CHAPTER 4

Computer Applications in Libraries: Advanced

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
Unit-1: Use of computers in Libraries				
Classroom, Library or Computer Laboratory	Understanding the need, purpose and Functions of Library Automation Software (LAS)	Definition, Need, Purpose and Function	Chart out need and purpose of LAS.	**Interactive lecture:** Explaining about LAS and its need. Discuss functions of Library to
	Understanding the uses of LAS in various sections of a library	Uses of LAS	Explain the uses of LAS in different sections of Library	**Interactive lecture:** Discuss the uses of LAS . **Activity:** Visit an automated library and make a case study on use of LAS in different functions and services of library.
	Understanding the difference between different types of application software	Meaning and Definition. Difference between them	Comparative study of Proprietary software and open source software	Interactive lecture: Explain the different types of software
	Know about the functionality of e-Granthalaya and KOHA library software	Operations of Library software	Chart out the different modules of LAS	**Interactive lecture:** Explain the different modules of e- Granthalaya and KOHA software **Activity:** Visit a library and prepare a record of field of different modules of a LAS.

Unit-2: Use of social networking tools				
Location	**Learning Outcome**	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
Classroom, Library / Computer Laboratory	Understanding the various social networking tools used by library to provide the services to their users	Knowledge of social media tools	Create a library page using any social media tools.	**Interactive lecture: Discuss the application of social media tools in the library.**
	Understanding the features of various social media tools.	Knowledge of features of different social media tools	Chart out of features of different media tools.	**Activity:** Prepare a web page of a Library with the help of social media tools.

UNIT-1

Use of Computer in Libraries

4.1.0 Introduction

Software is a set of programmes, meant to perform a well-defined function. The software is created by grouping various related programmes. These programmes are written in computer programming languages. A programme is a sequence/set of instructions which are made to perform a well-defined task. On the basis of functions, the software can be grouped in following categories:

(i) Operating System

(ii) Utility Software

(iii) Application software.

(i) Operating System: The Operating System is a programme which controls the overall internal operations of a computer system. It performs the booting and rebooting functions, schedule the tasks, control the peripherals and manages the files. Windows, Linux, etc., are some of the examples of an operating system.

Figure 4.1.1: Windows operating system

(ii) Utility Software: The utility software is a programme which analyzes, configure, optimize or maintain a computer system without any input. All the antivirus and system software fall under this category. For example- Microsoft Security Essential, etc.

(iii) **Application software:** Application software is designed to perform a particular task or a group of tasks to satisfy the needs of a particular environment. They are created by analyzing the environment and the need of a particular system. For example, a Library Automation Software (LAS) is a customized application software for managing day to day functions of a library and its management. The Library Automation software is developed to perform the housekeeping as well as storage and retrieval tasks. The work in library can be categorized into two categories:

(a) Routine work,

(b) Information Service work.

Both the above tasks in a library can be performed easily in less time through the LAS. It helps the library staff performing routine, administrative or clerical works efficiently, accurately and reduces the duplication of work.

4.1.1 Study of different Library Software

The LAS has the provisions of controlling and performing the routine works in acquisition, circulation, accounting, records maintenance, library catalogue, information storage and retrieval, etc. The library automation software automates the library functions with the help and assistance of computers and other equipment such as radio frequency identification (RFID), barcode, and so on.

4.1.1.1 Need and Purpose

Recent advancement in the field of information technology has compelled libraries to automate their functions to provide better services to their members. Suitable library automation software coupled with computers and other equipment can enhance the effectiveness of library services.

The LAS is needed for managing library in computerized environment. The maintenance of library records and provision of lists (catalogues) and notices involve considerable manual efforts and time. There are a number of routines works which are repetitive in nature. With the help of LAS, these functions can be performed easily, efficiently, and effectively with less time consumption.

The need of library automation software can realize as follows:

(i) To provide efficient and accurate services,

(ii) To reduce duplication of work, save the time of library staff and increase their productivity,

(iii) To quick and easy update, edit and information retrieval.

(iv) To control the rapid growth of information,

(v) To save the time of the reader/user,

(vi) To utilize the library resources efficiently and effectively,

(vii) To prepare library catalogues,

(viii) To provide OPAC,

(ix) To prepare various records of library such as circulation records, accession register, etc.

(x) To create different statistical reports

(xi) To make statistical analyses

(xii) To compare with records of previous year to enhance efficiency of the library

(xiii) To provide current awareness services and selected dissemination of information

(xiv) Stock verifications, etc

4.1.1.2 The purpose of LAS can be understood as:

(i) The LAS is introduced in library to keep pace in the era of information explosion and the need of the users. Once information is stored in the computer and verified, it becomes an asset for the library. After that it provides accurate information to the users and the library staff, easily and quickly.

(ii) There are a number of repetitive works performed by the library staff which consumes time and prone to make mistake also. For example, sending reminders, different notices, circulars, ordering books and many others. with the help of LAS, the repetitive works may be done in very less time and with accuracy. It reduces the burden of library staff and save their time which would enhance their productivity.

(iii) The application of LAS saves the precious time of the library users/readers as it provides them quick and accurate information services.

(iv) The LAS facilities to update, edit and replace the existing data and different information which make day-to-day task easier and to complete them within the specific time.

(v) The LAS helps in locating the resources available in-house as well as in other libraries which makes staff and users both controlling over the rapid growth of information and finding the relevant information resources with less effort and time.

(vi) The LAS provides tool to create centralized library catalogue and make it searchable over Internet or Intranet. This provision of the software maximizes the utilization of the library resources and makes the users self-dependent in using the library services.

(vii) The LAS has the provisions of creating different reports which helps in managing the library functions and further planning and designing better services to the users.

(viii) The LAS provides tools for reference services, as new addition list, selective dissemination of information, arrival of new issues of journals, compilation of study list or bibliography on the topic of interest, etc.

(ix) The LAS provide different administrative tools for the authority of the library to monitor the library functions, keep eyes on activities of the libraries, consumption of budget, stock verification, etc. There are such provisions through which a library can be monitored remotely in real time environment.

(x) The LAS gives time and tools for research and development in the field of library and information science.

4.1.1.3 Function of LAS

In an automated library system, all kind of the tasks are performed through the LAS. It can perform housekeeping operations as well as information retrieval and dissemination. It can be applied in all sections of a library such as acquisition, cataloguing, OPAC, reference service, serial control, and other services. It can also help library in its administration and management such as, planning, decision making, stock verification, statistical analyses, etc.

4.1.1.4 Use of LAS in various section of a Library

(a) Acquisition

The LAS has the provisions to undertake all the routine work under acquisition with the wide range of outputs, giving the librarian full control over acquisition process and budget. It supports in selection of library materials, ordering, receiving, accessioning, budgeting, fund management and other works of the section. The application of the LAS in acquisition section can be understood as follows:

(i) Collecting bibliographical information through various selection tools and managing the recommendations given by the members of the library.

(ii) Assuring the availability of proposed materials within the available or allotted budget.

(iii) Preparation of supply order to be sent to the vendors.

(iv) Maintaining online records of all materials, ordered, received, accessioned, pending, etc.

(v) Maintaining database of vendors.

(vi) Detection of delay in supply and sending reminders.

(vii) Checking in of item received, processing of invoice, accessioning of materials.

(viii) Accounting fund for payment of bills and controlling the funds for books and other materials.

All the tasks of acquisition section can be done accurately and efficiently with less human resources and in less time compared to manual system.

(b) Serial control

Serial acquisition is completely different from acquiring books. Serial subscription is being paid in advance and issues are received continuously within the period of subscription. Each periodical is being subscribed separately and because of different frequency, each issue is received and recorded separately. Payment details of each title is recorded and maintained separately. The records of the serial section are very important and necessary to keep up to date. Therefore, serial control in a library needs separate set of functions to manage the serial section.

The LAS can help in subscription, keeping payment records, receiving and maintaining issues, claiming missing issues and sending reminders, renewal of subscriptions, updating list of current holdings and managing bound volumes, as well as other functions of the section.

(c) Technical Section

The LAS can make possible the computerized classification and cataloguing of books, which reduces the manpower and saves the time of the library staff. Computerized classification has been experimented by DRTC Bangalore, in India. Classification needs much human intelligence to decide a class number for a material therefore, difficult in implementing.

A library can create its own catalogue or can get help from other libraries, or cataloguing service providers. Library of Congress (USA) is one of the largest catalogue holders in MARC format from which a catalogue can be imported directly in to own library database. Today there are several software for example KOHA, in which data can be imported directly from the catalogue database of other libraries if they Z39.50 standard compatible and online. The LAS provides tools to create, edit, delete catalogue, and make them searchable.

(d) Circulation section

The LAS makes the functions of circulation section easy and fast. It also helps library in saving time and space as there is no need to keep members borrowing cards and book cards at the circulation counter in different trays.

The software helps the library staff in issue, return and renewal of the library resources and also in maintaining the records. With the help of software, the circulation work can be automated to the extent that there would no need of staff for issue and return. This can be done with the help of RFID.

LAS gives the facility of reservation of books and other materials. The members of the library can reserve the issued materials online which, leads to save the time of the users and staff both.

The software helps in preparing different reports and statistics of the circulation section like, issue-return, fine, membership granted and terminated, number of users/readers, etc.

(e) Inter Library Loan

The Inter library loan is one of the services provided by libraries in which required resources, (if not available in the library) can be traced and brought from other libraries into own library and issued to the needed member. Similarly, if needed, materials can be issued to other libraries too.

Locating resources and their availability is easy through online catalogue. For this purpose, generating request letter to holding library, issue-return process (with the member who has demanded), again returning the material to holding library and maintaining the records, all are done through the LAS.

(f) Library Catalogue

The library catalogue is being created through LAS. Once, the database of catalogue created and uploaded for online access, it becomes easy to search required materials and to know their availability status. It provides full bibliographic details of the materials and depending upon the library, image, content page, reviews, etc, of the materials may be provided also.

(g) OPAC/Web OPAC

The online access of a catalogue is known as OPAC (Open Public Access Catalogue). It provides the library collection on a computer system to its user in the form of searchable catalogues. It is a tool which makes user self-dependent in searching required materials. All the LAS have the provision to provide OPAC.

The OPAC accessible through Internet is being known as Web OPAC. The Web OPAC saves the time of the user and the staff of the library. It is a tool which makes the users self-dependent in exploring the resources of the library remotely.

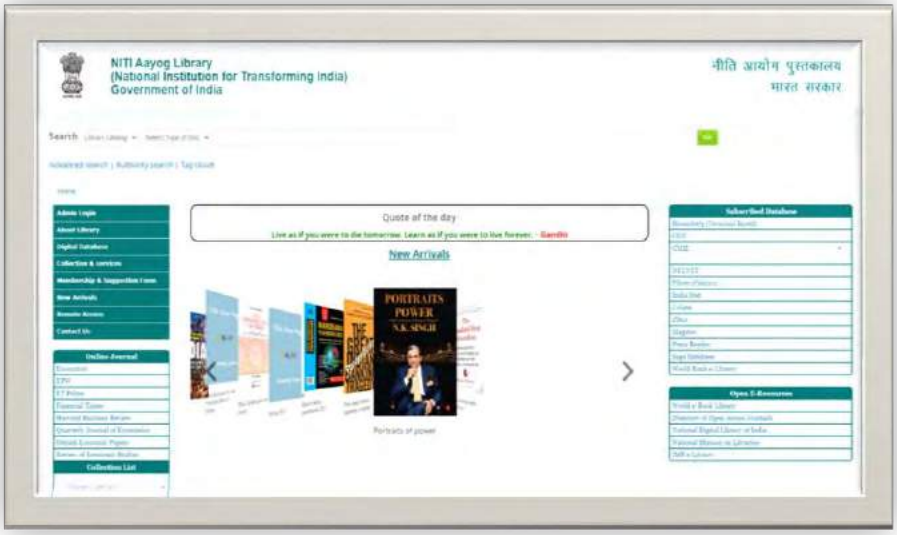

Figure 4.1.2: OPAC of NITI Aayog Library

Figure 4.1.3: OPAC of Delhi Public Library

Source http://delhipubliclibrary.in/cgi-bin/koha/opac-search.pl
Accessed 11.8.2021 at 14:00 Hrs IST

(h) Reference Section

The LAS provides tools for reference service to the users. It helps in locating required materials in own library and if needed it can search another library also.

Preparing study list and compiling bibliography on a given topic, bringing out new addition

list, providing Current Awareness Service (CAS), Selective Dissemination of Information (SDI), or other activities of the section becomes easy through LAS.

(i) Maintenance Section

Maintenance of records, statistics, pre-defined and customized reports can be taken out with maximum accuracy through LAS. Planning for future, data analyses and decision- making information is easy through proper utilization and timely updating different databases of the LAS.

Analysis of data and comparison with the data of previous years are easy and accurate through LAS which enhance the efficiency of a library.

4.1.1.5 Types/Kinds of Library Automation Software Packages:

The LAS can be categorized based on different characteristics of the software. Here, we are discussing the types of LAS based on licensing. There are two types of Library automation software available in the market. Those are:

(i) Proprietary software

(ii) Open-Source Software

The proprietary software is a kind of software for which ownership remains with the creator under the provisions of copyright. The owner or proprietor provides license to the user, for using its applications on certain terms and conditions. Users are not being given the right to open, modify or further distribute the source code of such software. Because of this, the software of this category is being called closed source software also. The owner of the software takes fees for granting the license for using its applications, sometimes, some of the software may be free from charges for using its applications but the source code of the software remains closed.

The proprietary software is most of the times a paid software but sometimes it can be made available free of cost, based on some terms and conditions decided by the owner whereas. Whether such software is being purchased or made available free of cost, but the source code of such software remains closed. We have several Library automation software in this category. For example, LIBSYS, VIRTUA, TRUDAN, etc.

(ii) Open-Source Software

The Open-Source Software (OSS) is a software for which source code is open. The users are granted license to use, study, modify and further redistribute it. Such software is usually the product of collective efforts of the professionals to provide free and the right of customization as per need of the user.

There are a number of open-source Library automation software available and being used worldwide. For example, KOHA, New Gen Lib, ABCD, etc, are a few open-source LAS available worldwide.

4.1.1.6 Study of e-Granthalaya software

e-Granthalaya is a Digital Platform developed by National Informatics Centre, Ministry of Electronics and Information Technology, Government of India for Government Libraries. Under the platform, NIC provides a complete ICT solution with integrated Library Management Software, Digital Library Module, Cloud hosting environment and a Library Portal (OPAC) with NICSI empanelled Roll-out Services support. e-Granthalaya is useful to transform traditional libraries to e-Library with Digital Library Services which includes, automation of in-house activities of libraries, digital library integration, and to provide various online member services using Single Window Access System. Latest version of e- Granthalaya i.e. Ver.4.0 is a 'Cloud Ready Application' and provides a Web-based solution in enterprise mode with a centralized database for cluster of libraries. The ICT solution is well compliance with International standards prevalent in Libraries with use of latest ICT technology and Cloud hosting. e-Granthalaya 4.0 uses PostgreSQL - an Open Source DBMS as back-end database solution and is made available in NIC National Cloud (Meghraj) for Government Libraries on request basis with hosting of application and databases for online access.

e-Granthalaya was started as an in-house project at 'Karnataka State Centre of NIC, Bangalore' and first version of the software was designed for the Public Libraries in the State. Later, NIC HQs 'Library and Information Services Division' took over the designing of the software where library professionals were involved in the designing process and, thus, improved the software with enhanced user interface and simplify the workflow of library functions so that it can suit to all kinds of libraries

System Requirements

- Application is hosted in NIC National Cloud and used Online by User Libraries for Data Entry and Member Services.
- No Component is installed and nothing to maintain at User End (Database and Application are hosted in NIC National Cloud)
- User Library needs to have Desktops with High-Speed Internet Connectivity (With Min 4 MBPS).
- Other Infrastructure required in Library: Desktop Bar Code Printer / Scanner / Small Laser Printer

Software Components

e-Granthalaya 4.0 contains following components:

- Database (Separate database for each library cluster).
- e-Granthalaya 4.0 Application
- Crystal Reports Executables.
- Z39.50 Libraries

Implementation and Distribution Policy

As per NIC Policy on e-Granthalaya, the software is provided to the Government and Semi-Organizations only. The Software is not installed in libraries, rather it is hosted in NIC Cloud and libraries need to use it online, thus, high-speed NET connectivity (min 4-8 MBPS speed) is required in libraries.

Access to e-Granthalaya 4.0 On Cloud

Once library gets an Online Account of e-Granthalaya 4.0 from NIC then user may access the application through http://eg4.nic.in e-Granthalaya 4.0 - LIVE link may be clicked and then Select the Cluster - then Login

4.1.2 Use of Open-source software KOHA: A Library automation Software

KOHA is one of the most popular, free and open-source Integrated LAS in the world. The package was developed by Katipo Communication Limited, Wellington, New Zealand for the Horowwhenua Library Trust(HLT). The HLT is a regional library system located in Levin, near Wellington. The developer of KOHA proposed to develop a new system for HLT using open-source tools as, Perl, My SQL and Apache which run on LINUX platform and use telnet to communicate with the branches.

The KOHA software was first released in July 2000 under the general public licensing for public. The whole world took interest in this software and a global community of users and developers of KOHA got created. From its first Version to Version 2.9, the package was available for both Linux and Windows operating systems. Since the KOHA community is promoting the concept of open-source software therefore, only Linux version was being developed and distributed, from version 3 onwards. Hence, KOHA version 3 onwards is available for LINUX environment only. The latest version of KOHA koha-21.05-latest.tar.gz was released on 2021-06-24.

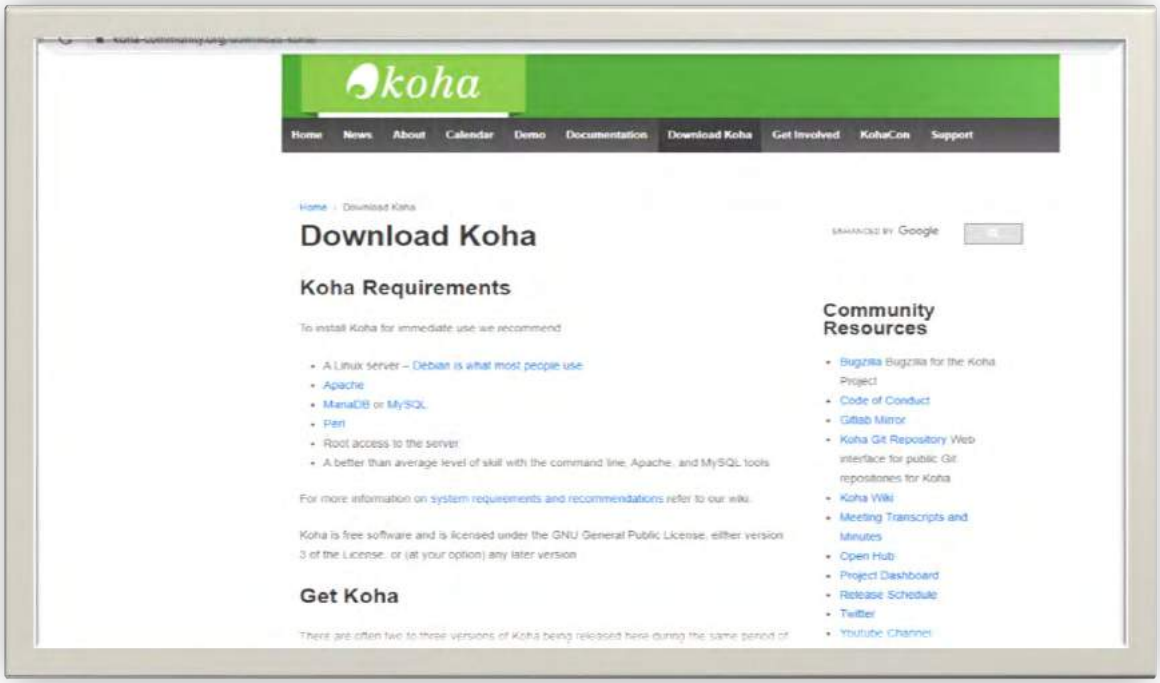

Figure 4.1.4: KOHA requirements Source https://koha-community.org/download-koha/ Accessed on 11.08.2021 at 14:10 Hrs IST

(a) Features of KOHA

KOHA is an open source, web centric Integrated Library automation software, free to download from its official website: http://koha-community.org/, without any fees for licensing, customizing, using and further distributing. It has a strong user community worldwide to provide documentation and technical support. Technical details and operating guidelines have been given in the manual of the software. The manual is available online as well as in PDF form. It is suggested to download a PDF version of the manual of a particular version of KOHA you are going to work with. It has been observed that the website of the KOHA Community maintains the manual of latest and few previous versions of the software.

The salient features of KOHA can be listed as follows:

(i) **Centralized Vs Decentralized Library:** The software provides facility to create different branches of a library and share their resources and members. It has provisions to restrict inter-operability among branch libraries. This feature is very much useful for universities or public library system which has branches to control. With the help of the software, control can be centralized, and real time monitoring system of the library operations can be developed.

(ii) **Administration:** The software has very strong administration tools. It can restrict its users or staff from accessing its certain areas of activities. The access can be linked with IP address. It gives control over each and every operation within the software. All the parameters which are needed to operate the software and keep the possible security measures under control are given in administration module.

(iii) **Tools:** The software provides tools to create different reports, notice, circular, members' comments, imports patron profile in bulk, and a number of templates to be used.

(iv) **Patrons:** The software provides separate module for managing information of members, its addition, editing, import in bulk, etc.

(v) **Circulation:** The software provides facilities for issue-return, renewal, and reservation of the library resources, fine collection, using barcode, and generating overdue list for reminder.

(vi) **Cataloguing:** The software provides facility to create bibliographic database in popular fields like author, title, ISBN, and other attributes. KOHA supports MARC and its different forms. One of the best features of the KOHA is Z39.50 compatibilities. With the help of Z39.50 feature one can easily import MARC records in own database from the databases of other libraries like the Library of Congress, RMIT Library, etc, modify them as per needs and make its own record. It is also a Unicode compatible LAS hence; multilingual catalogue can be created in it.

(vii) **Serials:** The software provides separate module for serials management. Under this module, serial subscription process, renewals of old subscriptions, receiving of issues, reminders of non-receipt of issues, are the key features.

(viii) **Acquisitions:** The software provides facility to manage real time budget, vendor profile, ordering, receiving, suggestions to purchase, and other routine works of the acquisition.

(ix) **Lists and Cart:** The software provides facility to save a collection of content on a specific topic or for a specific purpose under list and session specific storage space under cart.

(x) **Reports:** The software provides facility to create customized reports and standard statistical reports needed for decision making and records.

(xi) **Searching:** KOHA software provides searching of the library resources of own library as well as the associated libraries. It has options of basic and advance searches.

(xii) **OPAC:** The software provides facility to search library catalogue online and to reserve or put comment against a record under its OPAC module. The OPAC created with the KOHA can be made accessible globally through internet.

(xiii) **Customization:** KOHA provides facility to customize it as per the need of the library. The library staff, with the knowledge of HTML or XML can make changes easily. As the source code of the software is open and the schema of database and coding instructions are given on the community website, with the help of those a person having knowledge of coding can change in programme of the software as per need and vision to create a better version.

Apart from above mentioned features, there are a number of other features of the software which can be learnt from the documentation section of the KOHA Community website.

Figure.: 4.1.5 Modules of Koha

(b) System Requirements:

The KOHA can run on any personal computer (under LINUX operating system) but it is recommended to install it on web server to get better result. It to be remembered that the LINUX having different versions. Two versions of LINUX namely Ubuntu and Dabian are popular. Hence, KOHA is available for these versions of LINUX.

In addition to the server, barcode printer and barcode reader as well as normal printer to print different labels and reports, should be connected to the system. With these machines and equipment a library can operate its automated systems with KOHA.

(c) Software requirements for installing and running KOHA are as follows:

(i) **Operating system:** A Linux server – the software can run on any version of Linux, Debian or Obuntu.

(ii) **Apache:** this is a web server software on which Koha runs.

(iii) **MySQL:** this is an RDBMS software which provides back-end support to KOHA.

(iv) **Perl:** this software provides web interface.

(v) Root access to the server

(d) Other Skills

(i) A reasonable level of comfort with the command line

(ii) Database administration skills.

The KOHA and other required software to run KOHA are listed above. They can be downloaded from the KOHA community website where links of the download page of different software have been provided. All this software is licensed under the GNU General Public License, either version 2 of the License, or (at your option) any later version. Instead of downloading different software separately, complete bundle of KOHA with related software can be downloaded from the CD or DVD version which is known as CD or DVD image or KOHA Live CD/DVD. After downloading CD or DVD image or can say ISO file, burn it on CD or DVD and boot your system with this CD or DVD and follow the instructions. All the software gets installed and after setting the parameters, KOHA runs.

As we know that the KOHA runs on Linux operating system, therefore, if you are running any other operating system and rebooting the system with the KOHA, CD or DVD then you may lose your previous operating system and data as it may format the hard disc and then installs the software. Hence, it is recommended that, before installing KOHA especially from CD or DVD, save your important data and then installs it. If you wish to run KOHA on your personal computer or laptop for practice purposes then, install KOHA in another partition of the Hard Disk of your Computer system. This will facilitate you to boot your computer system with the operating system you wish to work.

It is recommended that you download the KOHA Manual of that particular version of KOHA you have installed in your computer system and follow the instructions. For example, if you have installed KOHA 3.10 then download the Manual for KOHA 3.10. With the help of the manual and documentations available at the KOHA community web site (http://koha- community.org/), you would be able to operate the software and execute the functions of your library smoothly.

4.1.3. Summary

The library automation has become necessary to provide fast and accurate services to the library uses. Computers and some other equipment along with automation software are needed to automate a library. With the help of LAS almost all the functions of a library can be automated.

Library automation software is an important tool for creating an automated library system. There are two types of LAS available in the public domain namely proprietary and open- source software. Most of the time, the proprietary software is paid and sometimes it may be free too but, whether paid or free, the owner of such software only provides the license to use its applications only. The users of the proprietary software cannot get access of its source code, hence, cannot customize it as per their needs. The open-source software is licensed to use its applications and make changes in programme as the source code of such software is open. It also provides licence to bring different version after changing in the programme and further distribute it to others.

The KOHA is one of the popular open-source LAS worldwide. It runs in the LINUX environment and is completely web compatible. All most all the functions of a library can be automated through KOHA. Several features of KOHA have been discussed in this chapter. The KOHA and its supporting software can download from http://koha-community.org and associated links and can install in any computer.

Using KOHA can save the financial resources of a library and make the library service efficient and effective. The documentation and technical support can be obtained from the above-mentioned website of the KOHA to run the system smoothly.

4.1.4 Exercise

1. What do you mean by software?
2. What is application software?
3. What does the RFID stand for?
4. Define proprietary software.
5. Define open-source software.
6. What is the different software required to run KOHA?
7. Define library automation software.
8. How does LAS save the time of the users?
9. How does LAS save the time of the Library staff?
10. How does an LAS help in better planning and designing library services?
11. Name a few proprietary LAS available in India.
12. Name different versions of LINUX.
13. What do you mean by a Library Automation Software?
14. Why automation of a library is needed?

15. What are the salient features of KOHA?
16. Write down the process of installing KOHA.
17. Write down the purpose of Library automation in 1000 words.
18. List the different sections of a library which can be automated through LAS?
19. How LAS provides searching facilities to the users?
20. What are the functions of acquisition section which can be automated through LAS?
21. What are different tools provided by LAS for reference services?
22. How does LAS saves time and space in circulation section?

4.1.5. Practical

1. Download KOHA and other required software from http://koha-community.org and install it.
2. Download a KOHA manual from http://koha-community.org/documentation and make a short note on each module given in the manual.
3. Verify your short note made for each module of KOHA from KOHA software.
4. Create catalogues in KOHA for five books.
5. Create five patrons in KOHA.
6. Create five Catalogue through importing data from Library of Congress.
7. Create budget in KOHA and order five books to a vendor.

UNIT-2

Use of Social Networking Tools

4.2.0 Introduction

Now a days, Social media is being used by Libraries to communicate with readers and to market their services. It is being used as a platform for discussion, promotion of library services.

4.2.1 Facebook

One of the most popular social media portals is Facebook. It is one of the best for communication, organization and maintenance of professional and personal contacts. The data/ Information reveals that the Library community mostly communicate through Facebook. This includes library pages, Librarian's profiles and various thematic library group. It has convenient function of maintaining detailed statistics. Any one can track how many times people visit FB pages, gender, age and country of origin of viewers of "wall", photos, information or events, counting the number of the visits and likes. Facebook is a social networking website where users can post comments, share photographs and post links to news or other interesting content on the web, chat live, and watch short-form video.

Facebook began in February of 2004 as a school-based social network at Harvard University. It was created by Mark Zuckerberg along with Edward Saverin. Facebook makes it simple to share photos, text messages, videos, status posts and feelings on Facebook.

Figure 4.2.1 Facebook Source:
https://icon-library.com/icon/high-resolution- facebook-icon-8.html
Accessed at 11.8.2021 at 16:30 Hrs IST

Facebook provides a customizable set of privacy controls, so users can protect their information from getting to third-party individuals.

Features of Facebook

- Facebook allows you to maintain a friends list and choose privacy settings to tailor who can see content on your profile.
- Facebook allows you to upload photos and maintain photo albums that can be shared with your friends.
- Facebook supports interactive online chat and the ability to comment on your friend's profile pages to keep in touch, share information or to say "hi."
- Facebook supports group pages, fan pages, and business pages that let businesses use Facebook as a vehicle for social media marketing.

4.2.2 Twitter

Twitter is an online news and social networking site where people communicate in short messages called tweets. It is developed by Jack Dorsey, Noah Glass, Biz Stone and Evon williams. It was launched in July 2006. It's headquarter is in USA. Tweeting is posting short messages for anyone who follows you on Twitter, with the hope that your messages are useful and interesting to someone in your audience. It is also called microblogging. Twitter is a blend of instant messaging, blogging, and texting, but with brief content and a broad audience

Figure 4.2.2

Source: https://www.theindianwire.com/social-media/twitter-introduces-topics-feature- for-users-to-follow-subjects-according-to-their-interests-296823/

Accessed 11.8.2021 at 16:20 Hrs IST

How it works

Twitter is easy to use as either broadcaster or receiver. You join with a free account and Twitter name. Then you send broadcasts (tweets) daily, hourly, or as frequently as you like. Go to the "What's Happening" box, type 280 or fewer characters, and click Tweet. People who follow you, and potentially others who don't, will see your tweet.

People send tweets for all sorts of reasons: vanity, attention, self-promotion of their web pages, or simple boredom. The great majority of tweeters microblog recreationally.

Thousands of people advertise their recruiting services, consulting businesses, and retail stores by using Twitter, and it works.

Twitter has become one of the most used social media platforms because it is both personal and rapid. Celebrities use Twitter to build a personal connection with their fans.

4.2.3 RSS

RSS (Really Simple Syndication/ Rich Site Summary) is becoming one of the influential tools with growing number of tasks, such as headline syndication/news posting, eTocs, updating and locating content for websites. It allows a blog posting to be syndicated and fed into an aggregator. Generally, RSS is a simple XML syntax, describing feed of recent additions to a website and/or weblog. Any web user can subscribe these feeds to initiate the subscriptions to that site. It can be done through entering the URL address into an RSS reader or by adding these feeds icon into the concern website and/or web browser. Through this subscribed RSS feed, the user can see the update posts on a regular basis and downloads any update and aggregates them for reading new contents from multiple sites without visiting those sites.

Figure 4.2.3 RSS Feeds

Source: http://www.problogger.net/what-is-rss/

Accessed on 11.8.2021 at 15:13 Hrs IST

4.2.4 Blog

The term 'weblog' was coined by Jorn Barger on December 17, 1997. The short term "blog" was coined by Peter Merholz. The term "Blog" refers to a website, which indicates a blending of words Web and Log. "Log" stands for describing the systematic/sequential recording of data processing event, often chronologically and "Web" points to material available on the World Wide Web. Based on this principle, blog has evolved for publishing and posting data on the web. Various authors have defined blog differently, however, the basic theme remains same. In the word of a few, like Peter Sepp, Chris, Ivan and Stephen Downes, "Blog is an online publishing press or an information transmission hub, news reporting networks, a catalogue with new contents, personal diary or a website 'with new data' and updated frequently with links, commentary and, contains brief entries arranged in reverse chronological order".

In the context of library, a blog can be defined as a referring content management or distribution tool/system that helps to broadcast information to the end-user to promote awareness about the library programs and services. It is a communication agent or new publishing media for those libraries which connect with the world online. Through the library blog, a library can assist users and keep them updated about its products and services such as new arrival of books, journals etc. With the help of a blog, the library can secure participation of user in various programs such as, book review, discussion forum, research tips, conferencing, book, and other information source selection, etc. It provides an opportunity to build a virtual community, encourage feedback from patrons, extends or derives value addition to library services. It also enables rapid production and consumption of web-based publications, archive and share those new documents automatically

to establish an information social marketplace within the library. A few examples of blog service providers are Blogger, Typed, WordPress, etc.

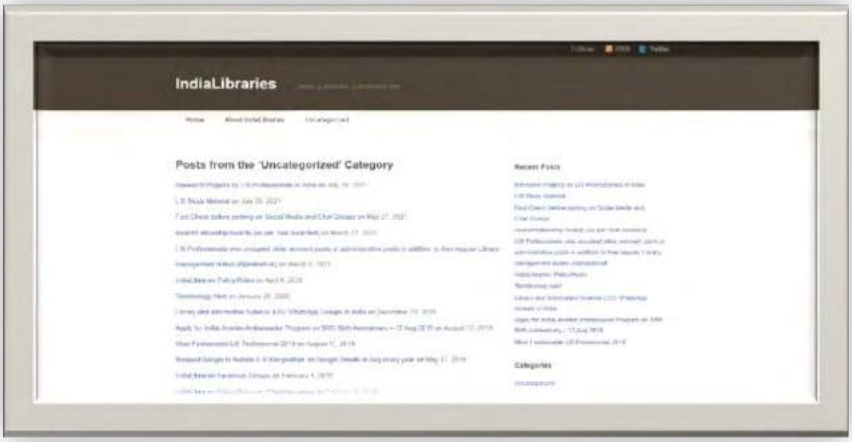

Figure 4.2.4 Blogs

Source: https://indialibraries.wordpress.com/category/uncategorized/
Accessed: 11.8.2021at 16:15 Hrs IST

4.2.5 LinkedIn

Figure 4.2.5 Linkedin

Source: https://www.marketing-interactive.com/linkedin-undergoes-brand-refresh- unveiling-new-logo-and-colours Accessed on 16:34 at 16:35

LinkedIn is one of the most popular social platforms today. It is a social network for professionals. founded by Reid Hoffman and was launched in May 2003. Whether you're a marketing executive at a major company, a business owner who runs a small local shop or even a first year college student looking to explore future career options, LinkedIn is for anybody and everybody who's interested in taking their professional life more seriously by looking for new opportunities to grow their careers and to connect with other professionals. LinkedIn is very similar to Facebook in terms of its layout and broad feature offering.

Features

Some of the basic features are:

Home: Once you've logged in to LinkedIn, the home feed is your news feed, showing recent posts from your connections with other professionals and company pages you're following.

Profile: Your profile shows your name, photo, location, occupation and more right at the top. Below that, you have the ability to customize various sections like a short summary, work experience, education and other sections. Similarly to how you might create a traditional resume or CV.

My Network: Here you'll find a list of all the professionals you're currently connected with on LinkedIn. If you hover your mouse over this option in the top menu, you'll also be able to see a number of other options that will allow you to add contacts, find people you may know and find alumni.

Jobs: All sorts of jobs listings are posted on LinkedIn everyday by employers, and LinkedIn will recommend specific jobs to you based on your current information, including your location and optional job preferences that you can fill out to get better-tailored job listings.

Interests: In addition to your connections with professionals, you can follow certain interests on LinkedIn as well. These include company pages, groups according to location or interest, LinkedIn's SlideShare platform for slideshow publishing and LinkedIn's Lynda platform for educational purposes.

Search bar: LinkedIn has a powerful search feature that allows you to filter your results down according to several different customizable fields. Click "Advanced" beside the search bar to find specific professionals, companies, jobs and more.

Messages: When you want to start a conversation with another professional, you can do so by sending them a private message through LinkedIn. You can also add attachments, include photos and more.

Notifications: Like other social networks, LinkedIn has a notification feature that lets you know when you've been endorsed by someone, invited to join something or welcomed to check out a post you might be interested in.

Pending Invitations: When other professionals invite you to connect with them on LinkedIn, you'll receive an invitation that you'll have to approve.

These are the main features you'll first notice when you get on LinkedIn, but you can dive deeper into some of the more specialized details and options by exploring the platform yourself. You may

eventually be interested in using LinkedIn's Business Services, which allow users to post jobs, take advantage of talent solutions, advertise on the platform and expand your sales strategy to include social sales on LinkedIn.

What You Can Use LinkedIn For (As an Individual)

Now you know what LinkedIn offers and what kind of people typically use it, but that probably doesn't give you any specific ideas for how to start using it yourself. In fact, many users create an account and then abandon it because they have no idea how they should be using LinkedIn.

Here are some tips for beginners.

Get back in touch with old colleagues. You can use the My Network section to find old colleagues, teachers, people you went to school with and anyone else you might think is worth having in your professional network. Just enter or connect your email to sync your contacts with LinkedIn.

Use your profile as your resume. Your LinkedIn profile basically represents a more complete (and interactive) resume. You can include it as a link perhaps in an email or your cover letter when you apply to jobs. Some websites that allow you to apply to jobs will even allow you to connect to your LinkedIn profile to import all your information. If you need to build a resume outside of LinkedIn, there are apps for that.

Find and apply to jobs. Remember that LinkedIn is one of the best places to look for job postings online. You'll always get recommendations from LinkedIn about jobs you may be interested in, but you can always use the search bar to look for specific positions too.

Find and connect with new professionals. It's great to get back in touch with old colleagues and connect with everyone at your current workplace who may also be on LinkedIn, but what's even better is that you have the opportunity to discover new professionals either locally or internationally that may be able to help out with your professional endeavours.

Participate in relevant groups. A great way to meet new professionals to connect with is to join groups based on your interests or current profession and start participating. Other group members may like what they see and want to connect with you.

Blog about what you know. LinkedIn's very own publishing platform allows users to publish blog posts and gain the opportunity to have their content read by thousands. Published posts will also show up on your profile, which will increase your credibility in related fields that are relevant to your professional experience.

Upgrading to a Premium LinkedIn Account

Many people can do just fine with a free LinkedIn account, but if you're serious about using LinkedIn and all of its most advanced features, you may want to upgrade to premium. As you go about exploring the platform, you'll notice that certain things like various advanced search functions and the "Who Viewed My Profile" feature aren't available to free users.

LinkedIn currently has premium plans for users who want to land their dream job, grow and nurture their network, unlock sales opportunities and find or hire talent. You get to try any premium plan for free for a month, after which you'll be charged a monthly fee depending on which plan you choose (plus tax).

- LinkedIn Premium Career: $29.99 a month. For individual professionals looking to get hired and advanced their careers.
- Linkedin Premium Business: $47.99 a month. For businesses that are looking to grow and build a network.
- LinkedIn Premium Sales: $64.99 a month. For professionals and businesses looking for targeted leads.
- LinkedIn Premium Hiring: $99.95 a month. For professionals and businesses looking to recruit and hire employees.

As a final note, don't forget to take advantage of LinkedIn's mobile apps! LinkedIn has its main apps available for free on iOS and Android platforms with various other specialized apps for job search, contact lookup, Lynda, SlideShare, Groups, and Pulse. Find links to all these apps on LinkedIn's mobile page.

https://www.lifewire.com/what-is-linkedin-3486382

https://www.lifewire.com/what-is-facebook-3486391

https://www.lifewire.com/what-exactly-is-twitter-2483331

4.2.6 Summary

The concept of Web2 has changed the information seeking and providing pattern of the users and Information providers both. Now, the advancement in technology and availability of different web tools has provided strength to the users to access the right information at the right time. The communication has become duplex because of these tools and techniques. The concept of Web 2 has applied in the file of library services too hence the Library2 has borne. By using this concept, libraries are becoming more interactive with their members and providing more personalized and customized services. There are a number of web tools to help people in accessing the web resources and use them effectively in their education, research and entertainment purpose. The

Web2 provides a host of platform to the people as well as organizations to create organize and share the information with the world. The web user, individual or organizations can exploit the potentiality of these tools for their own benefits. These tools are emails, e-forum, discussion board, listservs, instant messaging, conferencing, blog posting, media wiki writing, participation in polls, group emails, group talks, comments posting, recommendation, and many more.

Besides these tools, there are a number of devices available in the market through which one can access different forms of information with ease and convenience. These devices and software; like, Ipad, IPod, mobiles, e-books readers and so on can enhance calibre of accessing digital information of the user. With the help of these devices one can access the information provided by a library through the Internet or resources available on the Internet. The Web2, its tools and information access devices have broken the wall of the library and now the information resources of a library and other content available resources on the internet are available 24 hours a day and that also for whole week, month and year.

4.2.7 Exercise

1. Write a short note on each of the following tools:
   (i) RSS
   (ii) Blog
2. Write a short note on each of the following devices:
   (iii) Smart Phone
   (iv) E-Book Reader
3. How library 2.0 helps to promote e-learning process, explain?
4. Discuss the role of web 2.0 for the growth of CBSE school education?
5. How social web tools are effective for providing and promoting the library services?
6. What is an RSS? Describe its role and use?
7. How mobile technology will help in e-learning and teaching at school?
8. How Library website becomes the guiding tool for school education growth? Explain.

4.2.8 Practical

1. Create a library blog for your school library, using blogger software applications?
2. Create Google groups based forum to share your thought and various awareness at your school.
3. Upload and share photo, video, etc, on social media as Facebook, Twitter, etc?
4. Subscribe latest news about CBSE Schools Education through RSS feed?