv('products_cleaned.csv', index=False)

--- products.csv ---
product_id,name,brand,category,ingredients,price
1,Lipstick A,BrandX,Lipstick,"Wax, Oil, Pigment",15
2,Foundation B,BrandY,Foundation,"Water, Silicone, Pigment",25
3,Eyeliner C,BrandZ,Eyeliner,"Wax, Carbon Black",10

--- reviews.csv ---
review_id,product_id,rating,sentiment,review_text
101,1,4,0.8,"Loved the texture and color"
102,2,2,-0.5,"Caused irritation on my skin"
103,3,5,0.9,"Perfect and long-lasting"

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--- sales.csv ---

sale_id,product_id,date,units_sold

1001,1,2025-06-01,150

1002,2,2025-06-02,85

1003,3,2025-06-03,120

--- requirements.txt ---

Flask==2.3.2

pandas==2.2.2

textblob==0.18.0