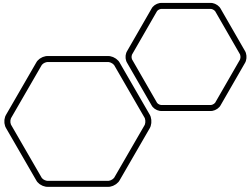





Software and Tools Preparation


Asst.Prof. Dr. Umaporn Supasitthimethee


ผศ.ดร.อุมาพร สุภสีทธิเมธี




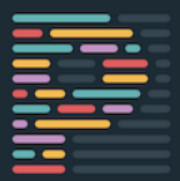
1. Preparing VSCode, Node.js and recommend extension





Live Server ritwickdey.liveserver
Ritwick Dey | 9,306,931 | ★★★★★ | Repository | License | v5.6.1
Launch a development local Server with live reload feature for static & dynamic pages
Disable Uninstall  This extension is enabled globally.




vscode-icons vscode-icons-team.vscode-icons
VSCode Icons Team | 8,466,128 | ★★★★★ | Repository | License | v11.6.1
Icons for Visual Studio Code
Set File Icon Theme Disable Uninstall  This extension is enabled globally.



Prettier - Code formatter esbenp.prettier-vscode
Prettier | 14,166,784 | ★★★★★☆ | Repository | License | v8.1.0
Code formatter using prettier
Disable Uninstall  This extension is enabled globally.



Bracket Pair Colorizer coenraads.bracket-pair-colorizer
CoenraadS | 5,828,261 | ★★★★★ | Repository | License | v1.0.61
A customizable extension for colorizing matching brackets
Disable Uninstall  This extension is enabled globally.



Visual Studio Code

- Download and install VSCode Software <https://code.visualstudio.com/>
- Install extension
 - Live server
 - Formatter
 - Vscode-icons

Node.js Installation



The screenshot shows the Node.js website homepage. At the top is a dark navigation bar with the Node.js logo and links for HOME, ABOUT, DOWNLOADS, DOCS, GET INVOLVED, SECURITY, CERTIFICATION, and NEWS. Below the navigation bar, a text line states: "Node.js® is a JavaScript runtime built on Chrome's V8 JavaScript engine." A green callout box contains the text: "New security releases now available for 16.x, 14.x, and 12.x release lines". Underneath, the heading "Download for Windows (x64)" is followed by two green buttons. The left button is labeled "14.17.4 LTS" with the subtext "Recommended For Most Users". The right button is labeled "16.6.1 Current" with the subtext "Latest Features". Below these buttons are two identical links: "Other Downloads | Changelog | API Docs". At the bottom, a text line says: "Or have a look at the Long Term Support (LTS) schedule."

Node.js® is a JavaScript runtime built on Chrome's V8 JavaScript engine.

New security releases now available for 16.x, 14.x, and 12.x release lines

Download for Windows (x64)


14.17.4 LTS
Recommended For Most Users

16.6.1 Current
Latest Features

Other Downloads | Changelog | API Docs Other Downloads | Changelog | API Docs

Or have a look at the Long Term Support (LTS) schedule.

<https://nodejs.org/en/>



```
app.js
1  var msg = 'Hello World';
2  console.log(msg);
3  msg.
4
```

- charAt (method) String.charAt(pos: number): string
Returns the character at the specified index.
- charCodeAt
- concat
- indexOf
- lastIndexOf
- length
- localeCompare
- match
- replace
- search
- slice
- split

Running Hello World

It's simple to run `app.js` with Node.js. From a terminal, just type:

```
node app.js
```

Integrated Terminal

VS Code has an [integrated terminal](#) which you can use to run shell commands. You can run Node.js directly from there and avoid switching out of VS Code while running command-line tools.

View > Terminal (`Ctrl+`` with the backtick character) will open the integrated terminal and you can run `node app.js` there:

```
TERMINAL 1: cmd.exe
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

c:\Users\gregvanl\Hello>node app.js
Hello World

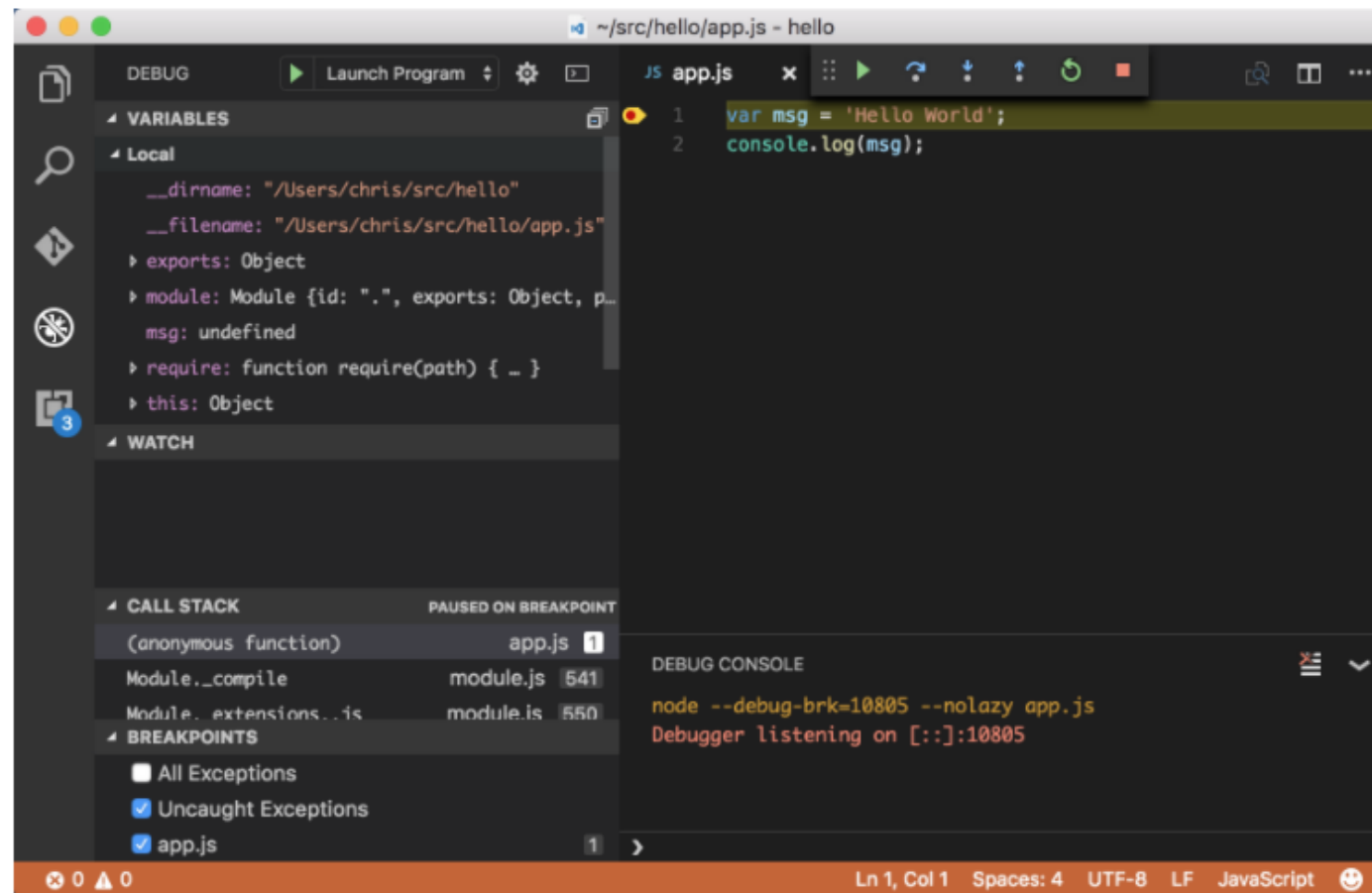
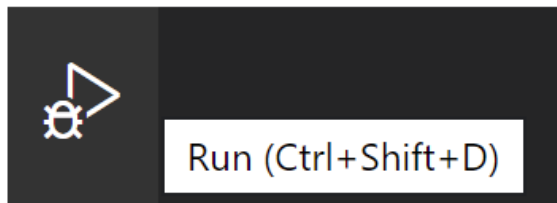
c:\Users\gregvanl\Hello>
```

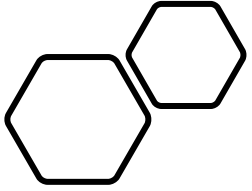
Debugging Hello World#

VS Code ships with a debugger for Node.js applications.

```
JS app.js x
1 var msg = 'Hello World';
2 console.log(msg);
```

To start debugging, select the Run View in the Activity Bar:





2. Install your git software



Git Version Control System Program

Visit <https://git-scm.com/>

Download and install git program

Test your git

```
git --version
```

Set your user and email

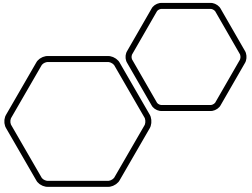
```
git config --global user.name "Umaporn Supasitthimethee"
```

```
git config --global user.email "umaporn@sit.kmutt.ac.th"
```

Check your config list

```
git config --list
```





3. Create Git repo for
your template files
(local)



Create Git Repo for your template files (Local)

- Create your local folder to store your project

```
mkdir <folder name>
```

- Go to your folder and initial your local repository

```
cd <folder name>
```

```
git init
```

- Open VSCode with current directory

```
code .
```



Create template files

- Create `index.html`
- Create `README.md`
- Create `script.js`



Save your version control (local)

- Ctrl + ` (on/off terminal)

- Check your files status

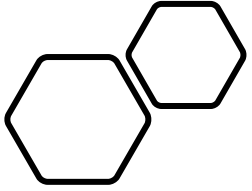
```
git status
```

- Add your git

```
git add .|<specified files>
```

- Commit your git

```
git commit -m "message"
```




4. Create Git Repo and push
for your template files
(Remote Site)

Create Git Repo at Github (Remote Site)

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Owner *

 umaporn-sup ▾

Repository name *

/ startup ✓

Great repository names are short and memorable. Need inspiration? How about [scaling-sniffle?](#)

Description (optional)



Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

☐ Add a README file

This is where you can write a long description for your project. [Learn more.](#)

☐ Add .gitignore

Choose which files not to track from a list of templates. [Learn more.](#)

☐ Choose a license

A license tells others what they can and can't do with your code. [Learn more.](#)

Create repository



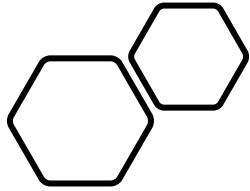
Add your remote site repo

- Set your git remote

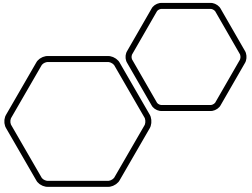
```
git remote add origin https://github.com/umaporn-sup/startup.git
```

- Push your local git to remote repo

```
git push -u origin master
```



Start your working project



Clone your template
to your new repo





Git Clone template project

1. Go to your (project) local directory
2. Use git clone command

```
git clone https://github.com/umaporn-sup/INT201_groupwork_template.git
```

3. Check your git remote status

```
git remote -v
```

4. Remove the owner remote git

```
git remote remove origin
```

5. Go to github and create your new repository
6. Add your git remote

```
git remote add origin https://github.com/student-name/INT201_groupwork.git
```

7. Push your git local to your github

```
git push -u origin master
```