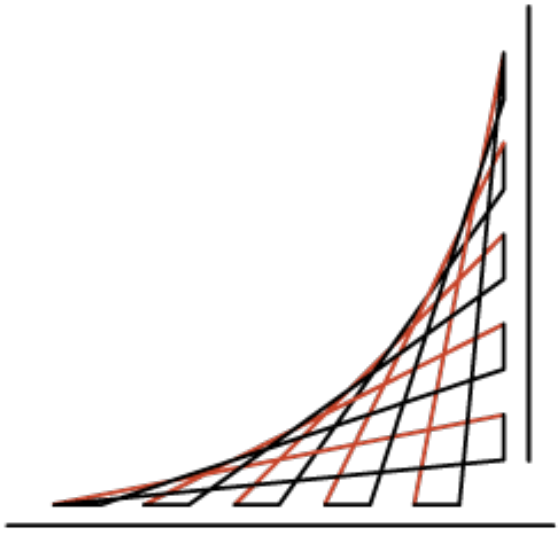

ESCUELA COLOMBIANA DE INGENIERÍA
JULIO GARAVITO

VIGILADA MINEDUCACIÓN

SYSTEMS ENGINEERING

Arquitecturas Empresariales

Workshop 3

Luis Daniel Benavides Navarro

Author:
Juan Camilo Angel Hernandez

Contents

1 Introducction

The goal of this workshop is to write a web server using java that supports multiple requests in a row. The server should return all requested static files, including html pages and images. A web page will be built using javascript to test the server.

2 Architecture

The client-server model, or client-server architecture, is a distributed application framework because the components do their work independently. In this architecture the tasks are separated between the servers and clients, which communicate through the internet. The client sends a request to access a service made available by a server and then it responds. The server hosts, delivers and manages the resources and services that the client will consume.

In this architecture, communication is carried out following a request-response messaging pattern and must have a common communication protocol, which is generally TCP/IP[1]. The figure [1] describe the client-server architecture, where we can see its different components.

Figure 1: client-server architecture, *taken from: [2]*

In this workshop the client would be the web browser and the server is the application hosted on heroku, this server is capable of responding to requests that allow obtaining html pages and images.

When making the request for the index.html resource, the server delivers a web page like the one that can be seen in the figure [2] , on this page we can enter our name so that when pressing a button a message with a greeting appears, we can also view images and hide or show it, these functionalities are thanks to the fact that the server also supports requests on javascript resources.

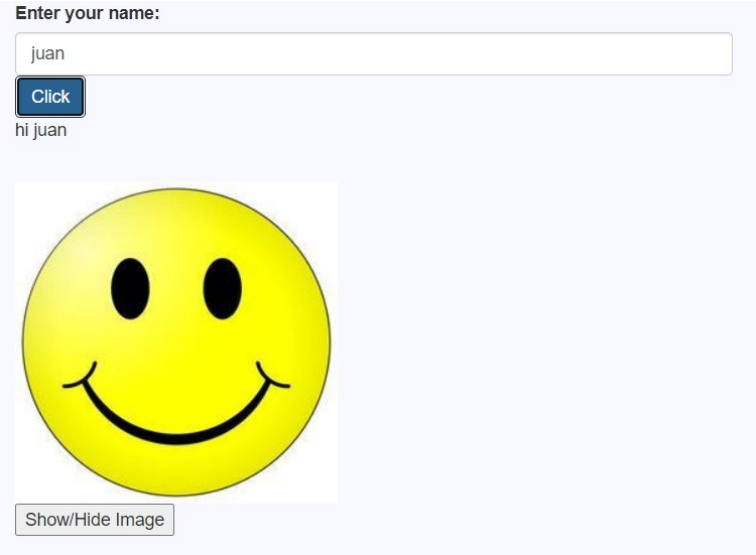

Figure 2: web page

3 Conclusions

In this workshop we implemented a client server architecture, which allowed us to learn how servers process and manage the requests that different clients make, these requests can be about services or about resources such as web pages or images.

4 References

[1] OmniSci, *Client-server definition*, `https://www.omnisci.com/technical-glossary/client-server`, Accessed on 2020-09-03.

[2] *What is client-server architecture*, `https://www.w3schools.in/what-is-client-server-architecture/`, Accessed on 2020-09-03.