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BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

- **Describe Open-Source Software with Example.**

Open-Source Software:

Open-source software (OSS) is any computer software that's distributed with its source code available for modification. That means it usually includes a license for programmers to change the software in any way they choose: They can fix bugs, improve functions, or adapt the software to suit their own needs. Open-source software (OSS) is a type of computer software in which source code is released under a license in which the copyright holder grants users the rights to use, study, change, and distribute the software to anyone and for any purpose. Open-source software may be developed in a collaborative public manner.

The "open source" label was created at a strategy session held on February 3rd, 1998 in Palo Alto, California, shortly after the announcement of the release of the Netscape source code.

Open-Source Software Example:

1. Firefox

2. Gimp

3. Open Office

4. PHP

5. Moodle

6. Linux Operating System

7. Android by google

8. VlC media

9. Blender

10. Python

The Most Popular Open-Source Software Licenses:

1. MIT license (MIT)
2. **Apache** License 2.0 (Apache-2.0)
3. 3-clause BSD license (BSD-3-Clause)
4. GNU General Public License (GPL)
5. Common Development and Distribution License 1.0 (CDDL-1.0)

- **Describe Free Software with Example:**

Free Open Source:

The concept of **free software** is the brainchild of Richard Stallman, head of the GNU Project. The best known example of free software is Linux, an operating system. Debian is an example of a distributor of a Linux package. According to the Free Software Foundation (FSF), a non-profit organization that supports the development of free software, "free software is the software that grants the user the freedom to share, study, and modify it." The FSF coined the term in the 1980s. It is used it without any restriction. Software available without any payment is not necessarily free software. According to the definition as presented by the Free Software Foundation, the word Free in "free software" implies the idea of freedom rather than not having a cost. If software is available to be downloaded without being paid for, but the user is not able to modify the source then it is not free software. It is important to note the distinction here. Freeware is software that you don't have to pay for. Free software is software you are free to modify and use for your own purposes. Freeware does not necessarily have to be free software as the source code can still be protected.

Free Source Software Example:

1.Linux

2.Apache

3.Google Chrome

4.Internet Explorer

5.Whatsapp

The Most Popular Free Source Software Licenses:

1.GPL (general public Licenses)

2.Apache Licenses

- **Difference between Free and Open-Source Software.**

Free Source Software	Open-Source Software
1.free source software foundation "Richard Stallman".	1. Open-Source initiative "Eric Raymond".
2.GPL (General Public License)	2.BSL (BSD-style licenses)
3.Free software is a software for which every one has a right not only to inspect and study the source code but also to use it for any desired purpose without monitory or other restriction.	3.Open-source software whose source code is freely available. That is without any requirement for payment or any other obstacle for any one to inspect and study.
4. Freedom to modify/improve program and release improvements to public.	4.Intergrity of authors Source Code.
5.free Software is a social movement.	5. open source is a development methodology.
6.Free software focuses on providing a moral/ethical argument for open source.	6.open source tends to focus on providing an economic/Business argument for free software.
7.Free software is a good, morally right, thing to do.	7. Open-source software is beneficial to you and your business.
8.all existing free software would qualify as open source. (according to Richard Stallman, GNU free software movement.	8.Nearly all open-source software is free software (according to Richard Stallman, GNU free software movement.

9.Freedom of information.	9.Better quality software.
10.Examples: The free software directory maintains a large database of free software packages. some of the best-known examples include the Linux kernel, the BSD and Linux operating systems, the GNU Complier Collection and C library; the MySQL relational database; the Apache web server; and the sendal mail transport again.	10.Examples: prime Examples of open-source products are the Apache HTTP server, the e-commerce platform commerce, internet browsers Mozilla Firefox and Chromium (the project where the vast majority of development of the freeware google chrome is done and the full office suite LibreOffice.