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OPEN SOURCE RESOURCES

- **USE OF OPEN SOURCE:** Open source made a revolution in programming and the software industry by providing new and exciting products free of cost. The primary motive to generate an open source code is to have more useful, bug free products which are easily available and can be tinkered with, according to the requisites of the user.
- **OPEN STANDARDS:** An open standard refers to the standard that allows full public assessment and can be used without constraints in unbiased form. They are free from legal or technical clauses that limit its utilization in any business model. It can be managed and further developed independently. It allows you to share all kinds of data freely and with perfect reliability.
- **Open standards provide several benefits:**
  - Application Independence: To ensure that access to resources is not dependent on a single application.
  - Platform Independence: To ensure that access to resources is not restricted to particular hardware platforms.
  - Long-term Access: To ensure that quality scholarly resources can be preserved and accessed over a long time frame.
- **Commercial Benefits of Open Standards:** The big benefit of Open Source software is not the reduced license costs, but the flexibility it brings.
  - Interoperability
  - Vendor neutrality
  - Efficient use of existing resources
  - Greater use of automation
  - Flexibility
  - More options provide more opportunities to optimise
  - Lower and manageable risk
  - Robustness and durability
  - Quality
- **FOSS:** Free and Open Source Software (FOSS) is computer software which are free and open source. They are also available and can be freely licensed to use copy and modify the software based on need or requirement. The source code is openly shared so that user can use or improve the existing software. FOSS provides freedom to run a program for any purpose.
- **Benefits of using FOSS:**
  - Secure: Operating System or platforms are not perfectly secured but security aspect of FOSS attracted public organizations to consider FOSS solutions.
  - Stable and Reliable: FOSS servers are functioning fine for years without making any maintenance issues.
  - Reduced dependence on import of software: FOSS reduces the cost of proprietary software licenses.
  - Developing Local Software Capability: Everyone is able to modify and redistribute the software which helps in learning and acts as an excellent training system.
- **Shortcomings of FOSS:** They are not completely compatible with proprietary systems. But people are switching to FOSS

very fast so these types of issues will be reduced. As FOSS mainly focuses on functionality so desired documentation is not available as such.

- **BOSS:** BOSS (Bharat Operating System Solutions) is an Indian GNU/Linux distribution developed by CDAC and is customized to suit Indian's digital environment. It supports most of the Indian languages. BOSS comes with many features required for desktop of government organizations. It helps in routine tasks and utilities for desktop.
- **The BOSS Free & Open Source Software Guidelines:**
  - Free Redistribution
  - Source Code
  - Derived Works
  - Integrity of The Author's Source Code
  - No Discrimination Against Persons or Groups
  - No Discrimination Against Fields of Endeavour
  - Distribution of License
  - License Must Not Be Specific to BOSS GNU/Linux
  - License Must Not Contaminate Other Software
- **MOOCs:** MOOC is a web-based platform where unlimited number of students gets chance of distance education from best institutions in the world. They have forums and interaction sessions between the students, guides and professors. They provide video lectures and course material to students and discuss about problems, issues students are facing. They guide students to get the proper in depth knowledge of the course.
- **Working of MOOCs:** MOOC is like an online platform where students and teachers together form a pool of resources which is freely and readily available for you all to utilize. It facilitates with:

- Listening of lectures.
- Downloading notes.
- Peer evaluation by communicating with each other.
- Virtual online classroom.

### CHECK YOURSELF

1. A software that can be freely accessed and modified:
  - A. Synchronous software
  - B. Package Software
  - C. Open Source Software
  - D. None of the above
2. Open Source Software can be used for commercial purpose:
  - A. True
  - B. False
3. What is the Basic Requirement for Software to be "Open and Free Standard"?
  - A. No restrictions in acclimating executions
  - B. Should be free of cost.
  - C. No Restrictions on commercial use.
  - D. No Restriction on further modification.
4. Which of the following is not a downside of OSS?
  - A. Lack of personalized support
  - B. Restricted choice
  - C. No warranty
  - D. Multiple choices
5. OSS stands for:
  - A. Open System Service
  - B. Open Source Software
  - C. Open System Software
  - D. Open Synchronized Software

### STRETCH YOURSELF

1. What do you understand by Open Source Software?
2. List any 5 Open Source Software and their uses?
3. What do you understand by FOSS?
4. Explain the working of MOOCs?

### ANSWERS

Answers to Check Yourself:

1. C
2. A
3. D
4. D
5. B