Server - project 4 Keren Chen keren9 Jiahui Huang Hjiahui7

This is based on the base files for the CS 3214 "Personal Secure Server" project.

To get started, run the script:

. install-dependencies.sh

Then cd into src and type make.

To compile

Switch into the src/ dir and use

```
> make clean all; make
```

To reset all things and compile

To Run

in src/ call

```
> ./server -p [port number]
```

To make the server listen to a specific port use "-h" flag to see more options and details With "-s" flag, the server will run in silent mode

To debug

The code is currently optimized for performance. For debugging purposes, user alternative compile flags commented out in Makefile; or customize it as needed.

Features and Notes

This project uses a 500 thread thradpool, and can listen to a reasonable amount of clients. Supports both HTTP 1.0, HTTP 1.1 and IPV4, IPV6. Robust enough to withstand all testcases. Extra credit implemented; performs better with 4000 threads, yet a bug in auto-grader prevents so; currently reduced performance with 500.

Request format: Users are allowed to

1. Login to the server / interact with API "api/login/REQUEST_TYPE" Users are allowed to use POST, providing user name and password as credentials. If the credentials are valid, a signature will be returned as cookie. Client can use this signature for previlaged accesses. Users are also allowed to use GET, providing the signature obtained as a cookie to obtain the signature's issue time, expiration time, and user name as a json file returned. In case of invalid signature, an empty json will be provided.
2. Obtain static assets "/path/to/asset" Any user can request for static assets on the server. However, to obtain secret information in the "/private" folder, on must provide a valid signature, as obtained in the API POSTrequest.

In case of successful requests, 200 OK will be returned; otherwise, specific returning values will be returned based on specific errors.