

LAB1 Development Environment Preparation

PART1

Web Development Software Installation

1. Software Development Environment Tools

Type	Application	Link to download
IDE	VSCode	https://code.visualstudio.com/
Remote Terminal	Terminus	https://termius.com/
FTP	FileZilla	https://filezilla-project.org/
Git	Git-scm	https://git-scm.com/downloads
Git GUI	Github Desktop	https://github.com/apps/desktop

2. Front-end Software

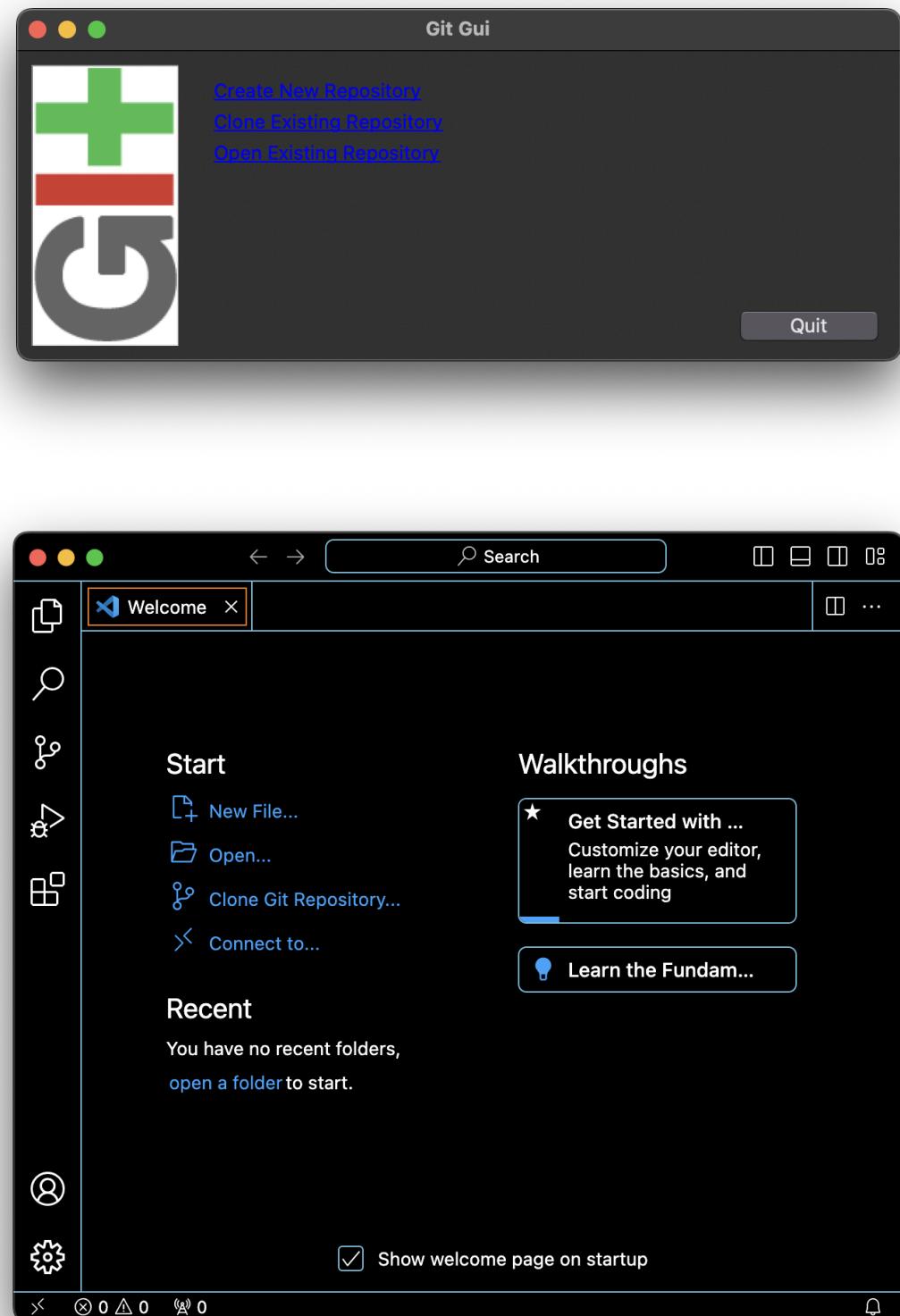
Type	Application	Link to download
Web Browser	Chrome	https://www.google.com/intl/en_uk/chrome/
	Firefox	https://www.mozilla.org/en-US/firefox/new/
	Edge	https://www.microsoft.com/th-th/edge/download

3. Back-end Software for Local Development

Open-source cross-platform web server solution stack package developed by Apache Friends,[

Type	Application	Link to download
Web server solution stack	XAMPP	https://www.apachefriends.org/

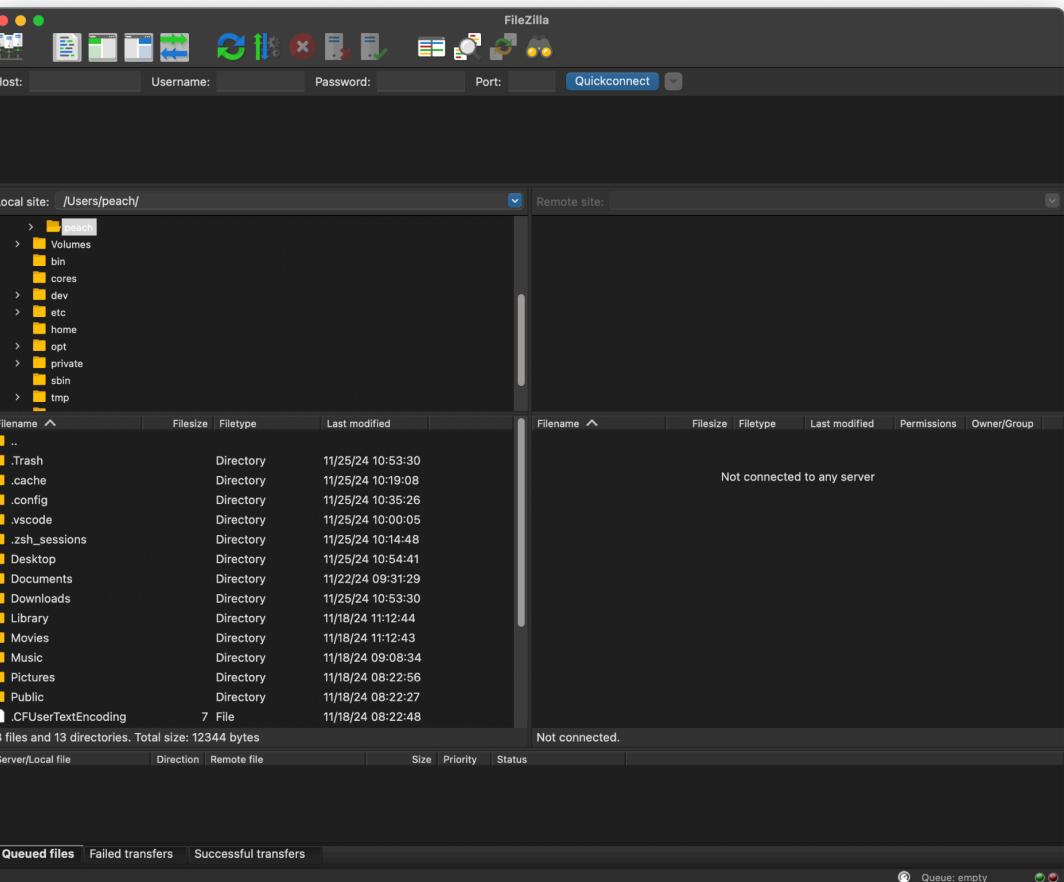
บันทึกการระหว่างติดตั้งและทดสอบใช้งาน

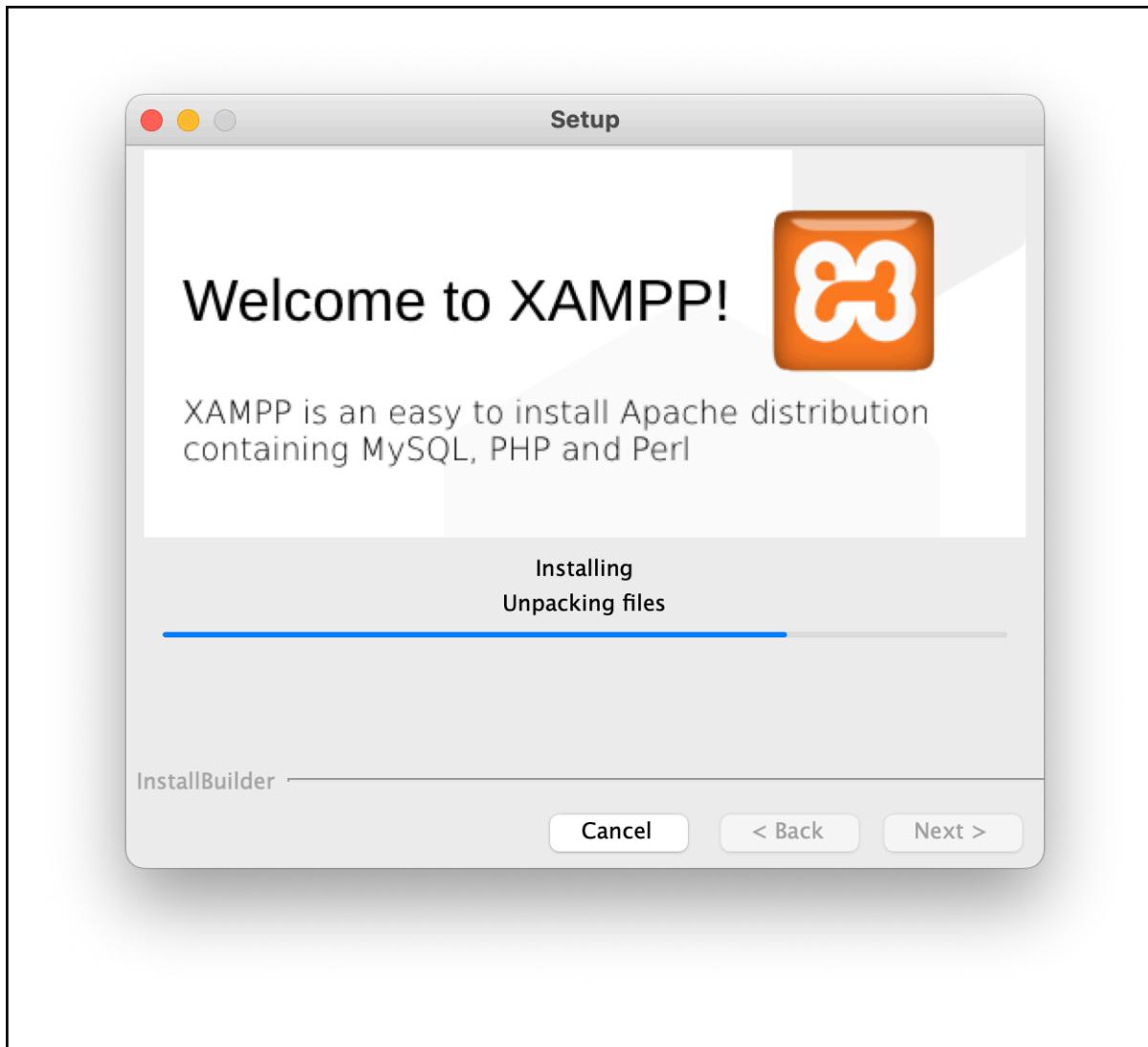




peach ➤ git -v
git version 2.47.0
peach ➤ git-gui -v

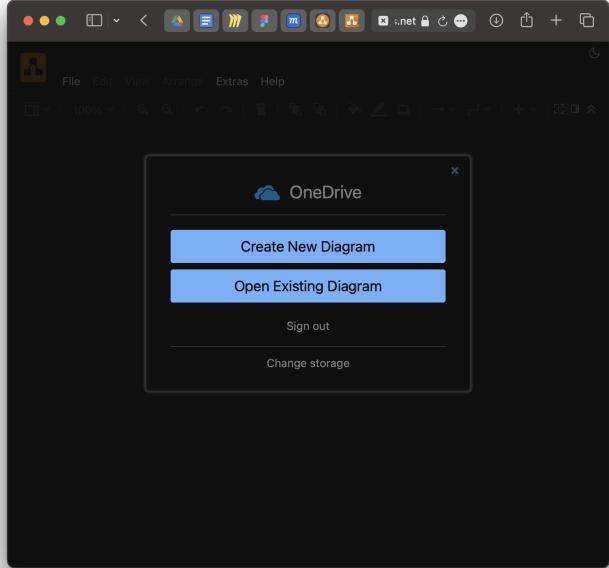
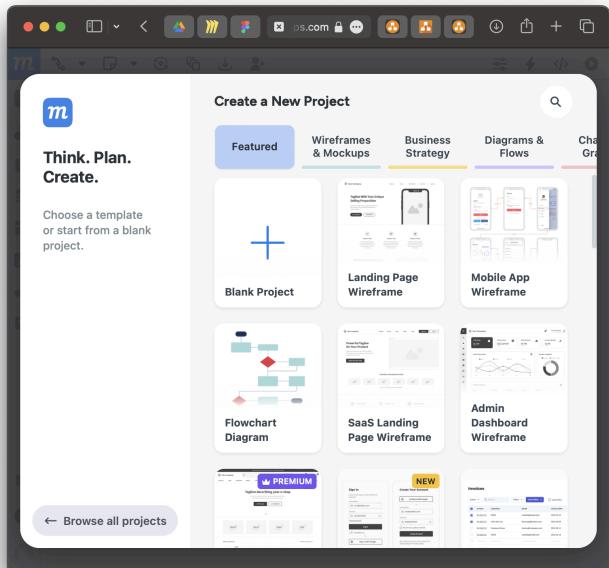
ENGSE611 การพัฒนาเว็บด้วยเทคโนโลยีสมัยใหม่



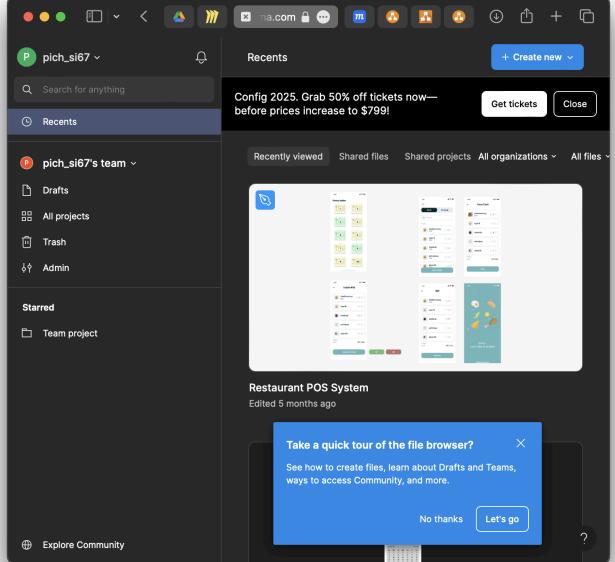
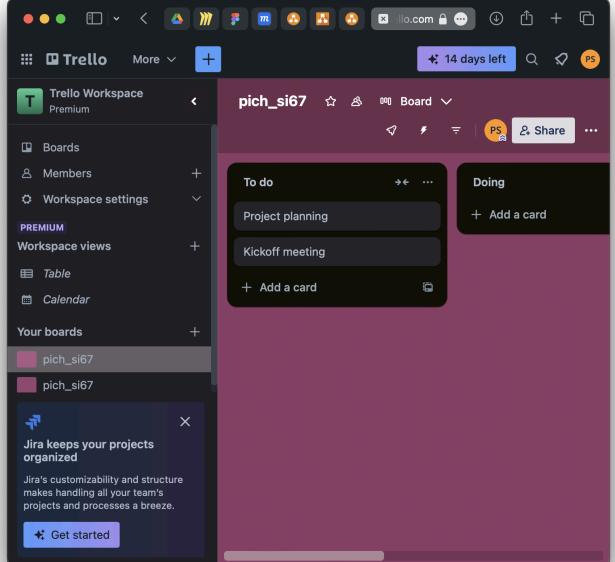


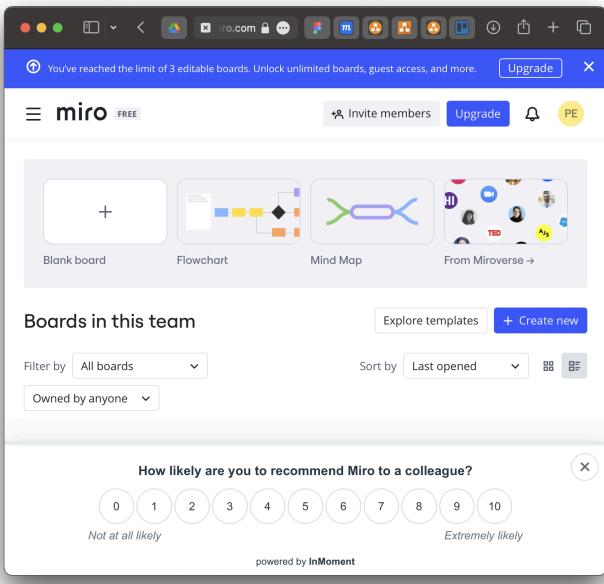
PART2**Diagram, Wireframe, UI Design and Tasks management software**

**ให้ใช้ email ของ มหาวิทยาลัยสมัครใช้งาน

Type	Application	Link to download
Diagram	draw.io	https://app.diagrams.net/ 
Wireframe	Moqups	https://moqups.com/ 

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UI Design	Figma	<p>https://www.figma.com/</p> 
Task Management	Trello	<p>https://trello.com/</p> 

Teamwork collaboration	Miro	<p>https://miro.com/</p>  <p>The screenshot shows the Miro homepage with a banner indicating a limit of 3 editable boards. It features four main board types: Blank board, Flowchart, Mind Map, and From Miroverse. Below this is a section titled 'Boards in this team' with filters for 'All boards' and 'Owned by anyone'. A survey overlay is present, asking 'How likely are you to recommend Miro to a colleague?' with a scale from 0 (Not at all likely) to 10 (Extremely likely).</p>
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PART3

Git - Version Control System

STEP1 (Local Development) ที่ PC/Notebook

- ทำการ register ที่ www.github.com
- ติดตั้ง Git (ถ้ายังไม่มี) ให้ไปที่ <https://git-scm.com/download>
- เอกสารศึกษาเพิ่มเติม สอนพื้นฐาน Git

<https://blog.wu.ac.th/archives/1979>

<https://www.borntodev.com/2020/03/30/git-%E0%B8%9E%E0%B8%B7%E0%B9%89%E0%B8%99%E0%B8%90%E0%B8%B2%E0%B8%99%E0%B8%AA%E0%B8%B8%E0%B8%94%E0%B9%86/>

<https://www.devahoy.com/blog/2015/08/introduction-to-git-and-github>

<https://medium.com/amiearth/git-%E0%B8%88%E0%B8%B2%E0%B8%81%E0%B8%95%E0%B8%B4%E0%B8%94%E0%B8%95%E0%B8%B1%E0%B9%89%E0%B8%87%E0%B8%88%E0%B8%99%E0%B9%80%E0%B8%9B%E0%B9%87%E0%B8%99%E0%B8%87%E0%B8%B2%E0%B8%99-16cc215c772b>

ไปที่ Terminal - command line (CMD)

สร้าง directory ชื่อ class

cd class

สร้าง directory ชื่อ engse611

pl.

สำหรับคนที่ใช้ Ubuntu ก็ติดตั้งด้วยคำสั่งด้านล่างนี้ได้เลย

`apt-get install git`

หรือ linux อื่นๆ ก็ลองเข้าไปดูคำสั่งได้จากหน้าเว็บของ Git ได้เช่นกัน Git

เริ่มทำที่นี่ !!

หลังจากติดตั้งแล้วก็ต้องทำการตั้งค่ากันขักเล็กน้อยเพื่อใช้งาน คือตั้งชื่อกับอีเมลนั้นเอง

`git config --global user.name "ชื่อที่จะใช้"`

`git config --global user.email "กับอีเมลที่จะใช้"`

อย่าลืม double quote “ ” ครอบชื่อกับอีเมลด้วยนะ !!!

เช่น

`git config --global user.name "tkeatkaew"`

`git config --global user.email thanit@rmutl.ac.th`

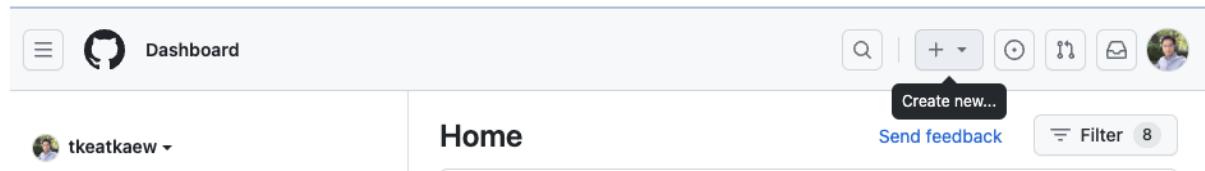
จากนั้น

`git config --list`

```
[admin@admins-MacBook-Pro ENGCE112 % git config --global user.name tkeatkaew
[admin@admins-MacBook-Pro ENGCE112 % git config --global user.email thanit@rmutl.ac.th
[admin@admins-MacBook-Pro ENGCE112 % git config --list
credential.helper=osxkeychain
init.defaultbranch=main
user.name=tkeatkaew
user.email=thanit@rmutl.ac.th
admin@admins-MacBook-Pro ENGCE112 % ]
```

STEP2 (Public Repository)

ไปที่ github ให้สร้าง repository ใหม่ ชื่อว่า engse611-first



Create a new repository

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

Required fields are marked with an asterisk (*).

Owner * Repository name *



/

engce112-lab5 is available.

Great repository names are short and memorable. Need inspiration? How about `congenial-parakeet` ?

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.

The screenshot shows a GitHub repository page for 'engce112-lab5'. The repository is public and has 1 commit by tkeatkaew. The README file contains the text 'engce112-lab5'.

STEP3

ให้ทำการ copy repository url ของเรา ไว้ที่ clip board

The screenshot shows the same GitHub repository page with a context menu open over the repository name. The 'Clone' option is selected, showing the URL 'https://github.com/tkeatkaew/engce112-lab5' with a 'Copy url to clipboard' button.

ทำการ pull repository ที่สร้างไว้ลงมาที่ local

ไปที่ Terminal - command line (CMD)
เข้าไปที่ directory ชื่อ class/engse611

```
git clone https://github.com/tkeatkaew/engse611-first.git first
```

**สื้น้ำเงินจะต่างกันไปแต่ละคน

```
admin@admins-MacBook-Pro ENGCE112 % git clone https://github.com/tkeatkaew/engce112-lab5.git lab5
```

```
Cloning into 'lab5'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
```

จากนั้น

```
cd lab5
```

และดูไฟล์ที่อยู่ใน lab5

```
git status
```

จะได้

```
[admin@admins-MacBook-Pro lab5 % git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean]
```

The screenshot shows a GitHub repository page for 'engce112-lab5'. At the top, there's a navigation bar with 'main' selected, a search bar, and a 'Code' button. Below the navigation is a commit history section showing one commit from 'tkeatkaew' titled 'Initial commit' made 15 minutes ago. Underneath the commit is a file named 'README' with a status of 'Initial commit' and '15 minutes ago'. The main content area displays the 'README' file's content, which is currently empty.

engce112-lab5

The screenshot shows a terminal window titled 'zsh in first'. The user runs several commands to set global git configuration, clone a repository from GitHub, and check the status of the local repository. The output shows that the local repository is 'up to date with 'origin/main'' and has 'nothing to commit'.

```
peach> git config --global user.name "ItsPitxh"
peach> git config --global user.email "pitched.10121@gmail.com"
peach> git config --list
credential.helper=osxkeychain
user.name=ItsPitxh
user.email=pitched.10121@gmail.com
peach> git clone https://github.com/ItsPitxh/engse611-first.git
Cloning into 'engse611-first'...
warning: You appear to have cloned an empty repository.
peach> git clone https://github.com/ItsPitxh/engse611-first.git first
Cloning into 'first'...
warning: You appear to have cloned an empty repository.
peach> cd first
first> git status
On branch main

No commits yet

nothing to commit (create/copy files and use "git add" to track)
peach> in first o main #
```

สร้างไฟล์ใหม่เข้า repo

สร้างไฟล์ใหม่ชื่อ **index.html**

ใส่ข้อความใดๆ และ save

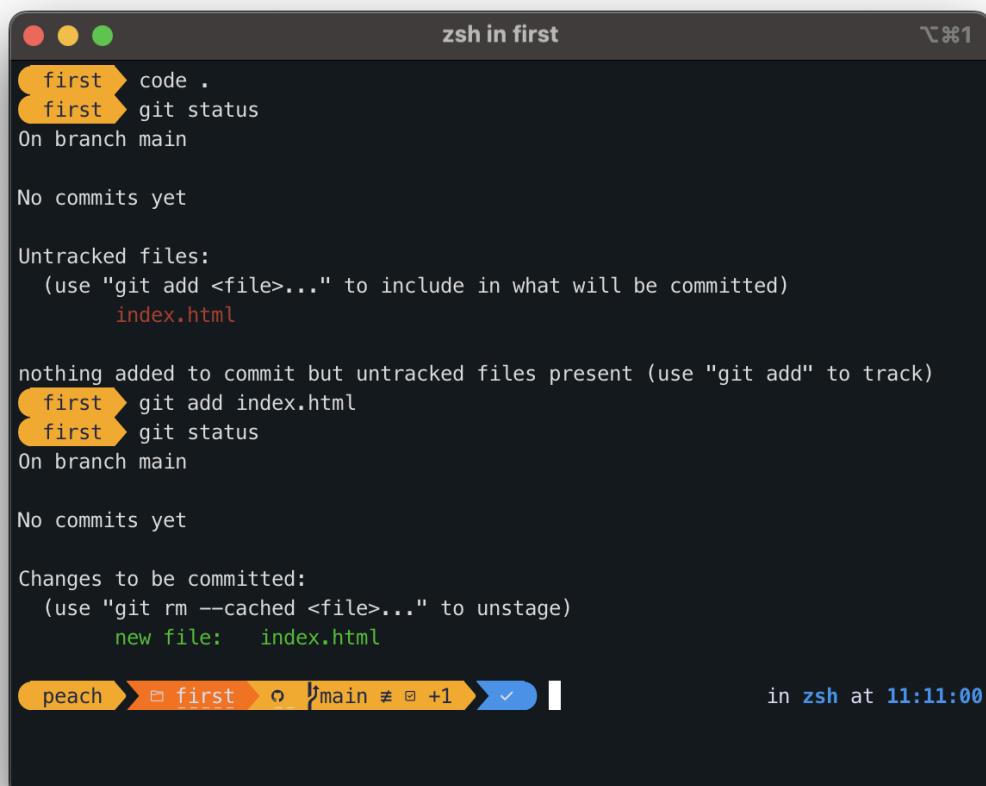
```
git status
```

```
[admin@admins-MacBook-Pro lab5 % nano index.html
[admin@admins-MacBook-Pro lab5 % git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    index.html

nothing added to commit but untracked files present (use "git add" to track)
admin@admins-MacBook-Pro lab5 %
```

```
git add index.html
git status
```



```
first  code .
first  git status
On branch main

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    index.html

nothing added to commit but untracked files present (use "git add" to track)
first  git add index.html
first  git status
On branch main

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   index.html

peach ➜ first ➜ ⌂ main ≠ +1 ➜ ✓ | in zsh at 11:11:00
```

```
[admin@admins-MacBook-Pro lab5 % git add index.html
[admin@admins-MacBook-Pro lab5 % git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   index.html

admin@admins-MacBook-Pro lab5 %
```

สร้างไฟล์ใหม่ออก repo
 git restore --staged index.html
 git status
 git add index.html

ทำการ commit ไฟล์

```
git commit -m "1st index.html file added"
```

```
[admin@admins-MacBook-Pro lab5 % git commit -m "1st index.html file added"
[main c799f0c] 1st index.html file added
 1 file changed, 2 insertions(+)
  create mode 100644 index.html
admin@admins-MacBook-Pro lab5 %
```

git status

```
[admin@admins-MacBook-Pro lab5 % git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)
```

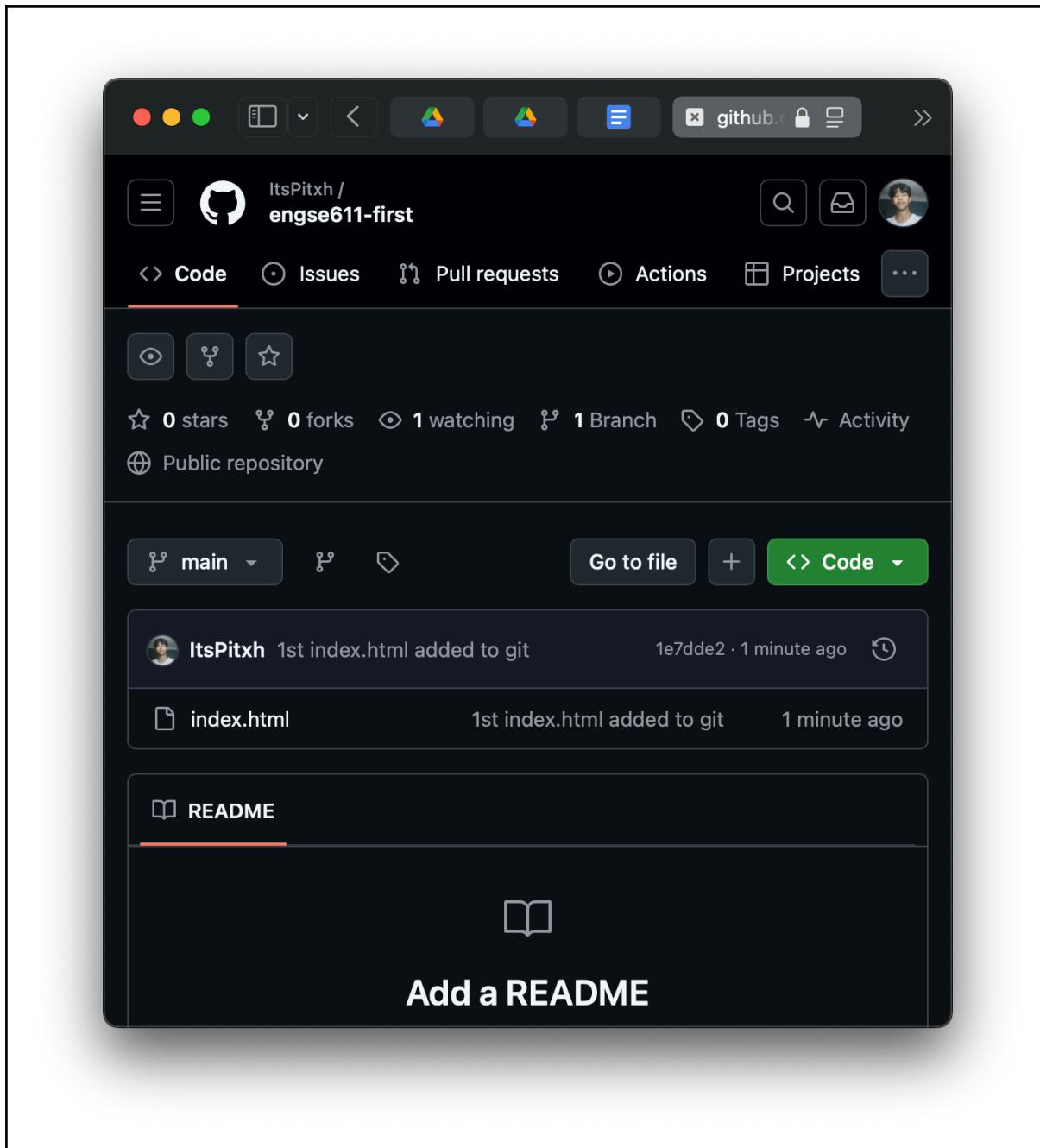
```
nothing to commit, working tree clean
admin@admins-MacBook-Pro lab5 %
```

นำไฟล์ commit ขึ้น public หรือ repo

git push

```
[admin@admins-MacBook-Pro lab5 % git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 310 bytes | 310.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/tkeatkaew/engce112-lab5.git
  089308a..c799f0c main -> main
admin@admins-MacBook-Pro lab5 %
```

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tkeatkaew 1st index.html file added c799f0c · 2 minutes ago 2 Commits

README.md Initial commit 27 minutes ago

index.html 1st index.html file added 2 minutes ago

README

engce112-lab5

About

No description, website, or topics provided.

Readme Activity 0 stars 1 watching 0 forks

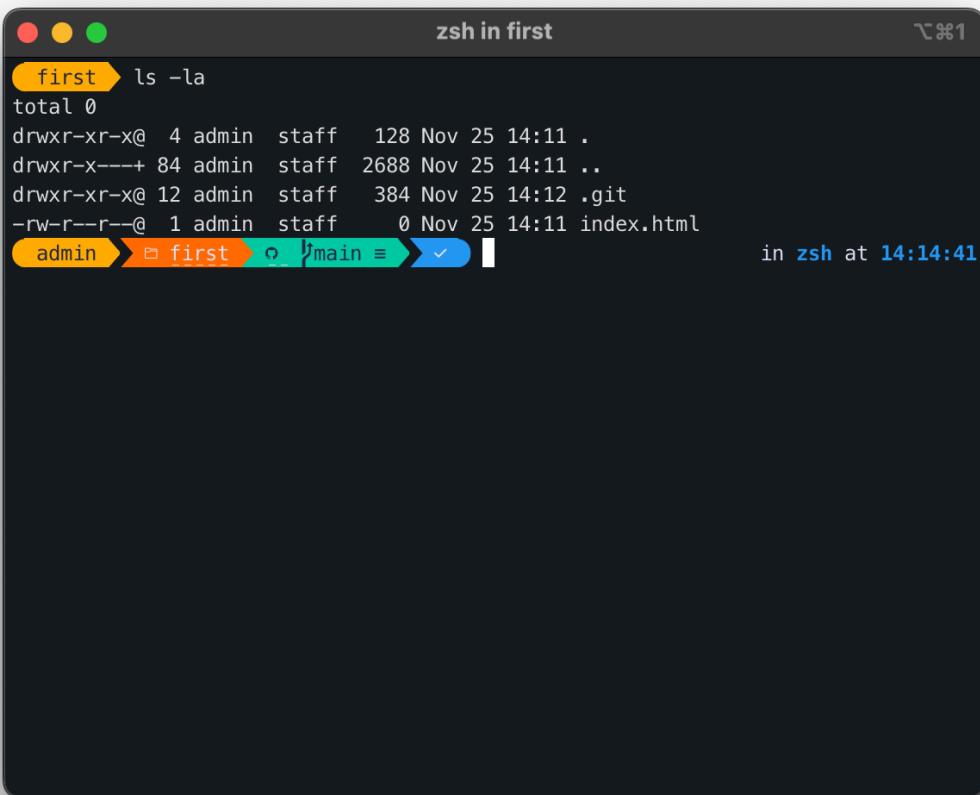
Releases

No releases published Create a new release

```
dir /a  
หรือ  
ls -la

[admin@admins-MacBook-Pro lab5 % ls -la
total 16
drwxr-xr-x    5 admin  staff  160 Mar  5 15:34 .
drwxr-xr-x    3 admin  staff   96 Mar  5 15:23 ..
drwxr-xr-x   13 admin  staff  416 Mar  5 15:41 .git
-rw-r--r--    1 admin  staff   15 Mar  5 15:23 README.md
-rw-r--r--    1 admin  staff   27 Mar  5 15:34 index.html
admin@admins-MacBook-Pro lab5 %
```

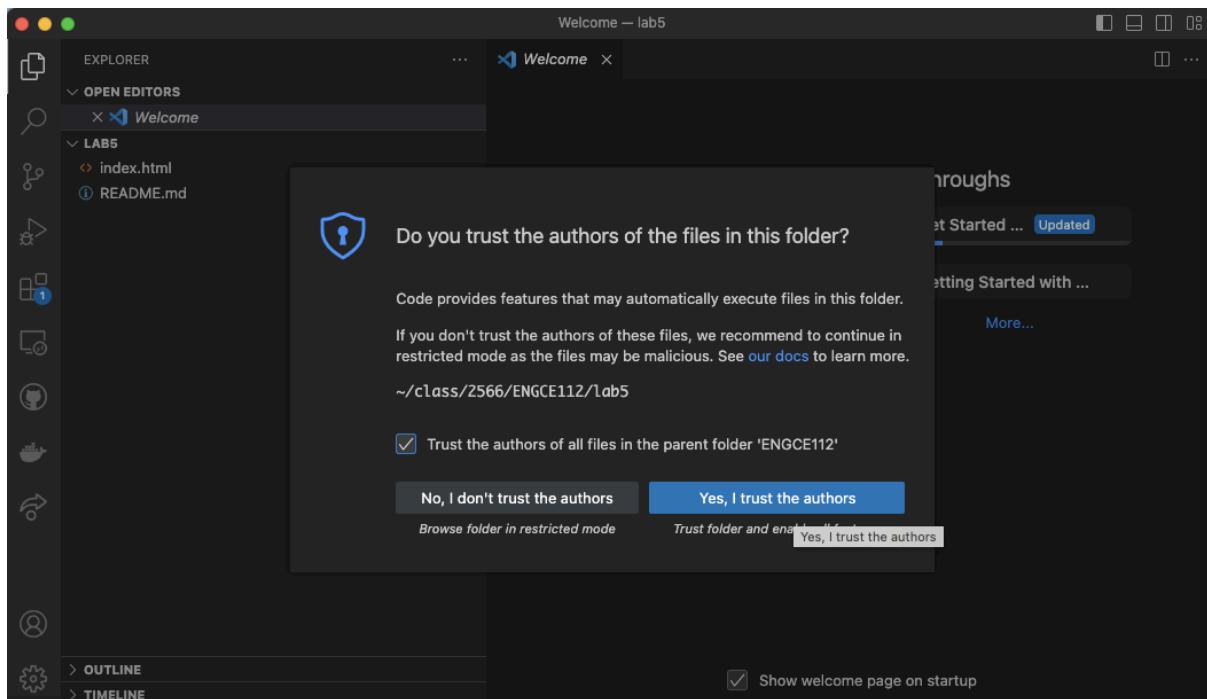
จะเห็น directory .git
ซึ่งจะใช้สำหรับเก็บไฟล์ version ต่างๆ ของ repo ของเรา



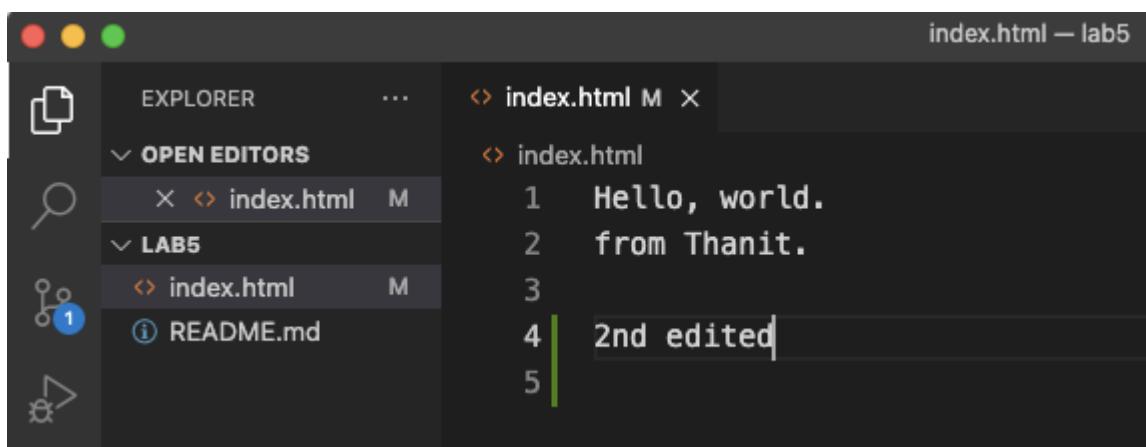
```
first ➤ ls -la
total 0
drwxr-xr-x@ 4 admin staff 128 Nov 25 14:11 .
drwxr-x---+ 84 admin staff 2688 Nov 25 14:11 ..
drwxr-xr-x@ 12 admin staff 384 Nov 25 14:12 .git
-rw-r--r--@ 1 admin staff 0 Nov 25 14:11 index.html
admin ➤ first ➤ main ➤ in zsh at 14:14:41
```

เขียนต่อ กับ vscode

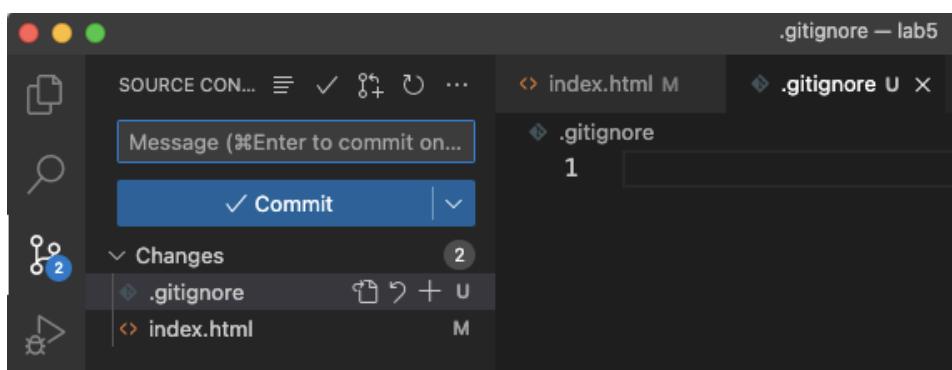
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ใช้ vscode แก้ไขไฟล์ index.html



ใน vscode ให้สร้างไฟล์ใหม่ชื่อ .gitignore
จะได้ดังนี้



ไปดูที่ git repo ว่ามีไฟล์ใหม่ หรือไม่

The screenshot shows a GitHub repository page for `tkeatkaew/engce112-lab5`. At the top, there's a navigation bar with a dropdown for the branch (`main`), a search bar labeled `Go to file`, and a code editor icon. Below the navigation is a list of recent commits:

File	Commit Type	Time
<code>.gitignore</code>	2nd commit	1 minute ago
<code>README.md</code>	Initial commit	54 minutes ago
<code>index.html</code>	2nd commit	1 minute ago

Below the commits is a preview of the `README` file, which contains the text `engce112-lab5`.

The screenshot displays two GitHub repository pages side-by-side.

Left Repository: `ItsPitxh / engse611-first`
This repository has 0 stars, 0 forks, 1 watching, 1 Branch, and 0 Tags. It is a Public repository.
Recent activity shows a commit by `ItsPitxh` at 107235b - now:
`index.html` 2nd edited index.html added to git
The `index.html` file content is shown below:

```
Hello, world.  
from Peach.  
2nd edited.
```

Right Repository: `ItsPitxh / engse611-first`
This repository has 0 stars, 0 forks, 1 watching, 1 Branch, and 0 Tags. It is a Public repository.
Recent activity shows a commit by `ItsPitxh` at 107235b - 1 hour ago:
`index.html` 2nd edited index.html added to git
The `index.html` file content is shown below:

```
Hello, world.  
from Peach.  
2nd edited.
```