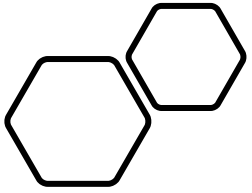# Software and Tools Preparation

Asst.Prof. Dr. Umaporn Supasitthimethee
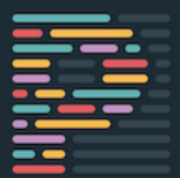
ผศ.ดร.อุมาพร สุภสิทธิเมธี

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.
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

3

Node.js Installation

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>
```
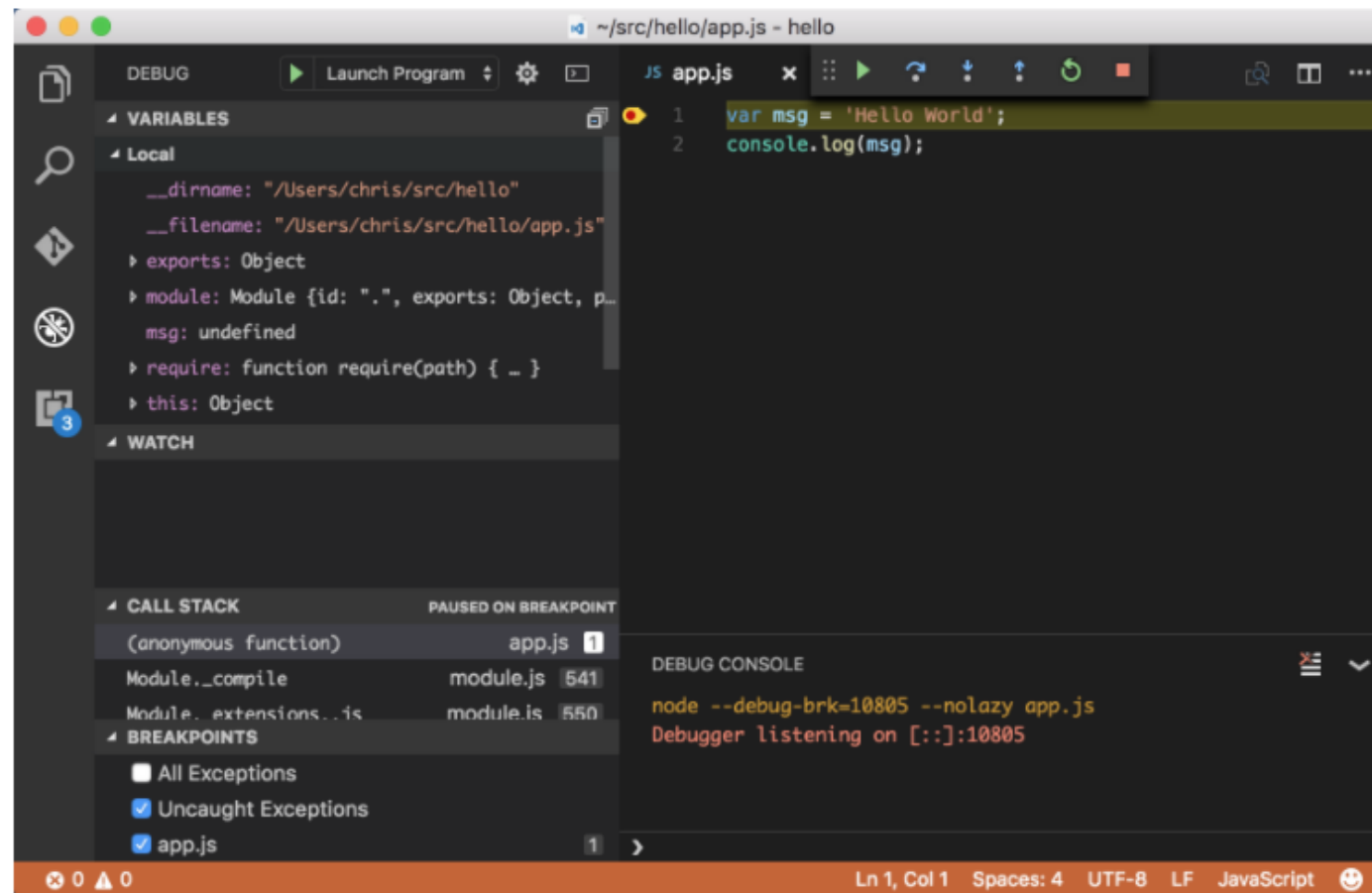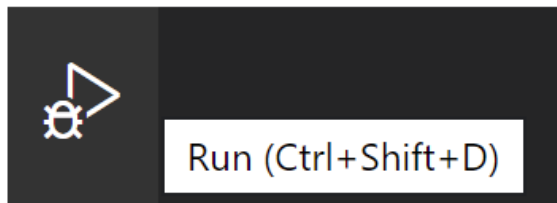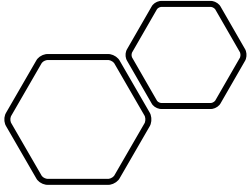
https://code.visualstudio.com/docs/nodejs/nodejs-tutorial   5

Debugging Hello World#
VS Code ships with a debugger for Node.js applications.

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

Run (Ctrl+Shift+D)

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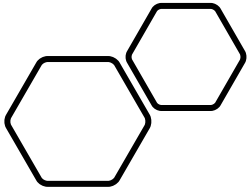
```
git config --global user.name "Umaporn Supasitthimethee"
git config --global user.email "umaporn@sit.kmutt.ac.th"
```

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
  ```
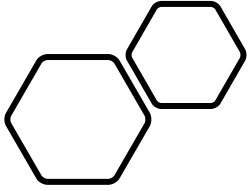- Add your git
  ```
  git add .|<specified files>
  ```
- Commit your git

  ```
  git commit –m "message"
  ```

4. Create Git Repo and push for your template files (Remote Site)
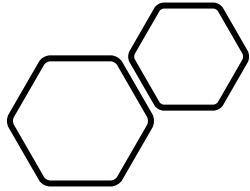
Create Git Repo at Github (Remote Site)
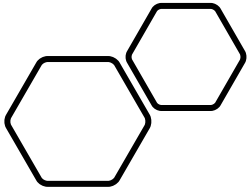
Add your remote site repo

- 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
    ```