

Design and Development of Subject Gateway of Chemistry: Open Access

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Abstract - The extensive usage of web as a channel for information supply has increased both the bulk of information and variety of information available today. Subject gateways are playing the important role in Library and information Science field since the Internet sources are updated. Moreover the concept of Open Access are attracted by the Research Scholars. Hence this paper focuses on Designing of Subject Gateway for Chemistry based on Scholarly Open Access Resources.

Keywords: Subject Gateway, Chemistry, Bharathidasan University, Open Access, Designing the website

I. INTRODUCTION

Subject gateways can be defined (DESIRE, 1999-2000) as quality controlled information services, produced by a public or private organism, that operate through the Web, and that work on the localization, selection, and description of Internet based resources, following a methodology and established quality criteria. The aim is to facilitate information search and recovery to their users, generally linked to the academic world.

The following characteristics have been marked as distinctive of a subject gateway face to simple collections of links:

- It is an online service that provides links to web sites or documents in Internet.
- The selection is done by an intellectual process according to a quality policy within the audience information needs.
- It produces subject descriptions since each item is catalogued in old or minor depth.
- The order or structure follows a scheme or classification that facilitates navigation.
- Each resource is assigned a series of metadata.

All these operations are of intellectual sort and a human team, usually integrated by librarians or by specialists in the topic, carries them out by hand (Koch, 2000). The main objective of subject gateways is to provide fast and effective access to their users to high quality information through Internet. From the beginning, subject gateways have been linked to the academic world, which nowadays continues to be their principal producer, and they are tools of much utility for students, researchers, educational, and for the public in general interested in accessing general and specialized information.

II. OBJECTIVES OF THE STUDY

- To find and Organize the Scholarly open Access Resources on Chemistry for Bharathidasan University

user Community.

- To Identify the Web links of Open Access Resources on Chemistry.
- To Provide Single entry spot for various resources on Chemistry.
- To decrease the trouble of using different search engines, by using this gateway.
- To make the Information available on network and access on 24x7 basis.

III. METHODOLOGY

Making of the gateway for Chemistry subject of Bharathidasan university Library is an information consolidation product and its preparation demands certain subject knowledge.

The major steps which have to be followed for designing a gateway are as following:

- Identification of target users in
- Planning of the gateway
- Study of subject as discussed with Heads of the Department at BDU.
- Identification of several information items available in Internet using various search engines.
- Selection of information sources
- Categorization and arrangement of information sources
- Designing a website using free web tool WEBNODE for providing access to all the resources on Chemistry.
- Organizing the resources on the gateway and providing links and making the site as a single access point for the information resources of Chemistry.
- Finally presentation of sources

IV. WEBNODE

Web node launched in early 2006. Official launch is January 2008 *Webnode* is the world's largest *do-it-yourself* website builder 2010 its user base raised to more than 2 000 000 users and it had 12 language versions. sites created using the software. Webnode is a website building solution that allows you to create, manage and host your own websites. The slick drag and drop functionality makes the application user friendly so those without technical knowledge can quickly and easily create their own professional looking website.

Features Of Webnode

1. Professional looking website
2. Build your professional, business or personal website within a minute absolutely free
3. No need to know web designing languages like CSS, HTML, JavaScript, PHP, Python etc.
4. Webnode drag and drop Site Builder requires no technical knowledge.
5. Customize Templates: Choose from a large variety of templates that can be customized to display your business brand including your own domain name and email address.
6. Easily add applications such as photos, videos blogs, forums and maps to communicate your business vision and engage your customers.

V. CHEMISTRY: AN OVERVIEW

Chemistry is a branch of physical science that studies the composition, structure, properties and change of matter. Chemistry is chiefly concerned with atoms and molecules and their interactions and transformations, for example, the properties of the chemical bonds formed between atoms to create chemical compounds. All fields of chemistry that involves the Scientific study of Analytical, Organic, Inorganic Chemistry and Crystallography.

BDU GATEWAY FOR CHEMISTRY

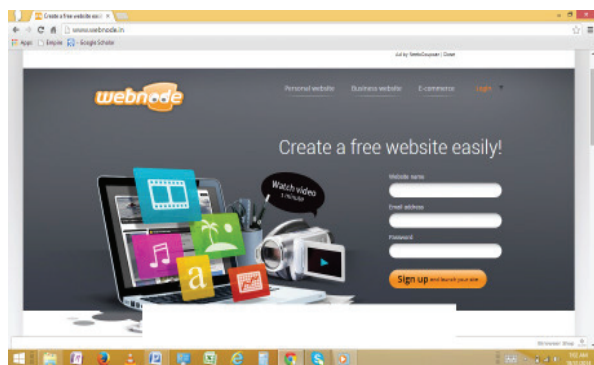
Bharathidasan University Subject Gateway for Chemistry is an Open Access gateway that helps to find the web Resources like scholarly resources of e-Books, e-Journals, e-Thesis&dissertation, Funding Agencies, Course Materials, Question Bank, Research Analysis on Google Scholar, Scopus and research project related to Chemistry . It has 171 Resources only for Chemistry.

The BDU Subject Gateway designed by free website designing “webnode” and this has all the features to support the Subject gateways.

VI. PROCEDURES FOR CREATING THE WEB NODE FOR SUBJECT GATEWAY

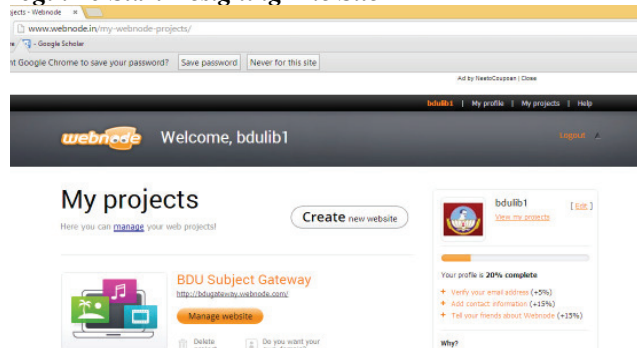
There are three steps for creating the webnode; such that, i) type the key string of web node at google; (ii) click the open account; (iii) create your own account used login user id and password; and (iv) creating of design for website management.

Procedure To Create A Website In Webnode: Open Account



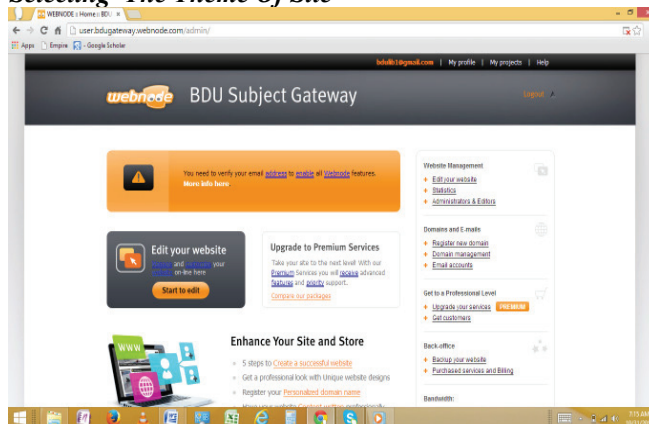
To start building the site you need to open this site <http://www.webnode.in/> after that we need to click sign up there we can fill the basic information required for registering which is compulsory for designing the site.

Login To Start Designing The Site



In this page we need to provide the required information such as user name or email ID and password after providing this information we can enter in to the page where we can start designing the site.

Selecting The Theme Of Site



After login we will find a page where there are many readymade themes available according to our need, we can select the theme and theme provides various inbuilt features suitable for theme. Even during the process of building site if theme is not comfortable we can change the theme without losing any data added earlier.

VII. WHY SUBJECT GATEWAY

“People are increasingly... . . . going to the Internet before they go to the library.”

“ Librarians are increasingly... . . . taking librarianship out of libraries and onto the Internet.”

The phenomenal growth of the Internet has posed an unmanaged and increasingly unmanageable environment. The current situation of Internet may be characterized as follows:

1. Internet as a whole is not well organized.
2. Users do not find what they are searching for, and still waste hours looking, are frequently arguments against the Internet.

3. Huge amount of public information are handled by various search engines in a fairly basic manner.
4. Search engines have no inbuilt mechanism for matching retrieval to the age, level or experience of the users or to the purpose of the study.
5. Web publishing is often very careless in authenticating sources.
6. Accessibility is sometimes illusory, and different file formats and protocols require additional software to read files and to achieve cross platform performance.
7. Ease of technical facilities to copy and paste makes a copyright abuse inevitable.
8. In spite of attempts to create metadata structures, there is an almost complete absence of effective information control mechanisms

VIII. PURPOSE OF SUBJECT GATEWAY

The Subject gateways are identify various Resources on the net and provide a link through a single platform link a Web-Portal. The resources are e Books e-Journals Thesie, Course materials, Organizations and experts , Specialised and Unpublished Sources and so on.

Subject Gateways act as a tool for Libraries,for users and for the academicians for their study, Research and qualitative work.It is something like searching a Comprehensive Bibliography for a reference in need.The Subject gatewas thus integrate all traditional services like Bibliographies, Current Awareness Services, SDI, Digest, RSS and so on by providing single platform link a Web-Portal.

IX. BDU SUBJECT GATEWAY

Bharathidasan university create the subject gateway for the target users in different discipline. This gateway provides the course materials, electronic books, electronic journals, electronic thesis and dissertation and funding agencies for related subject. In this website classified by the subject wise. The researcher has taken here for this study, the subject of Chemistry. The university subject gateway address is dugateway.webnode.com.

Home Page Of Subject Gateway

BDU Subject Gateway provides the information on e-books, e-Journals, e-Thesis and Dissert6tations funding agencies, Course materials and other useful resources which are freely freely available on internet for Chemistry Subjects.



E-Books

E-Books page provides links to the various e-Books open access and downloadable site can be search by the various subject categories in Chemistry. It gives access to the Four main branches of Chemistry viz. Analytical chemistry, Organic chemistry, Inorganic Chemistry and Crystallography.



E-Journals

E-Journals page provides the links to the various full text access of scholarly journal sites and that has been categorized by various subject headings in Chemistry for the easy access of users. Users can access journals through the subtitles of the minor subject disciplines of Chemistry.



Theses And Dissertation

This is the BDU Gateway for Theses and Dissertation of Bhatathidasan University Trichy. Individual can search, browse, and access theses and Dissertations from this collection. This BDU Gateway has been developed to disseminate and preserve research theses of Chemistry. This page provides links to the major e-theses and dissertations of various Universities. This gateway includes National and International theses and dissertations can be accessed and downloaded.



Funding Agencies

The below screen shows that the funding agencies like DST, CSIR, UGC, SERB etc. and its links. This BDU Subject gateway of Chemistry provides the funding agencies of National and International in respect of Science and Technology, Humanities and Social Sciences.



Course Materials

Many collections of e-course materials are available and the user can easily collect the material through this subject gateway. This gateway provided for accessing MOOC. This BDU gateway provides access to number of courses associated to Chemistry.



Digital Library

The gateway enables efficient access to the diverse range of historical online resources available in Bharathidasan university subject gateway. The BDU gateway also links to digital library which gives collection of digital objects that can include text, visual material, audio material, video material,

full text access to Institutional Repository document such as BDU publications, question bank news collection etc.

Research Projects

The below screen shot shows that the links of National and International Research projects of Individual and Organizations. It also provides the facility to search the database by keyword and links for the further information.



X. CONCLUSION

The internet is one of the most powerful media of communication and has created a global environment which has transferred the world into the global village. It is difficult for a normal internet user face in finding and accessing the relevant information required. So there is a need to go through subject gateway which will help in satisfying user for maximum extent. BDU chemistry gateway gives the open access scholarly chemistry resources on e-Books, e-Journals, Theses and Dissertations, Funding agencies and Course materials chemistry. To conclude that the present project has been modified with the user needs

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