Bash Script, Git and Introduction to Node.js Week: Todo List

1. Master - Bash script and Git

By the end of this week, you should **MASTER** these topics:

→ Terminal, Bash script and Git

- ◆ Bash script and the most common Bash commands
- Git and GitHub
- ◆ The most common Git commands
- ◆ Creating Git repositories
- ◆ What is meant by cloning, tracking, forking, merging, committing, pushing and sending a pull request in Git

→ Introduction to Node.js

- How a website works
 - Understanding a webpage, the browser, browser's JavaScript engines
 - Static vs dynamic webpage
 - Requesting and receiving data from a remote computer
 - Understanding the TCP/IP Networking Layers
 - Web servers: meaning and how they work
- Problems related to handling concurrent requests problem
- ◆ Threading, blocking/synchronous architecture
- ◆ Node.js as a solution to the problem of blocking/synchronous architecture
- ◆ Non-blocking or Asynchronous Architecture
- ◆ Installing Node.js and running scripts on Node
- ◆ What NPM does and how to use it

By the end of last week, you should have already watched the class videos on "Introduction to terminal, Bash Script and Git" and "Introduction to Node.js". You should have also listed out all of your questions.

1.1. Start by working on Bash and Git practice questions (3 hrs)

- Instructions on how to complete the questions is found here:
 - Link to your homework
- Try the homework on your own first and discuss it with your groupmates
- List out the parts you don't understand and ask your groupmates when you meet in groups

1.2. Complete the "Bash and Git" and "Node.js" checklists (1 hr)

- Bash and Git checklist
 - Link to Bash & Git Checklist
- Introduction to Node Checklist
 - Link to Introduction to Node Checklist
- Mark the ones you understood as complete, and list out the parts you didn't understand for further discussion

1.3. Before you meet your instructors in the group discussions

- Meet with your groupmates before the group sessions with Evangadi instructors. (Please take the lead in inviting everyone for discussion)
- Try to discuss the questions you have with your groupmates

1.4. Attend the 2 group meeting sessions with your instructors (4 hrs)

- Discuss the remaining questions you have prepared
- Turn your camera on, share your screen and participate

2. <u>Prepare for Next Week - Introduction to Node modules and Building web</u> <u>server (http & Express)</u>

2.1. Watch the "Introduction to Node modules" videos (3hrs).

- DO NOT just watch the video. Make sure you are pausing the video and practicing on your computer
- Read the lecture note side by side
- Prepare your questions for the lecture session

2.2. Watch the Building web server (http & Express)" videos (4hrs 30min)

- DO NOT just watch the video. Make sure you are pausing the video and practicing on your computer
- Read the lecture note side by side
- Prepare your questions for the lecture session

2.3. Attend the "Introduction to Node modules" and "Building web server (http & Express)" live lectures (4hrs).

- Read the lecture note side by side
- Prepare to ask your questions