Colin Koo

<https://github.com/thirdslipper/CS380-EX8>

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\* Program: This program emulates receiving a html packet-protocol through a server socket.

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import java.io.BufferedReader;

import java.io.File;

import java.io.FileReader;

import java.io.IOException;

import java.io.InputStreamReader;

import java.io.PrintStream;

import java.net.ServerSocket;

import java.net.Socket;

public class WebServer {

/\*\*

\* Creates a server socket that receives data from a client, which would be a HTTP request.

\* @param args

\*/

public static void main(String args[]){

try {

ServerSocket serverSocket = new ServerSocket(8080);

Socket socket = serverSocket.accept();

BufferedReader br = new BufferedReader(new InputStreamReader(socket.getInputStream()));

String[] data = getData(br);

String filepath = "www" + data[1]; //get location of file

PrintStream out = new PrintStream(socket.getOutputStream(), false);

String content = "", temp = "";

BufferedReader fileReader = null;

if ((new File(filepath)).exists()){ // get content

fileReader = new BufferedReader(new FileReader(filepath));

while ((temp = fileReader.readLine()) != null){

content += temp;

}

}

else{

fileReader = new BufferedReader(new FileReader(new File("www/notfound.html")));

while ((temp = fileReader.readLine()) != null){

content += temp;

}

}

String header = data[2] + " 200 OK\nContent-type: text/html\nContent-length: " + content.length() + "\n\n";

out.println(header + content);

fileReader.close();

out.close();

br.close();

serverSocket.close();

} catch (IOException e) {

e.printStackTrace();

}

}

/\*\*

\* Returns a data array containing GET, the HTML file, and

\* @param br

\* @return

\*/

public static String[] getData(BufferedReader br){

String[] data = new String[3];

String input = "";

try {

while (((input = br.readLine()) != null)){

if (input.contains("GET")) {

//GET /hello.html HTTP/1.1

data = input.split(" ", 3);

}

}

} catch (IOException e) {

e.printStackTrace();

}

return data;

}

}