import streamlit as st

import pandas as pd

import plotly.express as px

# Page Config

st.set\_page\_config(page\_title="Empower AI Dashboard", page\_icon="📊", layout="wide")

# Title

st.title("📊 Empower AI: Transformative Learning Dashboard")

st.write("A CSR Initiative by Microsoft & SAP")

# Upload Data

uploaded\_file = st.file\_uploader("Upload CSV or Excel file", type=["csv", "xlsx"])

if uploaded\_file:

try:

df = pd.read\_csv(uploaded\_file) if uploaded\_file.name.endswith(".csv") else pd.read\_excel(uploaded\_file)

st.success("File uploaded successfully!")

except Exception as e:

st.error(f"Error loading file: {e}")

st.stop()

# Show Data

st.subheader("Dataset Preview")

st.dataframe(df.head())

# Data Summary

st.subheader("Dataset Summary")

st.write(df.describe())

# Select Columns

numeric\_columns = df.select\_dtypes(include=['number']).columns.tolist()

categorical\_columns = df.select\_dtypes(include=['object']).columns.tolist()

# Visualization

st.subheader("📈 Data Visualization")

chart\_type = st.selectbox("Select Chart Type", ["Bar Chart", "Line Chart", "Pie Chart"])

if chart\_type == "Bar Chart":

x\_axis = st.selectbox("Select X-axis", categorical\_columns)

y\_axis = st.selectbox("Select Y-axis", numeric\_columns)

fig = px.bar(df, x=x\_axis, y=y\_axis, title=f"{x\_axis} vs {y\_axis}")

st.plotly\_chart(fig)

elif chart\_type == "Line Chart":

x\_axis = st.selectbox("Select X-axis", categorical\_columns)

y\_axis = st.selectbox("Select Y-axis", numeric\_columns)

fig = px.line(df, x=x\_axis, y=y\_axis, title=f"{x\_axis} vs {y\_axis}")

st.plotly\_chart(fig)

elif chart\_type == "Pie Chart":

category = st.selectbox("Select Category", categorical\_columns)

value = st.selectbox("Select Value", numeric\_columns)

fig = px.pie(df, names=category, values=value, title=f"{category} Distribution")

st.plotly\_chart(fig)

# Download Processed Data

st.subheader("⬇ Download Processed Data")

st.download\_button("Download CSV", df.to\_csv(index=False).encode('utf-8'), "processed\_data.csv", "text/csv")