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Current Module: Network Programming with Python
Project Name: Safetydome

Project Goals:

The goal of the project is to demonstrate an understanding of network programming with python accessing an SQL database.

Considerations:

What will happen when a new type is seen.
What will happen with random user input
SQL injection
Does the database exist
Can the database be connected to

Initial Design:

The initial design and the final design do not differ. The project utilizes flask to dynamically create web pages from SQL database queries, and html templates. There is one function per web site.

Data Flow:

When the python script is executed it listens on the localhost on port 8058 for http requests. When it receives them it looks for a match in its functions. If one is found and no other errors occur, a new http page will be generated and returned. Else 404

Communication Protocol:

CMD line options: none. The database, username, and password are all specified.
Signals handled: None.
Potential Pitfalls: SQL injection

Test Plan:

Input invalid database name
Database is empty
Database exists but is not the correct type
Multiple command line arguments.
Invalid URL requests.

Expected Result:

I expect the behavior outlined in the initial design to be appropriately implemented. The program will not seg-fault.

Conclusion:

The program works as intended. It makes use of SQL to actually search and manipulate the database.