import streamlit as st

import yfinance as yf

import pandas as pd

from streamlit\_autorefresh import st\_autorefresh

st.set\_page\_config(page\_title="S&P 500 Dividend Tracker", layout="wide")

st\_autorefresh(interval=600000, key="data\_refresh") # Refresh every 10 min

st.title("📈 S&P 500 Dividend Tracker - 6 Month Yield Projection")

@st.cache\_data(ttl=3600)

def get\_sp500\_tickers():

table = pd.read\_html("https://en.wikipedia.org/wiki/List\_of\_S%26P\_500\_companies")

return table[0]["Symbol"].tolist()

@st.cache\_data(ttl=3600)

def get\_dividend\_data(tickers):

data = []

for ticker in tickers:

try:

stock = yf.Ticker(ticker)

info = stock.info

dividends = stock.dividends

last\_div\_date = dividends.index[-1] if not dividends.empty else None

annual\_div = info.get("dividendRate", 0.0)

forward\_yield = info.get("dividendYield", 0.0)

half\_year\_yield = (annual\_div / 2) if annual\_div else 0.0

data.append({

"Ticker": ticker,

"Company": info.get("shortName", ""),

"Dividend Rate (Annual)": round(annual\_div, 2),

"6-Month Yield Est.": round(half\_year\_yield, 2),

"Forward Dividend Yield (%)": round(forward\_yield \* 100 if forward\_yield else 0.0, 2),

"Last Dividend Date": last\_div\_date

})

except Exception:

continue

return pd.DataFrame(data)

with st.spinner("Fetching data..."):

tickers = get\_sp500\_tickers()

df = get\_dividend\_data(tickers)

top\_n = st.slider("Show Top N by 6-Month Estimated Yield", 5, 50, 15)

sorted\_df = df.sort\_values("6-Month Yield Est.", ascending=False).head(top\_n)

st.dataframe(sorted\_df, use\_container\_width=True)

st.subheader("📊 Dividend Yield Chart (Top by 6M Yield)")

st.bar\_chart(sorted\_df.set\_index("Ticker")["6-Month Yield Est."])