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import streamlit as st
import pandas as pd
import snscrape.modules.twitter as sntwitter
import pymongo

Client = pymongo.MongoClient('mongodb://APHSC0899-LAP:27017')
db = Client['twitter']

keyword = "ElonMusk"
start_date = "2023-02-15"
end_date = "2023-04-03"
limit = 1000

def scrape_twitter_data(keyword, start_date, end_date, limit):
    tweets = []
    for i, tweet in enumerate(sntwitter.TwitterSearchScraper(f'{keyword} since:{start_date}
until:{end_date}').get_items()):
        if i >= limit:
            break
        tweet_dict = {
            'date': tweet.date,
            'url': tweet.url,
            'content': tweet.content,
            'user': tweet.user.username,
            'reply_count': tweet.replyCount,
            'retweet_count': tweet.retweetCount,
            'language': tweet.lang,
            'source': tweet.sourceLabel,
            'like_count': tweet.likeCount,
        }
        tweets.append(tweet_dict)

    db[keyword].insert_many(tweets)
    return pd.DataFrame(tweets)

# Set up the sidebar
st.sidebar.title('Twitter Scraper')
keyword = st.sidebar.text_input("Enter a keyword or hashtag to search for:")
start_date = st.sidebar.date_input('Start date:')
end_date = st.sidebar.date_input('End date:')
limit = st.sidebar.slider('Limit:', 1, 1000, 100)

# Set up main page
st.title('Twitter Scraper')
if keyword:
    st.write(f'Scraping tweets containing "{keyword}"...')
    data = scrape_twitter_data(keyword, start_date, end_date, limit)
    st.write(data)
```

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if st.button('Upload to MongoDB'):
    db[keyword].insert_many(data)
    st.success(f'Successfully uploaded {len(data)} tweets to MongoDB!')

file_format = st.selectbox('Choose a file format to download:', ('CSV', 'JSON'))
if st.button('Download'):
    if file_format == 'CSV':
        data.to_csv(f'{keyword}.csv', index=False)
        st.success(f'Successfully downloaded {len(data)} tweets as CSV!')
    else:
        data.to_json(f'{keyword}.json', index=False)
        st.success(f'Successfully downloaded {len(data)} tweets as JSON!')
```