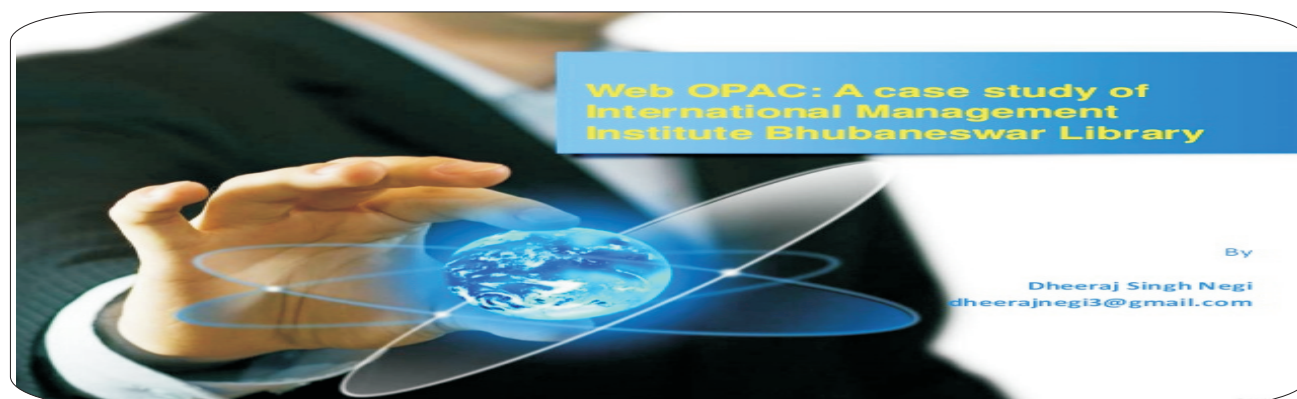




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DLISCAT: DESIGNING A NEXT-GENERATION WEBOPAC AT DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, JADAVPUR UNIVERSITY



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ABSTRACT

The academic or departmental libraries are facing a challenge to contribute to teaching and education, research, consultation, social, expert and public commitment. The academic libraries are basically converged upon the usage of the library's collection. Many a times, it becomes difficult for the users to retrieve the document information from the library catalogues and the collections. On the other hand, the academic libraries also face a challenge in providing the correct information and materials for the fulfillment of the user's needs, efficiently. To find a solution to these issues, the Department of Library and Information Science, Jadavpur University(JU), Kolkata, has taken an imitative in the form of a project "dLisCat", which is a proposed WebOPAC where all the documents of DLIS (Department of Library and Information Science), JU are made available through WWW. It provides single user interface to access the whole collection of DLIS. It acts as an Information Discovery and Retrieval tool which provides different browsing and searching capabilities (both simple and advanced) to retrieve collections of DLIS, JU.

KEYWORDS :dLisCat, OPAC, Web-OPAC, KOHA, DLIS, JU.

1. INTRODUCTION

Conventionally, a library catalogue is primarily used for locating the materials that are present in a library's collection. Procedurally, the User is expected to first check the catalogue, then note down the call number and then finally go to the shelf to identify the exact piece of his interest. In cases, where the desired document/item is not available in the parent library, it can be searched in other libraries' catalogues and procured on loan through the Inter Library Loan Facility. This whole exercise therefore

makes the process of search very complicated and tiring process. With the inclusion of IT in the library services, OPAC i.e. Online Public Access Catalogues came into being, in which the library catalogue is available through the WWW and the users can access it from anywhere, anytime without actually visiting the library just for browsing what exists in the library (Adenike and Akin, 2014).

As said before a Web OPAC is a library catalogue available through the Intranet. The users can search for the desired materials by entering the URL and simply access without any hassle of opening and closing the drawers containing the 3 by 5 catalogue cards. Web OPAC acts as a question-answering, richly interactive information discovery and retrieval system and to support decision making, that has no fundamental boundaries on the type and formats of data and information it can find, access, recover, exhibit, and distribute (Zainal and Hussin, n.d.)

2.ORIGIN OF THE PROJECT

Department of Library and Information Science started taking its shape as a functional organ of Jadavpur University in August 1964, through a meeting of the then Academic Committee. At the threshold, the department was manned by only one full time Teacher. Gradually this department flourished and earned the glory as a pioneering teaching school in Library and Information Science in the state of West Bengal. The department has stood witness to five decades of teaching and research and has become a knowledge base for thousands of scholarly documents like research papers, reports, dissertations, theses, memoirs etc. These scholarly outputs are very important assets of the department for the academic activities.

The academic libraries are basically converged upon the usage of the library's collection. Many a times, it becomes difficult for the users to retrieve the document information from the library catalogues and the collections. On the other hand, the academic libraries also face a challenge in providing the correct information and materials for the fulfillment of the user's needs, efficiently. To find a solution to these issues, the Department of Library and Information Science, Jadavpur University(JU), Kolkata, has taken an imitative in the form of a project "dLisCat", which is a proposed WebOPAC where all the documents of DLIS (Department of Library and Information Science), JU are made available through WWW. It provides single user interface to access the whole collection of DLIS. It acts as an Information Discovery and Retrieval tool which provides different browsing and searching capabilities (both simple and advanced) to retrieve collections of DLIS, JU

3.REVIEW OF LITERATURE

A catalogue named SOPAC was designed by John Blyberg, Darien Library, Darien in Connecticut. SOPAC (Social Online Public Access Catalog) is a free and open source next-generation catalogue system that takes advantage of online, web 2.0-style interaction to engage users. SOPAC (Social Online Public Access Catalog) is a module for the Drupal CMS that provides true integration library catalog system with the power of the Drupal content management system while allowing users to tag, rate, and review the holdings. User input is then incorporated into the discovery index so that SOPAC becomes a truly community-driven catalogue system (SOPAC2, n.d.).COPAC is a union catalogue which provides free access to the merged online catalogues of many major research libraries and specialist libraries in the United Kingdom and Ireland, plus the British Library, the National Library of Scotland and the National Library of Wales. It has over 40 million records from around 90 libraries, representing a wide range of materials across all subject areas. SOPAC is freely available to all (JISC, n.d.)

Another famous web OPAC is the Serials Union Catalogue, or SUNCAT, it is a freely available source of information about serials holdings in the United Kingdom, for the UK research community. It

claims to be the most comprehensive catalogue of serial holdings, and contains records for both electronic and print serials, including academic journals, periodicals, newspapers, newsletters, magazines etc. SUNCAT contains data from over 90 UK research libraries, including the British Library and the National Libraries of Scotland and Wales (SUNCAT, n.d.).

Yet another is the WorldCat, it is a union catalog that itemizes the collections of 72,000 libraries in 170 countries and territories that participate in the Online Computer Library Center (OCLC) global cooperative. WorldCat is a union catalog that itemizes the collections of 72,000 libraries in 170 countries and territories that participate in the Online Computer Library Center (OCLC) global cooperative. It is operated by OCLC Online Computer Library Center (WorldCat, n.d.).

Wichita State University Libraries developed WebOPAC through Dynamic Map Project enriched the bibliographic information by displaying dynamic maps for each individual record in the web OPAC. Dynamic mapping provides a customized map display in an online public access catalog for library patrons (Wichita State University Libraries, n.d.). The North Carolina State University Libraries incorporated Endeca's information access platform into its library catalogue, and created its "next generation catalog- featuring searching and relevance ranking of results, browsing function, and improved subject access (North Carolina State University, n.d.).

In India, Central Food Technological Research Institute, A Constituent Laboratory of the Council of Scientific and Industrial Research, Mysore designed and developed a Next-Generation Library Catalogue using Web 2.0 Technologies and Faceted Navigation (Sanjailal, Padmavathi, and Seetharam, 2011). Information Center for Aerospace Science and Technology Library also developed its OPAC in the 2000. It provides simple and advanced search interface. It also provides options to change member's account password or check overdue books. It contains different document types like article/paper, Books, audio/video, standard, theses etc. (National Aerospace Laboratory, n.d.).

J.R.D. Tata Memorial Library, Indian Institute of Science Library, Bangalore developed WebOPAC. It provides simple and advanced search interface. It also provides options to change member's account password or check overdue books. It contains different document type like books, conference proceedings, standard, theses etc. (Indian Institute of Science, n.d.). National Library, Kolkata developed a OPAC It provides simple and advanced search interface (National Library, Kolkata, n.d.). National Science Library, New Delhi, developed its own OPAC. It provides browsing (by title, year, accession no. etc) and searching both simple and advanced search interface. It contains different document types like books, manuals, reports and Standard etc. (National Science Library, n.d.)

These are just some of many OPAC initiatives have been made by several organization like universities, R&D institution etc. nationally and internationally. However dLisCat is the first one to be developed by the Department of LIS, Jadavpur University, Kolkata, India for departmental library.

5.AIMS OF THE PROJECT:

WebOPAC design services are available to achieve any number of objectives. This may include:

- To evaluate the performance of the retrieval mechanism and the use and acceptance of this online catalogue by library users and those patrons who are remotely located.
- To catalogue books, theses and other documents of Department of Library and Information library in order to set up a dLisCat using Koha, Open Source Software;
- To create web access mechanism called as webOPAC where all the documents are made available through WWW.
- To allow the end user specially LIS community to locate information any where and any time;
- To act a resource-sharing and resource discovery tool and

- To act as a single authoritative source of DLIS holdings information

6.SIGNIFICANCE OF THE PROJECT

The department during fifty years has developed a rich and unique collection of documents which are rare in nature. The content of these documents need to be disseminated to the end users pin-pointedly, exhaustively and expeditiously as these hold glorious history of the department and library and information science as well. This project will act as a information discovery and retrieval system to help the end users specially the LIS community as it can locate, access, retrieve, showcase and disseminate the information of the library's collection effectively. This will ultimately have an impact on broad research community and coming future generations. dLisCat is a quite ambitious project, reflecting the valuable sources of information for prospective graduate students, researchers and other LIS professionals in today's environment. Currently, Indian academic or departmental libraries are facing an extreme crisis in terms of funding, human resources and time; in such circumstances the dLisCat provides a single user interface, which is developed easily using the open source software (KOHA), it saves time and effort for both the library and its users.

7.WHY KOHA SOFTWARE:

There are many open source software in the domain of library automation now but Koha appeared first in the year 1999. Koha, the first open source library management software, has created a high level of interest in library profession for open source movement internationally. Koha (in Maori language Koha means an unconditional gift) is a full-featured open-source ILS. Developed initially in New Zealand by Katipo Communications Ltd and first deployed in January of 2000 for Horowhenua Library Trust, Koha is currently maintained by a team of software providers and library technology staff from around the globe.

FEATURES:

- Supports all the features of Koha 2.x
- Platform independent
- Two options for retrieval
- Own text retrieval engine
- Zebra search engine and YAZ toolkit
- Supports emerging standards like NCIP, MARC-XML, DCMES, METS
- Supports sophisticated search features – Boolean, Relational and Positional operators
- Powered by Zebra and YAZ and thereby can server as Z39.50 Public server
- SRU/W, Z39.50, UnAPI (<http://unapi.info/>), COinS/OpenURL
- Users can submit comments/rating/tags for any item
- Can be integrated easily with many Web 2.0 tools like Zotero, delicious, etc. (Mukhopadhyay, n.d.)

8.IMPLEMENTATION OF PLAN AND PROJECT TIME LINE

This Project was implemented within a period of one year. The work plan is broken down into 3 phases. The 1st phase was the planning and setup; 2nd and 3rd phases were the implementation and evaluation respectively. The following table depicts management of time during the twelve month project:

Work Schedule			
Key to project Activities	Time Period (12 Months)		
	4 Months	4 Months	4 Months
Planning and set up			
Requirements Gathering (Acquire the necessary supplies and other peripherals;			
Implementation			
Installation of Hardware and Software;			
Configurations of KOHA as per requirement;			
Formulation of policy and strategies etc. regarding collection development			
Data Entry into MARC format in KOHA			
Provide Library end user training			
Evaluation			
Output /Functional Analysis			
User perceptions			
Reports Writing (quarterly, half yearly, and final report)			

9. DLISCAT: FEATURES

Figure 1 depicts the dLisCat home page that is being loaded after a successful installation of the koha software. dLisCat provides end user -faculty members and students and staff with a single stop shop for all the collections of Department of Library and Information Science, Jadavpur University. It provides both simple and advanced search interface via the web that allows user more targeted searching which provides full bibliographic information. See Simple Search screen in the Fig. 2 below. It is easy to integrate Web 2.0 tools like Zotero, delicious It helps the users to submit comments/rating/tags for any item. Browsing through subject and keywords is also made available so as to facilitate easy retrieval.

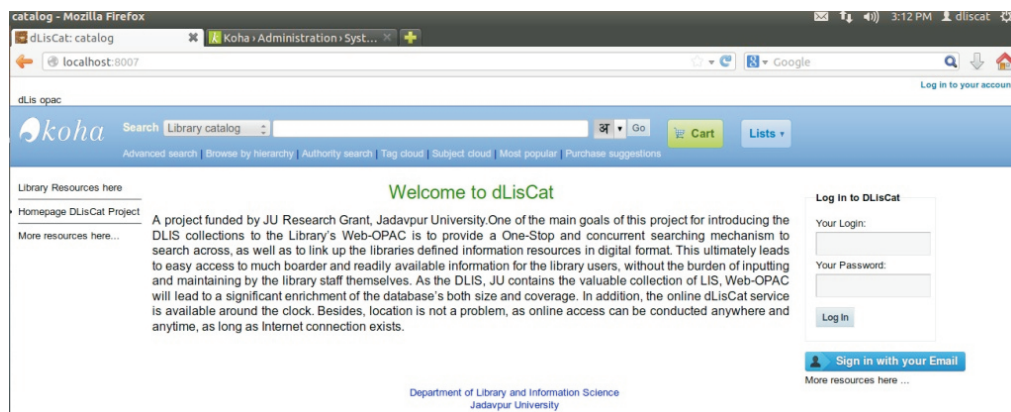


Figure 1: Home page of dLisCat

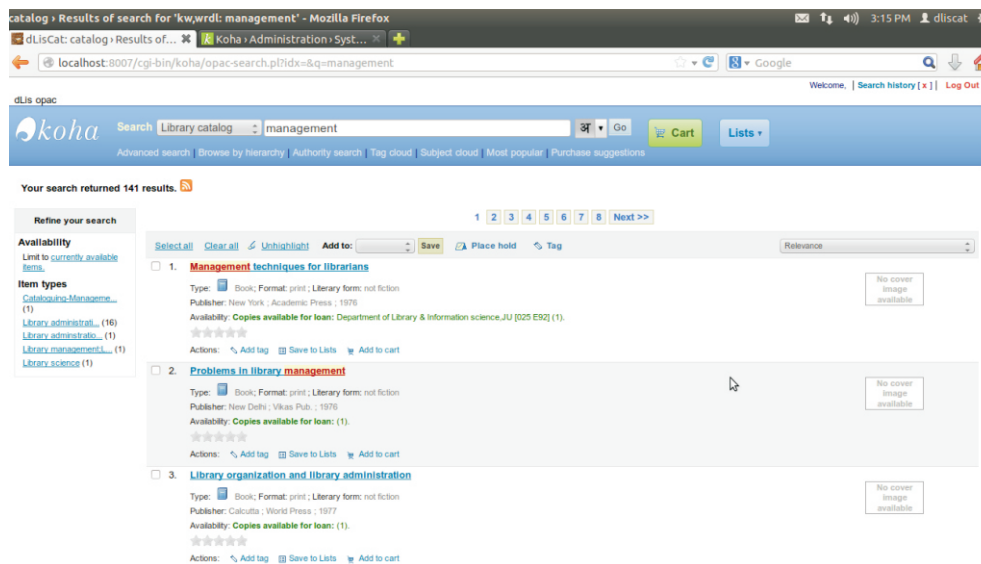


Figure 2: Search interface of dLisCat

10.CONCLUSION:

dLisCat is an attempt to explore various ways that could enrich the contents of the DLIS catalogue, and its records to provide easy access, recover, exhibit, and distribute to the end-users at any time anywhere. Indian academic or departmental libraries are facing a critical paucity in terms of finances, time and human resources. in such a state, dLisCat provides a single user interface, developed using the open source software (KOHA). In addition, with the help of the World Wide Web (WWW) dLisCat can become both a centralised and a distributed information system for providing access to bibliographic information of the Department of Library and Information Science to the global LIS community. Thus dLisCat will help to achieve the goal of a scalable system for resource discovery, cataloguing, description, organization and quality control.

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