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Use of Open Source Software in Library

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Abstract:

Computer technology and its infrastructure as well as commands are developing at a very rapid speed. Initially all these were available in monopolistic form. Although Windows is an advanced and simple system, the difficulties in using that technology, especially its monopoly, were bothering everyone. Against this backdrop the concerned technicians and researchers came together and decided to develop open source technology as a solution to all these difficulties. Open source software is, software that consumers have the capacity to run, copy, allocate, study, change, share and progress for any determination.

Introduction:

Today, information technology has progressed in all fields. Information technology has a great impact on people's lives today. Along with personal progress, there has been a great revolution in physical, social and political conditions. In this age of information technology, computers are widely used in all fields. The field of library and information science is not an exception to this. Computers have also entered the field of library and information, and day-to-day work is being done on computers. With the increasing stock of knowledge, you need to get the information you want at the right time in the least time and therefore here computers started to be used regularly.

Libraries have always been an important part of society. Libraries have to do things like collection of books, their use, response of readers, reading of academic books along with other literature, sources of information. Be it any type of library, academic or public, Libraries have to do the work of social enlightenment and public awareness, social and cultural enrichment.

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Effective use of information technology is necessary to make information easily accessible to all in the society. Software is an important component of information technology. Some experts concerned with social welfare came up with the idea that software should be provided free of cost to make the information easily available to all the citizens of the society, and it was from this idea that open source software wasborn.

Not all libraries are financially viable. The price of library books available in the market today is in lakhs. Besides, after spending so much for previous girls, we get the information we want and need from the order. Open source software helps improve library services. People who do daily computer-based work in the library can help with the use of Open Solar software. Like in other areas, open software has been created which is useful for libraries. Through this software, the library can be computerized. As we can change such software according to our needs, it becomes more useful.

What is an Open source?

The term open source can be interpreted in several ways, such as software that allows the programmers who create it to make their source code available to others, and that is part of the software itself and is readily available to anyone who finds the software useful.

According to Richer Poinder, "Open software is software whose source code is freely available to others to modify and use, and is managed by a community of developers and according to them, open source helps to increase the quality and reliability of the source code by adding new changes and qualitative improvements to it."

Open source software is computer software whose source code is available under a license that authorities users to study, change, and improve the software, and to reallocate it in modified or unmodified firm. It is often developed in a public, collaborative manner. It is the most prominent example of open source development and often compared to user created content.

Richard Stallman and Linus Torvalds are two particularly notable figures in the context of open source. In fact, Richard Stallman can be called the father of modern open source. Because of his fifteen years of tireless work, the concept of open source, which was totally defunct, was reinvented.

In short, software experts who think about the wider community make the source code of their software available to everyone, so software that is freely available with the source code is called open source software.

Features of Open source means:

- 1. Free software
- 2. Software with source code available
- 3. Because of the source code, no one is required in such software Can change.

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- 4. Modified Software is made freely available to others.
- 5. There are certain conditions to be followed to use a doctor

Advantages of Open Source Software:

- **Lower software costs**: Open source solutions normally require no licensing fees.
- > Simplified license management: Obtain the software once and install it as many times and in as many settings as you need.
- > Scaling/consolidation potential: Again, Linux and open source applications and services can often scale considerably.
- > Support: Support is available for open source often superior to exclusive solutions.
- ➤ Unified management: Specific open source technologies provide the capability to integrate or consolidate server, service, application, and workstation management for powerful administration.
- > Quality software: Evidence and research indicate that open source software is good stuff.

Open source library software:

Open source means making infrastructure and platforms available for computing. Similarly, freely available software for library computerization should be available in the library computerization tools that are available in the library or their small parts as well as the technology tools for making information resources available. The aim is to provide immediate service to the readers.

Open source library software's does not need the original cost of commercial software and enables libraries to have greater control over their working atmosphere. Library professionals should be aware of the advantages of open source software and should involve in their increase. They should have basic knowledge about the selection, installation and conservation. Open source software requires a grander degree of computing responsibility than commercial software. (https://www.researchgate.net/publication/28810296 Open Source Software and Libraries.)

When we buy or download software, it is in a compliant form and ready to use. When a programmer creates it, its code, called source code, is safely encoded in a way that a computer can understand. It is not given with command. The user does not get it. As a result, nothing can be changed in the declaration. Only the program owner can do that. The experience was the same with all the orders made on a commercial basis. But open source used to be quite the opposite. In this regard, along with the instructions, the source code is provided. Developers of the open source type believe that if the source code is given to anyone with the knowledge to modify or improve the code, then the bugs will be removed and an advanced code will be created. There are only a few things to keep in mind; Commands should be freely distributed as well as the source code accompanying the

www.irjhis.com ©2023 IRJHIS | Special Issue, February 2022 | ISSN 2582-8568 | Impact Factor 6.865 International Conference Organized by V.P. Institute of Management Studies & Research, Sangli (Maharashtra, India) "Digital Technology: Its Impact, Challenges and Opportunities" on 25th February 2023 command. Any source code modification or modification should be permitted.

If you want to use open source software while computerizing the library, then there is free open source software available on the internet. It has some software ready for administrative tasks as well as library automation and separate software for library digitization and another for Web publishing.

Softwares for Library Automation:

> Koha:

Integrated Library System-

Koha is a promising full highlighted open source which has integrated library system, presently being used by libraries all over the world. For those of you out there unaware of what an ILS is, well, it is a system of keeping track of the Operations of a library - payroll, expenses, purchases, and most importantly, keeping track of the various media being checked out by the librarians supporters. Many smaller libraries cannot afford to purchase, install, and maintain an ILS, and Koha is a perfect alternative.

Koha is constructed using library ILS standards and uses the OPAC (open public access catalog) interface. In addition, Koha has no vendor-lock in, so libraries can collect tech support from any party they choose.

> NewGenLib:

Verus Solutions Pvt Ltd and The Kesavan Institute of Information and Knowledge Management, India. Was created the OSS named as New Gen Lib (New Generation Library) is an Integrated Library Automation and Networking Solution.

> Evergreen:

This is another alternative when researching open source ILS options. Established by Equinox Software, Evergreen is a robust, enterprise level ILS solution developed to be capable of supporting the workload of large libraries in a fault-tolerant system.

Software's for Library Digitization:

➤ **Greenstone**: Digital Library Software-

The Greenstone digital library software is an open-source system for the Creation and presentation of information collections. It constructs collections with effective full-text penetrating and metadata-based browsing facilities that are Good-looking and easy to use. Moreover, they are easily preserved and can be Increased and rebuilt entirely automatically.

http://www.degreetutor.com/library/managing-expenses/open-source-library

> DSpace:

Dspace is a innovative digital institutional repository that captures, stores, indexes, preserves,

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E Prints:

E prints is an open source software package for building open access Repositories those are accommodating with the Open Archives Initiative Protocol for Metadata Harvesting. It shares many of the features commonly seen in Document Management systems, but is mainly used for institutional repositories and scientific journals. E Prints has been developed at the University of Southampton School of Electronics and Computer Science and released under a GPL license.

> Fedora:

Fedora open source software gives administrations a flexible service oriented architecture for managing and delivering their digital content. At its elementary is a powerful digital object model that supports multiple views of each digital object and the relationships among digital objects. e functions can be endangered with fine-grained access control policies.

Soft wares for Web Publishing:

> Wordpress:

Wordpress happening out as a quick, free, open-source solution blogging solution just a few years ago; today it is a perfect alternative to building a web site from scratch. In addition to being free to use (and easy to install), the Wordpress community has exploded, with thousands of users and programmers creating custom themes and plug-ins to completely change the way the software looks and operates. The most important aspect of the software is it's easy-to- use interface and content management system. With its visual rich editor, anyone can publish text and Photos to the web site. Other options include multiple authors (with separate log-ins), built in RSS (Real Simple Syndication) technology to keep subscribers updated, and a comment system that allows readers to interact with the sites content. A fantastic way to communicate with patrons, staff, etc.

Drupal:

Drupal is another open source web publishing option that permits an individual or a community of users to easily publish, achieve and organize a varied variety of content on a website. (UNESCO Free & Open Source Software Portal.http://www.unesco.org/)

Other Computer Web Publishing Software.

> Ubuntu:

Ubuntu the most popular player in the Linux based operating system game. (Linux is the open-source answer to Microsoft's Windows operating system; Ubuntu is a variation of Linux). ("Supported platforms". *Ubuntu Core Documentation. Canonical Ltd. 2020.*)

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> Open Office:

OpenOffice.org is a multiplatform and multilingual office efficiency suite and an open-source project. Well-matched with all other major office suites, the Product is free to download, use, and distribute.

> Firefox:

Firefox is the Mozilla formations answer to Microsoft's Internet Explorer web browser. Firefox offers a much more safe browsing experience compared to IE.

> Thunderbird:

Thunderbird Firefox's little comrade program, Thunderbird, is the Mozilla foundations open-source another to Microsoft's Outlook Express. The program works accurately like Outlook, providing you with a secure and safe desktop email solution.

Effective use of information technology is necessary to make information easily accessible to all sections of the society i.e. to all types of readers. Irrespective of any type of reader, students, teachers, researchers would need textbooks for readers, some scientific books, books for research specialists as well as advanced information in a chapter and in minimum time. Online services are also to be provided through modern technology computers. If open sources are available at this time, it is certain that the use of those open sources can reach the readers as soon as possible through open source software.

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