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BE-B(B1)

ASSIGNMENT NO. 1

Q.1] What is open source software? Need of oss? Advantages of open source system? Can open source software be used for commercial purpose?

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i) Open Source Software (oss) is computer software released under a license in which the copyright holder grants users the right to use, study, change and distribute the software and its source code to anyone and for any purpose.

ii) Oss is distributed with the source code, making it available for use, modification and distribution with its original rights.

iii) Programmers with access to source code can change a program by adding to it, changing it or fixing parts that aren't working correctly.

iv) Oss may be developed in collaborative public manner. It is prominent example of open collaboration, meaning any capable user can participate in the development making the number of possible contributers indefinite. The ability to examine the code facilitates public trust in the software.

Need of oss:

1) Open Source Software is used extensively across businesses, industries and individuals around the world.

2) The market and demand for open source software are expanding quickly.

3) Open Source Software provides a platform for developers to contribute and learn from others.

Advantages of oss:

1. Oss is very cost-effective to the majority of it is freely distributed.

2. It provides high flexibility where the code can be fully accessed.

and customized. It is usually modular, so vendors can tweak parts of the code or add features suited to their needs.

3. Open Source software embraces the values of community collaboration and transparency. It is backed by a diverse community of developers and is often regarded as cutting edge of technology.

4. Open Source software is highly secure and reliable as their is a constant peer review by developers to close gaps in securities and vulnerabilities.

5. The open source community uses a global collaborative approach to software development which helps drive innovation where the knowledge is shared and the community benefits from the collective innovation.

All open source softwares can be used for commercial purposes and can also be sold. However any further restrictions must not be placed on the user who recives the software. And in some cases the software must be distributed under the same license as recieved.

Q.2 What are the four important factors that led to the development of open source software?

→ 1. Reliability :

       This is an important factor to consider. Being an OSS, the primary attribute it should have is reliablity. If the product is built on a reliable OSS, half the river is crossed, and other issues that will arise can be managed or solved with relative ease.

2. Support (both community-wise & commercially) : Support for OSS is vital. All OSS rely on

talented and active support community. The community decides the progress & maintenance of the OSS. If the OSS has strong community support, there is better chance of recieving help of all issues one might face in the future with regards to the OSS.

3. license :

The OSS licence forms an integral part of the software and has to be clearly defined before any use of the OSS. A good OSS contains a well defined detailed license, which will describe the terms & conditions for contribution to the ongoing development of the software, your use of the software, as well as your incorporation of the software into other packages.

4. Accessiblity and flexiblity :

It is the one of the crucial factors in consideration influencing the development of the open source software. One of the major factors that have contributed to its development is the need for software that can be easily customized to the meet business requirements.

Q.3) Difference between free and open software.

Free Software	Open Source Software
1. It was coined by the free software foundation in 1980's.	1. In response to the restrictions of free software, the term "open source" was coined in the late 1990's.
2. Software is an important part of people's lives.	2. Software is just software. There are no ethics associated with it.
3. Software freedom translates to	3. Ethics are to be associated with

free Software	Open Source Software
social freedom	people & not software
4. freedom is a value that is more important than any economical advantage.	4. freedom is not an absolute concept freedom should be allowed not imposed.
5. Every free software is open source.	5. Every open source software is not free software.
6. There is no such issue with free software.	6. There are many different open source software licenses and some of them are quite restricted results in open source software is not free.
7. No restrictions are imposed on free software.	7. Open source Software occasionally imposes some constraints on users.
8. Examples: The linux kernel, the BSD and linux operating system, the GNU compiler collection etc.	8. Examples: Apache HTTP server, open source commerce, mozilla firefox, chromium, etc