**Exercise 08**

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**Link to Project:** <https://github.com/hvluu/CS380/tree/master/Exercises/Exercise8>

**WebServer.java**

*import java.io.BufferedReader;*

*import java.io.File;*

*import java.io.FileInputStream;*

*import java.io.IOException;*

*import java.io.InputStreamReader;*

*import java.io.PrintStream;*

*import java.net.ServerSocket;*

*import java.net.Socket;*

*import java.util.Scanner;*

*public class WebServer {*

*public static void main(String[] args) {*

*try {*

*ServerSocket serverSocket = new ServerSocket(8080);*

*System.out.println("Listening to connection on port 8080 ....");*

*while (true) {*

*Socket socket = serverSocket.accept();*

*BufferedReader br = new BufferedReader(new InputStreamReader(socket.getInputStream(), "UTF-8"));*

*String text;*

*String path = br.readLine();*

*System.out.println(path);*

*String[] getPath = path.split(" ");*

*File file = new File("www" + getPath[1]);*

*PrintStream out = new PrintStream(socket.getOutputStream(), true, "UTF-8");*

*System.out.println("\nChecking if the file exists");*

*if (file.exists()) {*

*FileInputStream fis = new FileInputStream(file);*

*//Can't seem to print it this way*

*out.println("HTTP/1.1 200 OK");*

*out.println("Content-type: text/html");*

*out.println("Content-length: " + file.length() + "\n");*

*// Can't print with printstream so print it the regular way*

*System.out.println("HTTP/1.1 200 OK");*

*System.out.println("Content-type: text/html");*

*System.out.println("Content-length: " + file.length() + "\n");*

*Scanner scan = new Scanner(file);*

*while (scan.hasNext()) {*

*out.println(scan.nextLine());*

*}*

*scan.close();*

*fis.close();*

*} else {*

*File errorFile = new File("www/404 Not Found.html");*

*FileInputStream errorFis = new FileInputStream(errorFile);*

*//Can't seem to print it this way*

*out.println("HTTP/1.1 404 Not Found");*

*out.println("Content-type: text/html");*

*out.println("Content-length: " + errorFile.length() + "\n");*

*// Can't print with printstream so print it the regular way*

*System.out.println("HTTP/1.1 404 Not Found");*

*System.out.println("Content-type: text/html");*

*System.out.println("Content-length: " + errorFile.length() + "\n");*

*Scanner scanErrorFile = new Scanner(errorFile);*

*while (scanErrorFile.hasNext()) {*

*out.println(scanErrorFile.nextLine());*

*}*

*scanErrorFile.close();*

*errorFis.close();*

*}*

*socket.close();*

*}*

*} catch (IOException e) {*

*e.printStackTrace();*

*}*

*}*

*}*