

Open Source Software

CREATED BY APISIT SAENGSAI, AUGUST 2021, BASED ON:

- ❖ OPEN SOURCE SOFTWARE (OSS OR FLOSS) AND THE U.S. DEPARTMENT OF DEFENSE (DOD) DAVID A. WHEELER NOVEMBER 4, 2009
[HTTP://WWW.DWHEELER.COM/](http://www.dwheeler.com/)

Outline Guide

- ❑ What is Open Source Software (OSS)?
- ❑ Typical OSS development model
- ❑ Open source license
- ❑ Creative commons license
- ❑ Open source community
- ❑ Types of open source software

What is Open Source Software (OSS)?


- ❑ **Software licensed to users with these freedoms**
 - ❖ to run the software for any purpose,
 - ❖ to study and modify the software, and
 - ❖ to freely redistribute copies of either the original or modified software (without royalties, etc.)
- ❑ **Original term: “Free software” (confused with no-price)**
 - ❖ **Free as in freedom not as in free beer**
- ❑ **Antonyms: proprietary software, closed software**

Case study



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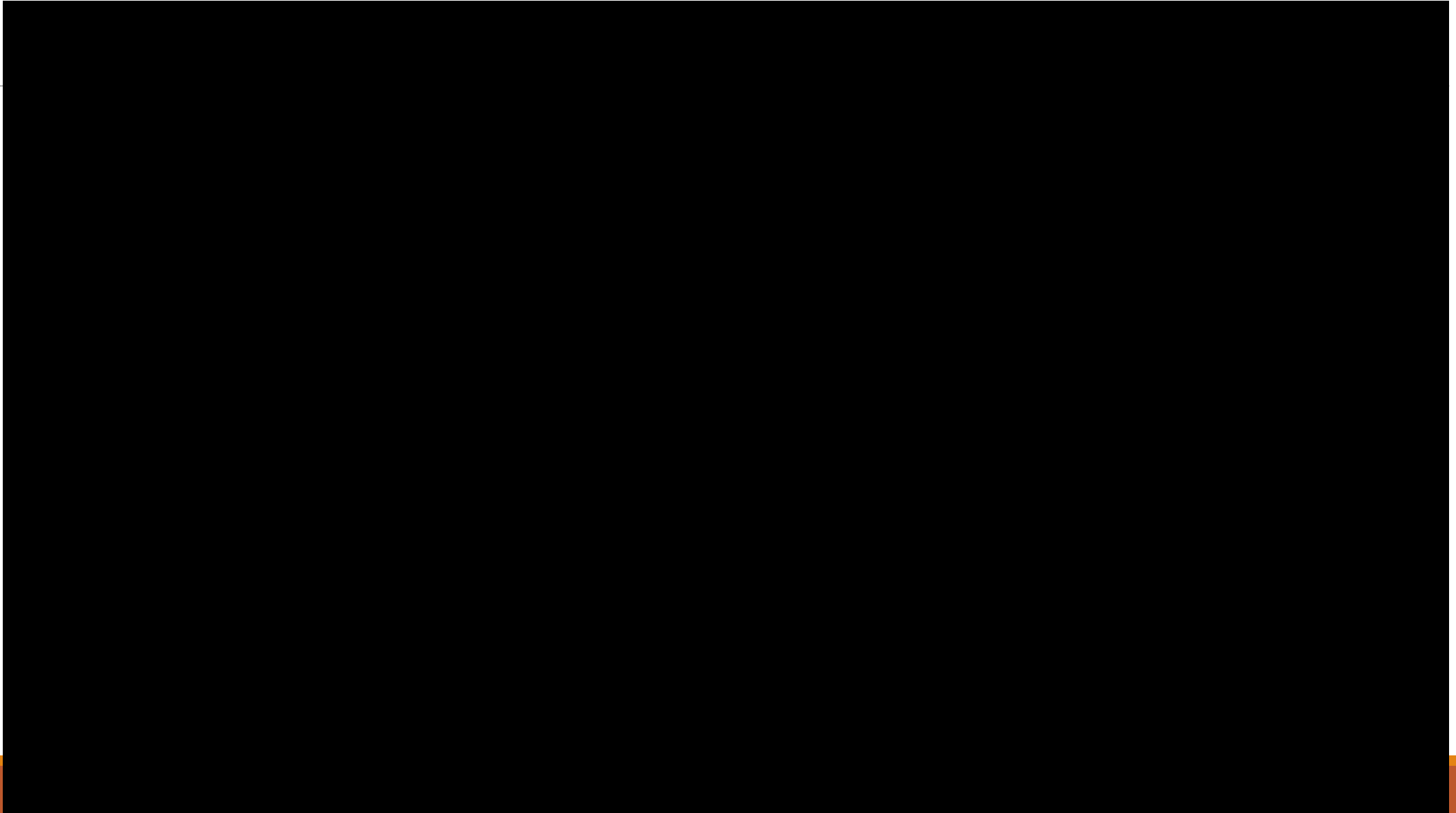
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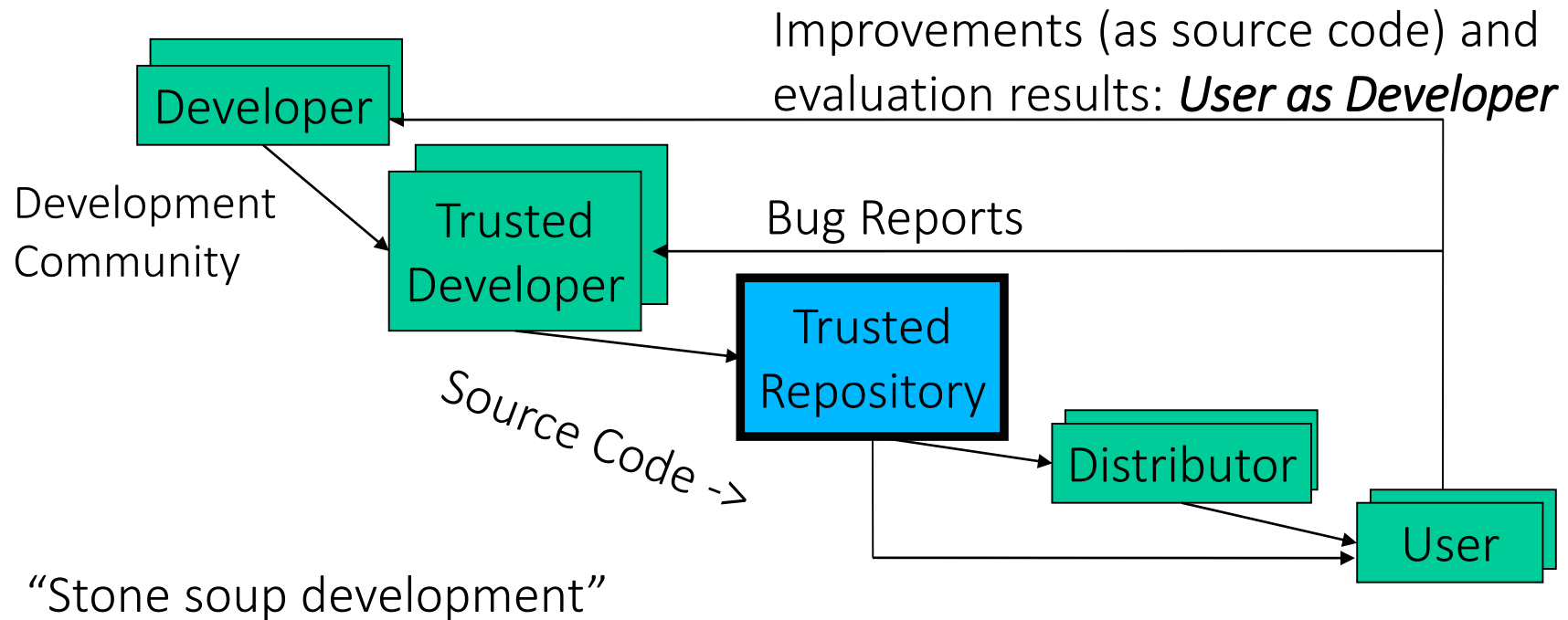
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Typical OSS development model (Stone soup development)



Typical OSS development model



- OSS users typically use software without paying licensing fees
- OSS users typically pay for training & support (competed)
- OSS users are responsible for paying/developing new improvements & any evaluations that they need; often cooperate with others to do so
- Goal: Active development community (like a consortium)

Open source licenses

- ❑ License that are popular and widely used or with strong communities
 - ❖ Apache License 2.0 (Apache-2.0)
 - ❖ 3-clause BSD license (BSD-3-Clause)
 - ❖ GNU General Public License (GPL)
- ❑ Special purpose licenses
- ❑ Non-reusable licenses
- ❑ Superseded licenses
- ❑

Apache License 2.0 (Apache-2.0)

<https://opensource.org/licenses/category>

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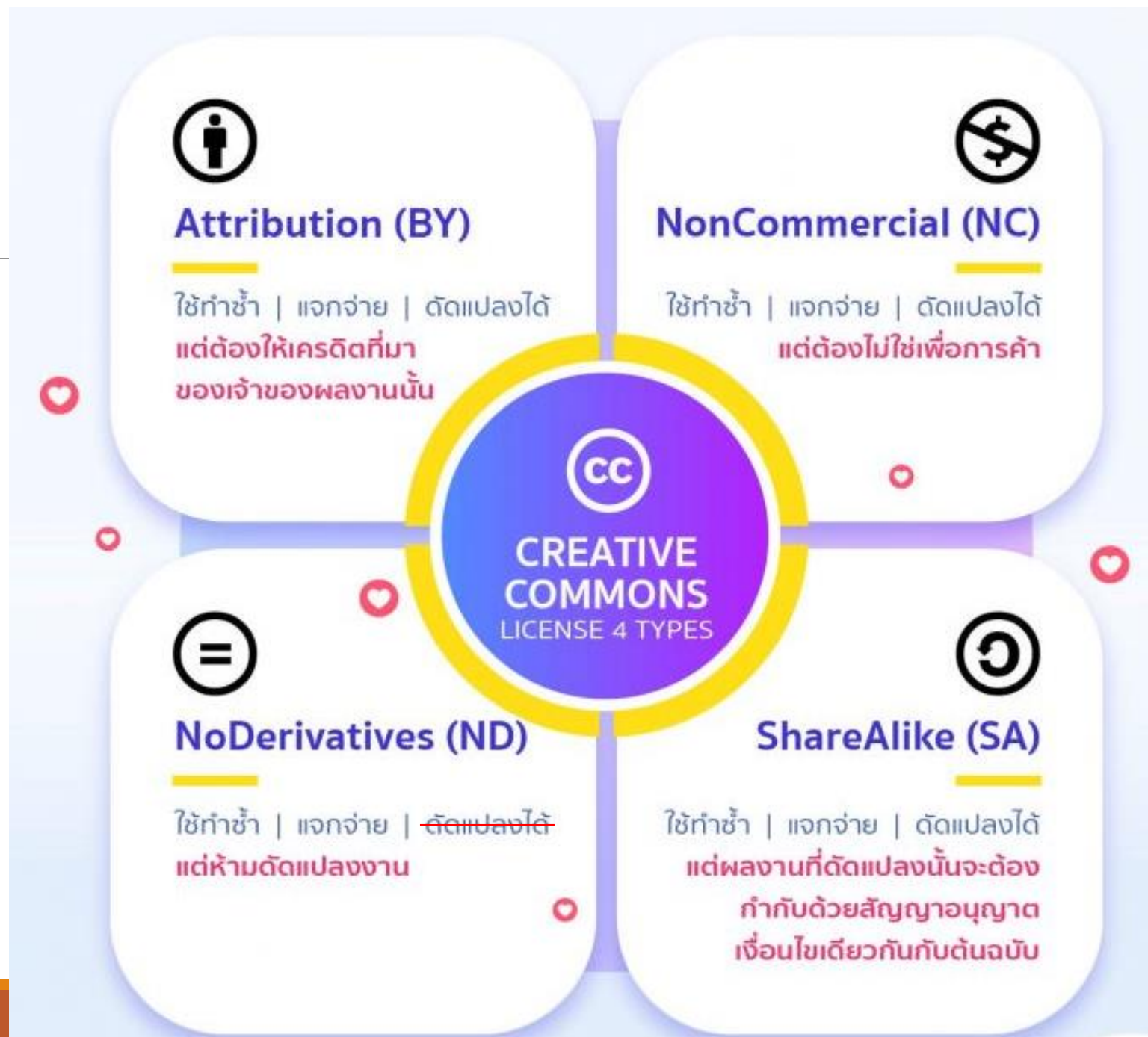
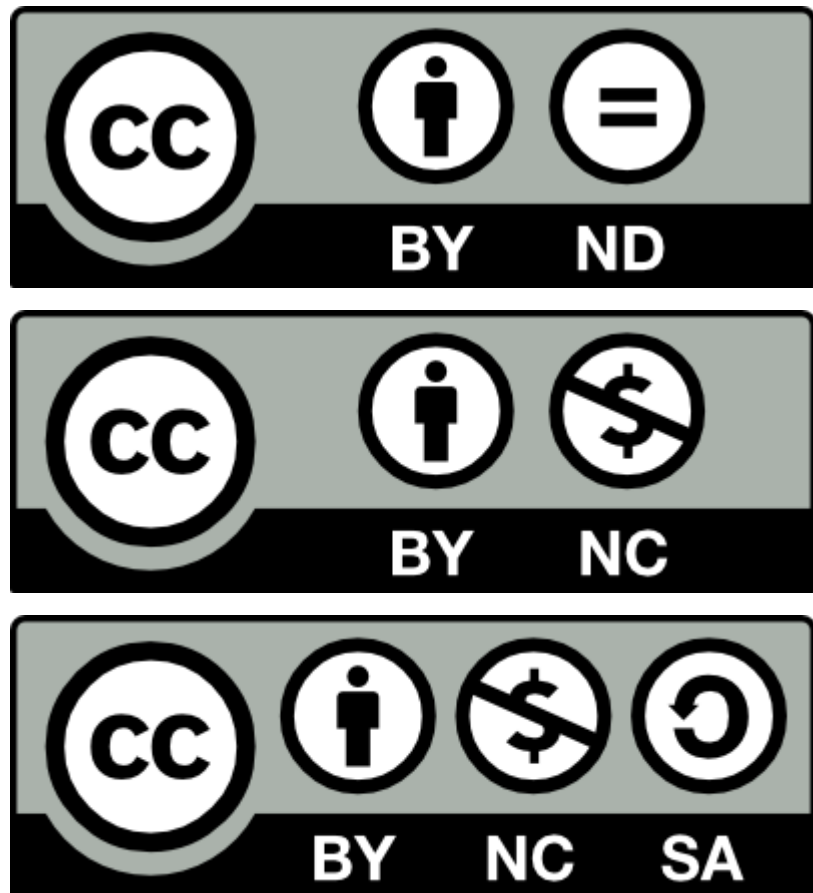

Types of OSS licenses

| สัญญาอนุญาต | ใช้งานได้ อย่างเสรี | การแจกจ่ายชิ้นงานที่ได้ จากการใช้ซอฟต์แวร์ | เปิดเผย ซอร์สโค้ด | การแก้ไข ซอร์สโค้ด | เผยแพร่ซอร์สโค้ดที่ ได้แก้ไขแล้ว | การมีส่วนประกอบที่เป็น ซอฟต์แวร์เชิงพาณิชย์ |
|-------------------|------------------------|---|----------------------|-----------------------|-------------------------------------|--|
| GPL (2) | O | O | O | O | O | X |
| LGPL | O | O | O | O | O | O |
| MPL | O | O | O | O | O | O |
| BSD license | O | O | O | O | X | O |
| Apache license | O | O | O | O | X | O |

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CC Type



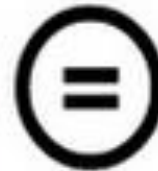
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LEAST FREE

Open Source Community

- ❑ <http://sourceforge.net/>
- ❑ <http://www.gnu.org/>
- ❑ <http://www.gnu.org/software/software.html>
- ❑ <http://www.php.net/>
- ❑ <http://www.postgresql.org/>
- ❑ <http://thaiopensource.org/>

Types of open source software

Open source office software

- ❖ Open Office.org - business productivity suite
- ❖ Libre Office - business productivity suite
- ❖ MySQL - database
- ❖ Ingres – database

Open source operating systems

- ❖ GNU/Linux (various versions or distributions include Debian, Fedora, Gentoo, Ubuntu and Red Hat) - operating system
- ❖ FreeBSD - Operating system
- ❖ Android - mobile phone platform

Types of open source software (2)

❑ **Open source website software**

- ❖ Wordpress - blog hosting platform
- ❖ Joomla - enterprise content management system
- ❖ Drupal - enterprise content management system
- ❖ NginX - web server software
- ❖ PHP - web application scripting engine

❑ **Open source development tools**

- ❖ Ruby on Rails - rapid web application development
- ❖ Eclipse - integrated development environment

Workshop-01 : Open source software presentation

Team assignment

Direction

- ❑ Step 1. : There are 8 different OSS.
- ❑ Step 2. : The TL must select only one OSS (In Step 1)
- ❑ Step 3. : Search for your OSS to use in presentations.
- ❑ Step 4. : Prepare your presentations and scripts.
- ❑ Step 5. : Each team has time up to 5 minutes to present via video clips
- ❑ Step 6. : Post your final video clips in LINE Group : “SE BUU #9 (รหัส62)”

..... Due date : 27 August 2021 (1 o'clock in the afternoon)

Workshop-01 : Open Source Software

1. Open office : 3

2. Fire Fox : 6

3. gimp : 5

4. blender : 1

5. Ubuntu : 0

6. format factory : 7

7. ProjectLibre : 2

8. Ethereum : 4

Workshop-02 : Mind map and Individual assignment Open source software

Direction

- ❑ Summarize Open Source Software (In this presentation) using Mind Map and covering 6 topics:
 - ❖ What is Open Source Software (OSS)?
 - ❖ Typical OSS development model
 - ❖ Open Source License
 - ❖ Creative Commons license
 - ❖ Open Source Community
 - ❖ Types of open source software

Due date : 20 August 2021
(1 o'clock in the afternoon)

Submit an assignment:

<https://forms.gle/cRBRiV3qV7PieWNv5>