Project Title: GitHub Issue Analyzer using FastAPI and Streamlit

The main goal of this project is to analyze issues from a GitHub repository and summarize their content using an AI model. This helps developers understand issue descriptions quickly.

- **Backend:** FastAPI (Python)
- **Frontend:** Streamlit
- **ML Model:** Hugging Face Transformers (e.g., BART or T5)
- **API Communication:** HTTP requests (via requests)

```
ai-github-issue-assistant/
|
 ├── main.py              ← FastAPI backend (runs server)
 ├── model.py             ← LLM logic (summarization, classification, etc.)
 ├── utils.py             ← Helper functions (e.g., GitHub API fetch)
 ├── requirements.txt     ← All Python dependencies
 ├── frontend/
|   └── app.py            ← Streamlit app (simple UI to interact)
```

main.py (FastAPI Backend)

This file runs the **API server**.

◆ **Purpose:**

- Accept repo URL and issue number.
- Fetch issue details (via utils.py)
- Run AI analysis on issue (via model.py)
- Return results to frontend.

utils.py (GitHub Issue Fetcher)

- **Purpose:**

Fetch issue title, body, and comments from GitHub using the GitHub API.

model.py (Hugging Face Transformers Model)

- **Purpose:**

Use **a free transformer model** (e.g., distilbart-cnn-12-6) to summarize GitHub issue info.

frontend/app.py (Streamlit App)

- **Purpose:**

Simple web UI to accept GitHub repo URL and issue number, call backend, and display analysis.

Input:
{

"issue_title": "Login error",

"issue_body": "Clicking the Google login button causes a 500 error in production."

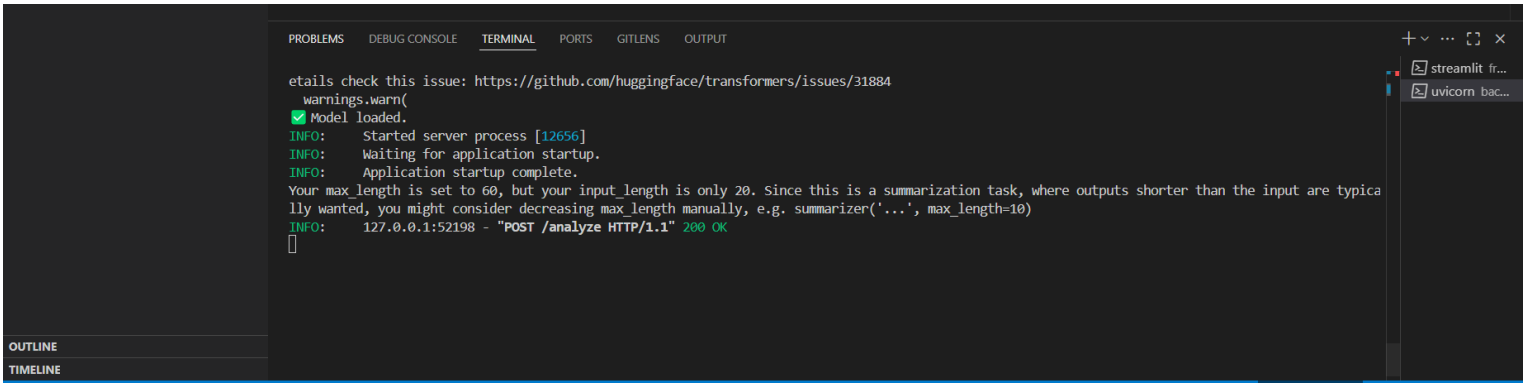
}

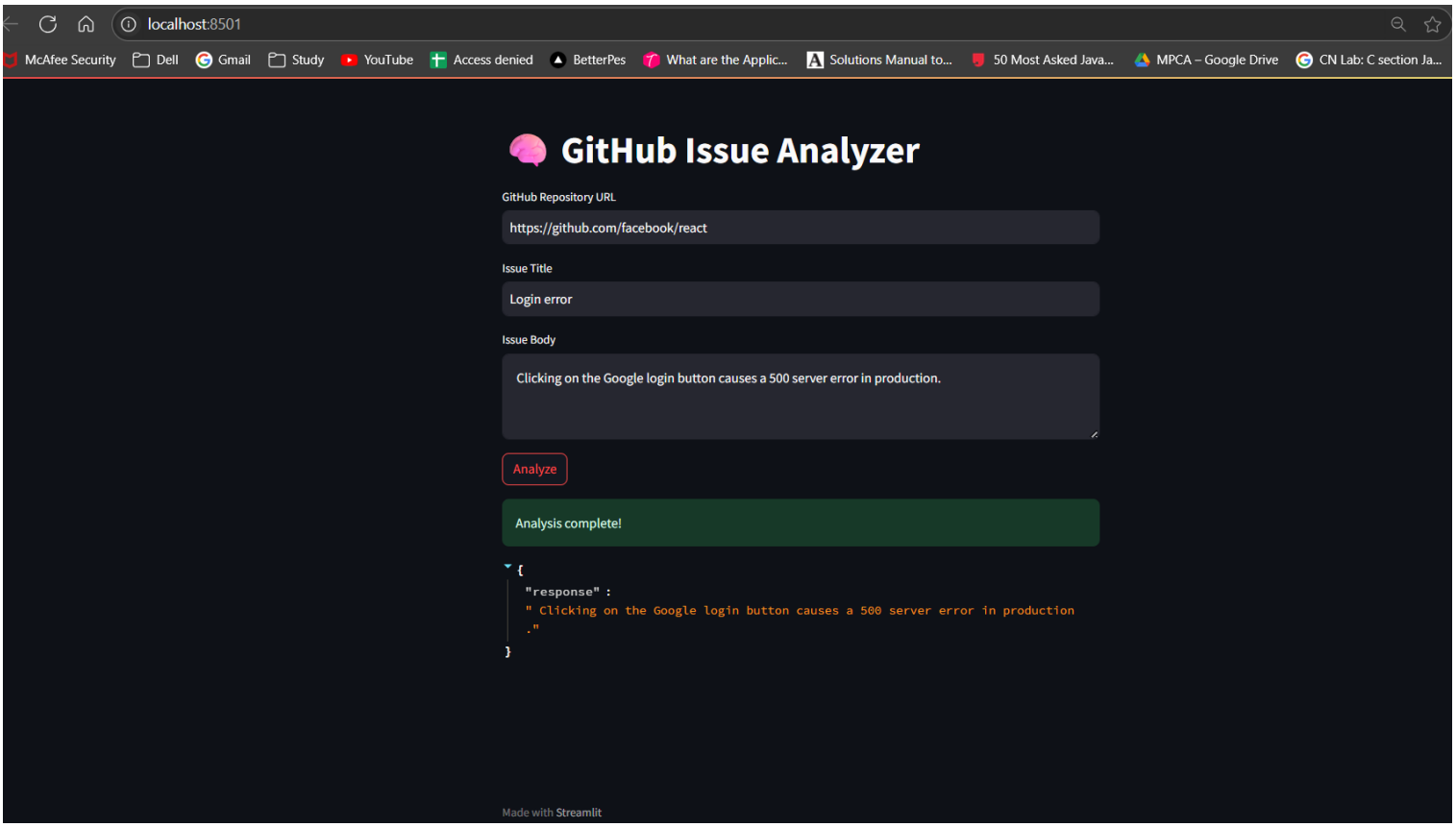
Output:
{

"response": " Clicking on the Google login button causes a 500 server error in production ."

}

Screenshot:


PROBLEMS
DEBUG CONSOLE
TERMINAL
PORTS
GITLENS
OUTPUT
etails check this issue: https://github.com/huggingface/transformers/issues/31884
warnings.warn(
Model loaded.
INFO: Started server process [12656]
INFO: Waiting for application startup.
INFO: Application startup complete.
Your max_length is set to 60, but your input_length is only 20. Since this is a summarization task, where outputs shorter than the input are typica
lly wanted, you might consider decreasing max_length manually, e.g. summarizer('...', max_length=10)
INFO: 127.0.0.1:52198 - "POST /analyze HTTP/1.1" 200 OK
streamlit fr...
uvicorn bac...
OUTLINE
TIMELINE


localhost:8501
McAfee Security
Dell
Gmail
Study
YouTube
Access denied
BetterPes
What are the Applic...
Solutions Manual to...
50 Most Asked Java...
MPCA – Google Drive
CN Lab: C section Ja...
GitHub Issue Analyzer
GitHub Repository URL
https://github.com/facebook/react
Issue Title
Login error
Issue Body
Clicking on the Google login button causes a 500 server error in production.
Analyze
Analysis complete!
{
"response" :
" Clicking on the Google login button causes a 500 server error in production
."
}
Made with Streamlit