

Lab3 report

Overview

This lab mainly includes two parts. The first part is to manually update the value and get the updated value. The second part is to set the value to be updated once per second and displayed on the webpage.

How to run

1. Enter 'pip3 install flask' in terminal
2. Open the first server in terminal 'python3 app.py 8000'
3. Open another server in another terminal 'python3 app.py 8001'
4. Access 'http://127.0.0.1:8000' in browser

Tools

Ajax

Flask

Html

Python3

Description

app.py

The master server first reads the parameters from the command line, then reads the second parameter from the command line, then sets the start variable 1000, and sets the statistics generator. Then start creating the Flask application. Read the contents of index and background image through def index() and def background(), and use the

statsGen.py function given by the professor to generate random numbers and return them to the client (html).

index.html

The first is to simply set the style of the entire web page, and then use the two request functions set to achieve data transmission. Later, I used set Interval to make a timer loop in window.onload = function(). Called once every 1 second. After Request2 gets the data and returns, use innerHtml to display the assembled data on the interface. Finally set up two objects, the first set button to run request1 () to achieve the update, the second display a data and refresh every second.

StatsGen.py

This program is from the professor and is mainly responsible for the production of random numbers. Random numbers are generated in a loop, and the data of the file is called by the request function.

Conclusion

In this lab, I learned how to create and transfer stats, and transfer randomly processed data based on different servers. How to use a web page to send a request to one server and then update the data of another server, and how to write a timer loop. For me, individual is more difficult than teamwork, because I have less communication, and all the work needs to be done by myself instead of assigning tasks to everyone in the group. This is a challenge, but also an opportunity to learn.