Advanced Internet Technologies

Lab Sessions

Exercises 1, 2

- Apache
- CGI

Lab Exercise 1

- Apache
  - Get the Apache bundle according to your operating system
  - ONLY Apache now
  - Install it
  - Deploy your web server
  - Show the traditional "It Works!" Screen
  - Find htdocs
  - Customize the initial page to show anything else

Lab Exercise 1

- Apache
  - Find the httpd.conf
  - Review it
  - Make Apache listen through port 8888 instead of 80
  - Restart the Apache server
  - Reload your page
  - If it fails, add the port number to the address
  - Write your experience report (Exercise 1), discussing the steps you took, problems you faced and how you solved them

Lab Exercise 2

- CGI
  - In your Apache server, locate the cgi-bin folder
  - Use your favorite text editor to write the following C code
    - Create a C++ program that defines a class with a method that, given an integer N input value, writes an HTML table with N rows with arbitrary content
    - Look example in the whiteboard

Lab Exercise 2

- CGI

```
<html>
 <head>
   <title>Lab Exercise 2<title>
 </head>
<body>
  <table>
    <tr><td>Iteration</td><td>1</td></tr>
  </table>
</body>
<html>
```

Lab Exercise 2

- CGI
  - Compile the C++ code using gcc, g++ or mingwC
    - Linux: # which gcc
    - Mac: $ which g++
    - Windows gcc.exe
  - Locate the generated object code and place it in cgi-bin
  - Verify that the permissions of the binary file are 755 (or execution permissions if Windows)

Lab Exercise 2

- CGI
  - Restart apache and try to execute the CGI
  - Tip: If it does not work, review the execution permissions of the cgi-bin folder in httpd.conf
  - Write your experience report (Exercise 2), discussing the steps you took, problems you faced and how you solved them