# Exercise11: Nodejs

**Objectives:**

- **To learn to use nodejs**

**Work with your group (or by yourself). Each group to upload only one submission.**

**Credits (for edits): Naresh Somisetty, Zahra Hosseini.**

# 1. Run node

1. Read the notes provided (nodeJS1.pptx.pdf and nodeJS2.pptx.pdf

2. Node can installed onto the "U" drive, but not by using the official installer. ([http://nodejsportable.sourceforge.net/](http://nodejsportable.sourceforge.net/) or [https://github.com/yjwong/nodejs-portable-runtime](https://github.com/yjwong/nodejs-portable-runtime) should work. They are basically downloading node.exe, node.lib and npm.zip from the node.js website.) If the above links do not work, navigate to [http://nodejs.org/dist/latest/win-x64/](http://nodejs.org/dist/latest/win-x64/) and download both node.exe and node.lib.

3. Create a file "hello.js" and enter the line 'console.log("hello");' in it.

4. run node by typing   node hello.js  at the terminal

5. use the debugger:   node debug hello.js

# 2. Warm Up: Try Some Examples

Download the examples from the assignment and try them all out! There are 10 examples:

1. modules

2. callback pattern

3. emitter pattern

4. timers

5. Buffer

6. readStreams

7. writeStreams

8. http server

9. tcp server

10. websockets

# 3. Client/Server Posts Application.

This application is same as that for exercise07 – EXCEPT that you need to use **websocket** to create it and make it have two way communication. Changes are highlighted in yellow.

Create a SINGLE PAGE web application to create, view, and update posts AND users on a webpage. Design the page as you wish.

## 3.1. Overview

UC1 View Posts: user Tom brings up the website. He is shown a log in page. After successfully logging in, he is shown a list of posts (made by him and other users). Others who are logged in now see Tom is logged in.

UC2 Make a Post: user Tom logs in. He clicks on the "make a post" button and enters his message. After he hits enter, the list of posts gets updated on the screen (with the latest post at the top). Others who are logged in, see his posts immediately.

UC3 Edit a Post: user Tom clicks on a post that he has made before. He enters a new message that overrides the old post. Others who are logged in see the changes immediately.

UC4 Logout: user Tom clicks on "logout" button and is taken back to the login page. Others who are logged in see Tom is logged out.

## 3.2. Design

Use node and websockets to design your pages/code.

## 3.3. CheckList

**[ ] All usecases should work as expected!**

# Submission:

Zip your files and submit on black board. Remember there is only one submission per group. Make sure to include all the files that are needed in order to run your program.