

Auto Marking Program Guideline

Things to do for Web Server

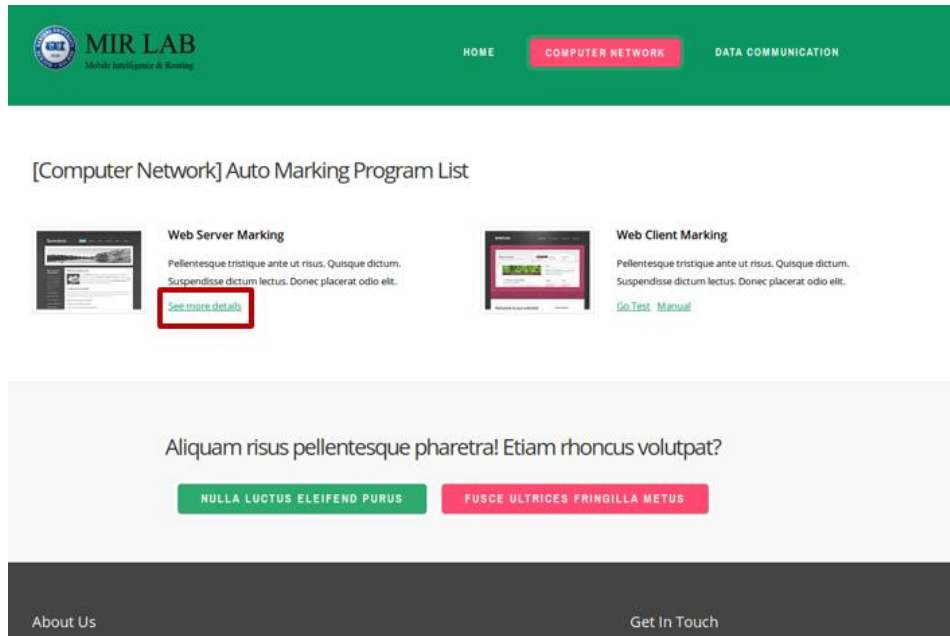
1. You have to handle message received from Web client with multi thread (Iteration Structure, Single Thread Structure is not acceptable)
2. There is a lot of ERROR CODE on HTTP; however, we are going to mark 3 codes 200 OK, 404 NOT FOUND, 400 BAD REQUEST (in 400 BAD REQUEST case, you just need to handle HTTP/1.1 Protocol. If Client send request message as HTTP/1.0 Protocol version you should send 400 BAD REQUEST. It is what you have to do for 400 ERROR CODE)
3. You have to make 2 Pages (First Page: Index, Second Page: Image, You can build pages as different names)
 - A. First page header should be text/html and 1024 length
 - B. Second page header should be image/jpeg and 1024 length
 - C. This conditions are for testing criteria
4. You have to set HTTP header Content Length as '1024', and Content Type as text/html for first page, Image/jpeg for second page

List of grading items

- (1) Socket & Program Handling
 - A. Web Server socket is opened normally
 - B. Multi Thread – Web Server should handle message with multi thread on each messages
- (2) Restful API
 - A. You just need to implement 'GET' method
- (3) ERROR Handling and response appropriate with response code
 - A. 200 OK: You should response 200 OK when Web Client approach correct URL that you assign on Web Server
 - B. 404 NOT FOUND: You should response 404 NOT FOUND if Web Client approach WRONG URL that you don't assign on Web Server
 - C. 400 BAD REQUEST: If Client send you request with HTTP/1.0 Version, you should send 400 BAD REQUEST.
- (4) HTTP Header Handling CheckD
 - A. Content Length: We set Content Length as '1024' so as to check if you can handle http header or not
 - B. Content Type: text/html (first Page), image/jpeg (second Page)


How to test?

1. Approach 166.104.143.225/index through your web browser (Internet Explorer, Chrome, Firefox and etc.). Next move to "Computer Network" and click "Go Test"(Student manual is right next to "Go Test").



TEST PROGRAM

166.104.143.225/index


MIR Lab
 Mobile Intelligence & Routing

2017 Computer Network Web Server Test Program

All values should be written in English

Current Connection Info

Time : 2017.9.20. 13:14
 Your IP Address is :/218.235.241.17
 Your IP Port is : 62681

Student INFO

Student Number	Student Name	WebServer IP	WebServer PORT
<input type="text" value="2010102000"/>	<input type="text" value="HYUNJIN PARK"/>	<input type="text" value="192.168.1.1"/>	<input type="text" value="80"/>

Web Server Test URL Path

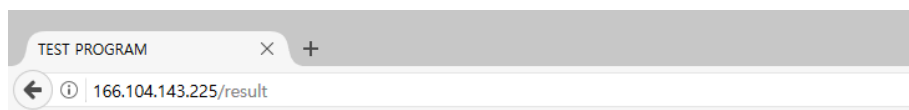
first Page	image Page
<input type="text" value="index.html"/>	<input type="text" value="image.jpg"/>

2. Fill in the blanks

A. Student Number(2017xxxxx)

- B. Student Name (Should be written in English)
- C. Your Web Server IP Address. If you are hard to find your global IP, refer to Current Connection Info in case you approaches this web site with the same computer
- D. Port that you assign for your Web server, Check this out on your Source Code
- E. First Page that your text/html is located
- F. Second Page that your Image/jpeg is located

3. ERROR Page



No route to host

Network Connction ERROR

Reason

1. Firewall Problem // sol. Port Forwarding if possible
 2. Wrong IP or Port Number
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If you are still in trouble, visit ITBT-402-1 or email us phj3372@hanyang.ac.kr

If you confront this page, 2 main reasons are Firewall problem or you had put Wrong Web Server IP Address or Port Number.

- (1) Firewall problem: You have to forward your port through Router. Most routers are available to forward specific port number; however some Router is impossible to forward part because of Telecom policy, in this case visit ITBT/402-1 and test it as local address.
- (2) Check your Web Server IP address or Port

4. Result Page

← 192.168.1.126:9000/result

Your Test Result

Student INFO

Student Number	Student Name	WebServer IP	WebServer PORT
2010102000	HYUNJIN PARK	192.168.1.125	9999

List of Test Items

WEB SERVER SOCKET :	False
GET METHOD :	False
STATUS CODE : 200 OK	False
STATUS CODE : 404 NOT FOUND(EXCEPTION HANDLING)	TRUE
STATUS CODE : 400 BAD REQUEST(HTTP PROTOCOL VERSION)	False
CONTENT LENGTH	False
CONTENT TYPE TEXT/HTML	False
CONTENT TYPE IMAGE/JPEG	False

(1) You can see what is wrong or correct with Reason