COMP 4620 Web-Based Information Systems

**Seminar/Lab 6**

**Web Server with Node.js – part II**

1. **Objectives**

* Understand how modules work
* Understand how HTTP works within Node.js
* Complete Node WebServer.

1. **Implementation of web server**
   1. Requirements (You may start with the solution of the previous assignment.)

* index.js
* server.js
* router.js
  + Different content types need to be supported.
  + Non .sjs file needs to be read and sent back to the client.
  + For .sjs file,
    - Prepare \_GET, and invoke proceed\_sjs(…).
    - Prepare \_POST, and invoke proceed\_sjs(…).
    - proceed\_sjs(),
      * require pathname
      * invoke proceed() in the module
      * You need to support try-catch.
      * The required module should be deleted.
  1. A sever-side JS program, calculator.sjs,
* Similar to Exercise 7 Trial E3
* User queries: { op: …, x: …, y: …}
  + op: ‘addition’, ‘subtraction’, ‘multiplication’, ‘division’
  + x and y include numbers.

1. **How to test?**
   1. Run your Node WebServer.
   2. //cs.tru.ca/~mlee/comp4620/Winter2022/4. back\_end\_technologies/calculator.html is a simple calculator web program. You may use it for testing your Node WebServer. Of course, you may need to change the url in the client program.
2. **How to keep running ‘node’ when you logout?**
   1. You need to run your Node web server using the ‘nohup’ command so that your web server can be tested later. For example,

$ nohup node index.js &

* 1. How to kill the above node process later?
* Find your process. E.g., $ ps -aef | grep node
* $ kill -p *process\_number*

1. **Assignment**
   1. Submission

* The URL of an HTML file that uses calculator.sjs in 2.b).
* Total marks: 20
* Due:
  + 11:59 PM, March 3, 2022 – 10% bonus
  + 6:00 PM , March 7, 2022 – full marks
  + 6:00 PM, March 8, 2022 – 10% penalty
* Any late submission will not be accepted.
* You should not update the application after you submitted. The information of any update of a file/directory will be left on CS, and I can check the last update date and time.
* The evaluation will be usually one of pass, half-pass, and fail. Most incomplete applications will get fail.