

#### 4.2.2.1 Website

Websites are very important sources of information, the sites can be browse through different search engines. Every governmental institute, agencies, authentic research institute, school websites, university websites, college websites provide information. Those site acts as an information bulletin. The information we are taking from the different web sites, it is our prime duty to provide reference for the same. On the other hand it very important that every websites are not authentic sources of information, we have to be very careful from where we are getting the information. Preferable government owned websites are most commonly used as an information sources. For Example. <http://www.india.gov.in/>, "This is the Official Portal of the Government of India, designed, developed and hosted by the National Informatics Centre (NIC), a premier ICT organization of the Government of India under the aegis of the Department of Electronics and Information Technology (DeitY), the Ministry of Communications and Information Technology".



Fig 4.2.2: National Portal of India

#### 4.2.2.2 Bibliographic Online Databases

Bibliographic online databases plays important role in accessing union catalogue of library, reference, facts finding etc. It's concerned only with the bibliographic reference of sources. The most commonly used bibliographic online databases in India is DELNET (developing Library Network), which has its union catalogue of more than 5000 library. Besides this, ISID (Institute of Studies in Industrial Development) Journal & Newspaper Searches.

#### 4.2.2.3 Full text online databases

A full-text database is a database that is comprised of several books, articles, journals, magazines, newspapers and other textual documents but does not include graphical

#### 4.2.2.4.3 Features of E-Books

With the help of e-books, we can save the physical storage space of the library and any reader can easily search the desired information from the complete text of e-book. Besides, one can keep thousands of e-books in easily transportable electronic storage devices like pen drive or external hard disc.

Some other features of e-books are:

- ❖ **Kindle, ipad, Sony, Kobo** are some of the reading devices for reading e-books.
- ❖ Special software is required to read e-books. PDF, HTML, Microsoft LIT and PalmOS are most popular format for e-books.
- ❖ Convenience and mobility is ensured as we can carry the entire library in our pocket.
- ❖ Some e-books can be downloaded for free or at reduced cost, however, prices for many e-books - especially bestsellers - are similar to those of hardcover books.
- ❖ Saves time.

#### 4.2.2.4.4 Examples of E-Books

Presently millions of e-books are available in the market. In Figs. 4.2.7 to 4.2.10 the students are presented the glimpses of a popular e-book for easy upstanding. In this case you can observe step-by-step access of an e-book.

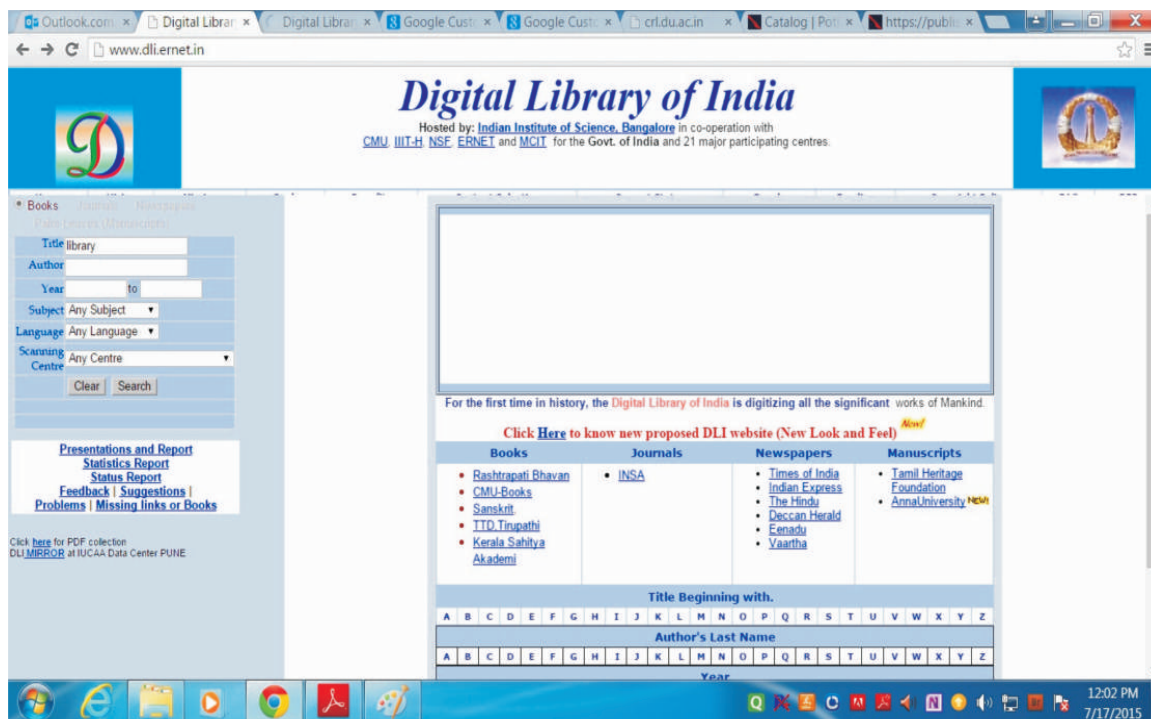


Fig 4.2.7: E-Book search



Fig 4.1.8: E-Book search

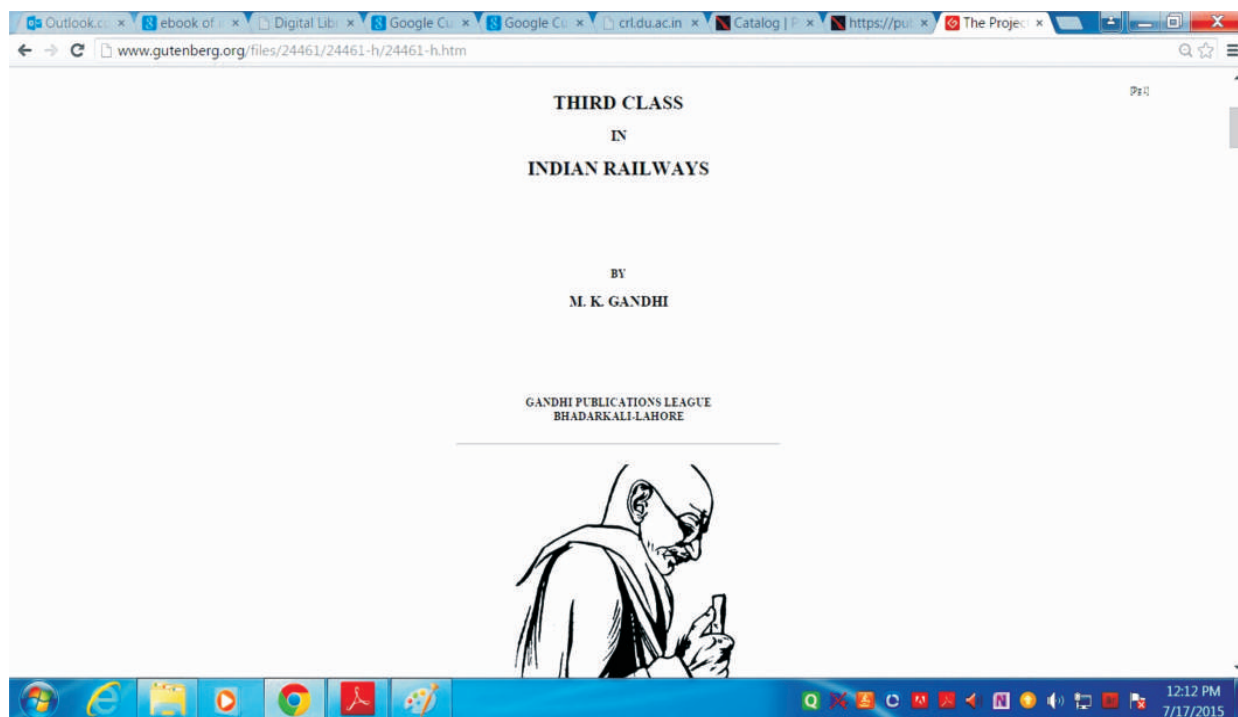


Fig 4.1.9: Cover page of an e-book

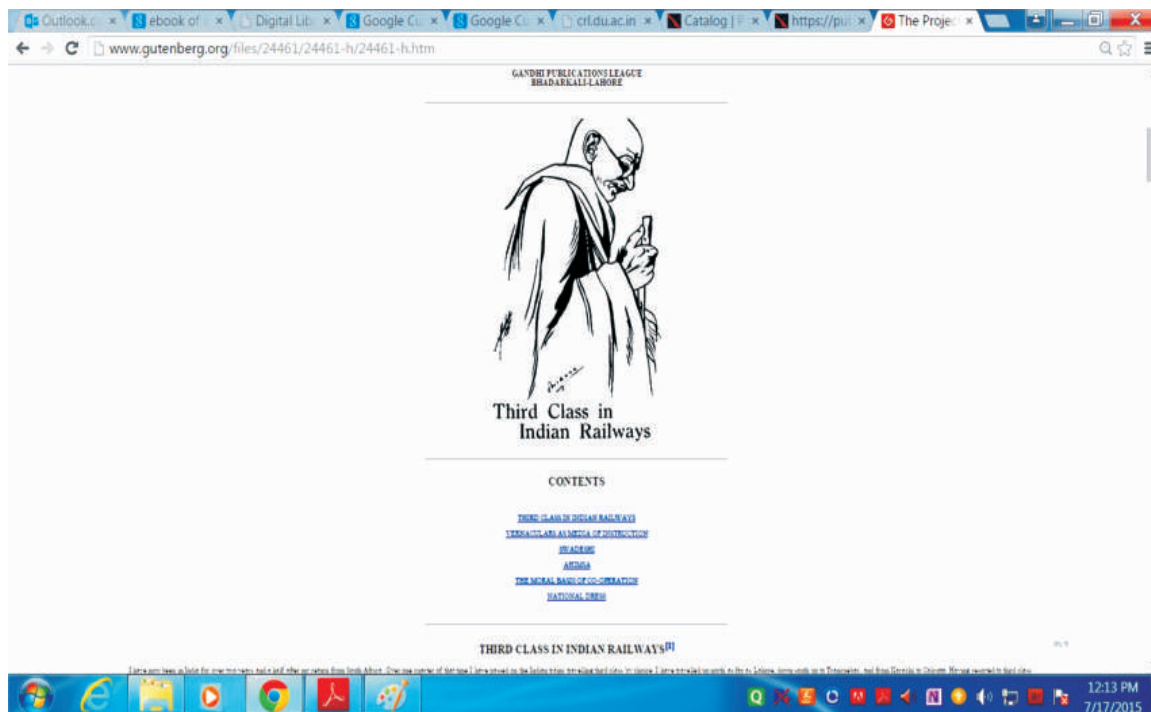


Fig 4.1.10: Content page of an e-book

#### 4.2.2.5 Multimedia Databases

The multimedia database systems are to be used when it is required to administrate a huge amounts of multimedia data objects of different types of data media (optical storage, video tapes, audio records, etc.) so that they can be used (that is, efficiently accessed and searched) for as many applications as needed. The objects of Multimedia Data are: text, images, Graphics, sound recordings, video recordings, signals, etc. All these are digitalized and stored. For Example BBC monitoring, National Geographic Databases, Discovery channel multimedia databases etc.

#### 4.2.2.6 Electronics Theses and Dissertation

Digital libraries of electronic theses and dissertations (ETDs) offer an alternative of output valuable academic research in University and higher education institute. The idea of E-Theses and Dissertations (ETD) is coming up in International scenario, which can be easily located, readily accessible and delivered over the web. Theses and dissertations are an important part of information resources in library. The current state of Indian ETD repository initiatives and introduces a project called Shodhganga, initiated by the Information and Library Network (INFLIBNET), an Inter-University Centre of the University Grants Commission.



### 4.2.3 Basic Search Features in Databases

The study has found some of the retrieval techniques, which has categories in the basic retrieval techniques, the details are given below.

#### 4.2.3.1 Boolean Operators

Many commercial online search systems permit the formation of complex expressions by using Boolean logic to combine retrieval sets. Boolean logic is algebra of sets. In online information retrieval, Boolean logic is applied to sets of posting.

The major Boolean operator are AND, OR and NOT. If A and B are set of posting , these Boolean operators have the following meanings:

AND - A and B is set of postings and common to A and B , and is called the intersection of A and B . A and B is represented by expression  $A * B$  on some search systems.

OR - A or B is the set of postings either in set A or in set B or in both sets A and B , and is called the union of A and B . A OR B is represented by the expression  $A + B$  on some search systems.

NOT - A NOT B is the set of postings in set A but not in set B m and is called the difference between A and B . A NOT B is represented by the expression  $A - B$  on some search systems. NOT should be used with caution, since relevant records can inadvertently be eliminated with NOT.

#### 4.2.3.2 Phrase Searching and Match Exact Word/Phrases

Phrase search and match of exact words features produce similar results, in which systems must find documents with the exact phrase to appear within the documents or any field as specified before executing the search. The phrase "digital divide" should retrieve documents with the exact terms adjacent to each other within the same document.

#### 4.2.3.3 Field Specific Searches and Limit Field Search

Field specific searches allow users to limit their query terms to a specific field(s), which includes abstract, author, title, accession number, and subjects. Limit search is another feature that constrains a users' query into a certain requirement; for instance by limiting the search to "full text available" and "English language" documents only. Limiting the search to English language documents is available in all systems.

#### 4.2.3.4 Truncation and Wild Card

Truncation allows a search to be conducted for all the different forms of a word having the same common root. As an example, the truncated term  $COMPUT^*$  will retrieve items on COMPUTER, COMPUTING, COMPUTATION, COMPUTE, etc. A number of different



options are available for truncation, e.g. right truncation retrieves all words having the same characters at the right-hand part, e.g. 'hyl' will retrieve word like methyl, ethyl, etc. Similarly, middle truncation retrieves all words having the same characters at left and right-hand part. For example, a middle-truncated search term 'colo\*r' will retrieve both the terms 'colour' and 'color'. A wild card is used to allow any letter to appear in the specific location within a word.

#### 4.2.3.5 Proximity Search

In the text retrieval system there should be provision for adjacency/proximity searching. The purpose of what is to refine search statements by permitting the searcher to specify the context in which a terms must occur. This search facility allows the user to specify whether two search terms should occur adjacent to each other, whether one or more words occur in between the search terms, whether the search terms should occur in the same paragraphs irrespective of intervening words, and so on.

Proximity search in dialog:-

- Information (w) system (specifies that the two terms should appear in the given order next to each other in the retrieved items)
- Information (2n) system (specifies that there may be at most two intervening terms between the two search terms in the retrieved items)
- Information (F) system (specifies that the search terms should appear in the same field in the retrieved items)

#### 4.2.3.6 Range Searching

Range searching is most useful with numerical information. It is important in selecting records within certain data ranges. The following options are usually available for range searching:

- greater than(>)
- less then (<)
- equal to (=)
- not equal to (/ = or <>)
- greater than equal to (>=)
- less than or equal to (<=)

These operator are used to prescribed a precise condition in a given search statement.

#### 4.2.3.6 Keyword Searching

A keyword is simply a word that shows up somewhere in a record: it can be part of a name, a subject, or a title, or appear in the table of contents. This is different from a subject search, which looks for the word only in the subject heading field.

#### 4.2.3.7 Word Stemming

Free text-searching, searches exactly as we type in to the search box, without changing it to thesaurus term. It is difficult for the end user to decide upon which all terms to key in and get the results. At this point word stemming will be needed. It is observed that in most cases, morphological variants of words have similar semantic interpretations and can be considered as equivalent for the purpose of IR applications. It also reduces the dictionary size, that is, the number of distinct terms needed for representing a set of documents. A smaller dictionary size results in a saving of storage space and processing time.

### 4.2.4 Recent Trends in Web Search

Students could be using the accurate, authoritative, and age-appropriate print and electronic sources provided by school and public libraries for their school research. A library database is an organized collection of electronic information that allows a user to search for a particular topic, article, or book in a variety of ways. Some databases contain the full-text of articles from journals, magazines, and newspapers, as well as books. One can access library databases off-campus too. Most of the information found by using Internet search engines is free. Library databases contain copyrighted, licensed, and proprietary information. Library pays for access to databases so that students can access the information for free.

The federated search engines is great tool, through which one get accessibility of majority of paid online databases,

The article describes the concept of federated searching and demarcates the difference between metasearching and federated searching which are synonymously used. Due to rapid growth of scholarly information, need of federated searching arises. Advantages of federated search have been described along with the search model indicating old search model and federated search model

Federated search is the simultaneous search of multiple online databases and is an emerging feature of automated, Web-based library and information retrieval systems. It is also often referred to as a portal, as opposed to simply a Web-based search engine. It is sometime termed as broadcast search, parallel search, cross reference search etc.

Example of Federated Search Engines: Google Scholar, Scopus, Liberty, Knimbus etc.



#### 4.2.5 Summary

Information and Communication Technology has changed the whole service environment of libraries and information centres. With the advent of new ICT tools and techniques, it becomes essential for our library professionals to update the existing library collection and to introduce new ICT based library services with maximum utilization of latest technological tools and services. In terms of library collection, it becomes essential to procure e-books, e-journals and e-databases. We should utilize e-mail support for the purpose of fast and cheap dissemination of information and also for promoting better communication. Internet has become an essential tool for any information organization/industry, and thus we should try to get maximum possible support for providing quality information service to our patron.

#### 4.2.6 Glossary

**Arpanet:** Its full form is Advanced Research Projects Agency Network. It was one of the world's first operational packet switching networks.

**E-Database:** It is an organized and systemized collection of information on a specific subject or inter related multiple subjects.

**E-Book:** It is a digital publication of complete book consisting text, graphics or both, readable on electronic devices like computer.

**Intranet:** Intranet is used for a network connection of various computers or computer networks within a specific organization.

**Extranet:** An Intranet, which is partially accessible for the authorized outsiders or outside users.

**ISP:** Internet Service Provider - a company that sells direct access to the Internet.

**Web Crawler:** It is known as a web spider or Web robot. The Crawler is used to collect information from a website.

**WWW:** The World Wide Web

#### 4.2.7 Exercise

##### Short Answer Questions

1. What is the importance of Online database search?
2. How a web portal can be authoritative sources of information?
3. Discuss different form of online databases.
4. What are Full text online databases?
5. What do you mean by eBook?



6. Discuss various features of Search.
7. Differentiate between website and database.
8. Point out various Regional Internet Registries.
9. Discuss various benefits of Electronic resources.
10. Discuss Electronic Theses and Dissertation.
11. Define Boolean logic.
12. Describe the operators of Boolean logic?
13. Define Range Search.
14. Point out various features of an E-Book.
15. Discuss Word Stemming in Search.
16. What are the requirements of using E-books in the library?
17. What is the importance of WWW Governance?

### Long Answer Questions

1. How Internet has changed the life of present society? Explain.
2. Write a descriptive note use of full text databases.
3. Discuss the need of Intranet for providing quality library support with proper justifications.
4. Explain the Boolean operators and their impact while connecting two keywords 'A' and 'B'.
5. Why are electronic resources considered better than print resources?
6. Write a descriptive note on different databases available as an information sources.
7. Write an essay on the utility of eBook in information profession.
8. Write a descriptive note on different basic search features of a database.



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2. Mobile application screenshot: <http://m.library.ucr.edu/>
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