

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).
- (2) You should submit the source codes (in a single compressed file) to iSpace on or before the 8th of December, 2023 (Friday, before 8:00 a.m.).
- (3) Each group is required to give a 10-minute English presentation with a demonstration in Week 12 and 13.