

INTERNET AND THE WORLD WIDE WEB

Assignment 2: Web Server

I. Assignment Description and Requirements

Students are required to develop a Web Server using Windows Socket Programming C++. The program should be able to serve **multiple requests** concurrently from different Web Browsers. The Web document stored in the Web Server could be an HTML file, image, or any other resource. The sample programs (namely, “server.cpp” and “client.cpp”) can be downloaded from the course Web site. The following is the illustration of the interactions between server and client:

- (1) A user inputs the IP address of the Web Server in the address bar of a Web Browser. The Web Browser will make a request to the Web Server as follows:

```
GET    /index.html    HTTP/1.0
```

- (2) The Web Server should accept the request and give a proper response to the Web Browser as follows:

```
HTTP/1.0    200    OK
Content-Type: TEXT/HMTL
Content-Length: 100
...
```

- (3) When the Web Browser receives the requested Web Page, it will interpret the content and display it on the screen.

II. Assignment Submission

- (1) This is a group assignment (at most four members). Please upload a list of your group members to iSpace on or before 15th November 2024 (before 5:00 pm).
- (2) You should submit the source codes (in a single compressed file) to iSpace on or before 2nd December 2024 (Monday, before 9:00 am).
- (3) Each group is required to give a 10-minute English presentation with a demonstration in Weeks 13 and 14.