Import streamlit as st

Import pandas as pd

Import matplotlib.pyplot as plt

From utils import preprocess\_data, predict\_next\_day

St.title(“Predicting Tesla (TSLA) Stock Price Using AI and Time Series Analysis”)

Uploaded\_file = st.file\_uploader(“Upload Tesla stock CSV”, type=”csv”)

If uploaded\_file

Df = pd.read\_csv(uploaded\_file)

Else:

Df = pd.read\_csv(“data/tsla\_data.csv”)

St.subheader(“TSLA Stock Data Preview”)

St.dataframe(df.tail())

Preprocessed\_df = preprocess\_data(df)

Predicted\_price = predict\_next\_day(preprocessed\_df)

St.success(f”Predicted Next Closing Price for TSLA: ${predicted\_price:.2f}”)

St.subheader(“TSLA Closing Price Chart”)

Plt.figure(figsize=(10, 4))

Plt.plot(df[‘Close’], label=”Close Price”)

Plt.title(“TSLA Stock Closing Price”)

Plt.xlabel(“Time”)

Plt.ylabel(“Price ($)”)

Plt.legend()

St.pyplot(plt)