

Toolkit for scholarly purposes: free and open source applications

Anusha Wijyaratne
Senior Asst. Librarian
Open University of Sri Lanka
e-mail: idwij@ou.ac.lk

Abstract

Purpose

Open source initiatives and open publishing are becoming popular among the academic community around the world. However, a significant portion of the academic community is not yet fully aware of the available free and open source software (FOSS) options that make their lives easy in searching, retrieving, storing and sharing information in a digital environment. The purpose of this paper is to present a FOSS toolkit that was used successfully for information literacy programs at the Library of Open University of Sri Lanka (OUSL) during the past two years.

Design/methodology/approach

The toolkit was gradually developed based on knowledge and experience gained through browsing the web, collaborating with colleagues and participating in workshops.

Findings

The toolkit consists of 83 web tools that were presented under 10 topics namely; Web Search Engines, Reference Materials, Translating Tools, Transliterating Tools, Information Sharing and File Hosting Services, File Format Converters, Screen Capture Tools, Download Managers, Reference Management Tools, Plagiarism Detection Tools.

The toolkit was successfully used for information literacy programs conducted at the OUSL Library since late 2010. In the post-workshop evaluation forms, all the participants mentioned that they were certain about the usefulness of the toolkit in achieving their educational and research goals.

Practical implications

This toolkit would be useful for academic community in their teaching, learning and research activities. Library professionals may use this toolkit in conducting information literacy workshops.

Originality/value

The toolkit presented in the paper was developed by the author for the purpose of using it as a training material at the OUSL Library user-training sessions.

Keywords: Free and open source software systems, Information literacy programs

1.0 INTRODUCTION

Massive flow of e-publications and the diverse nature of digital resources have created numerous challenges to the academic community. Time, cost and skills that are needed to identify, locate

and purchase electronic information have reached a towering height for ordinary learners, teachers and researchers. In other words, an individual has to have technological competencies and substantial financial support to carry out academic activities such as teaching, learning, research and publishing. This situation is more critical when it comes to academic community of developing countries such as Sri Lanka, where the opportunities to learn and practice the e-literacy skills are inadequate. In addition, our academics have to battle with the poor infrastructure facilities (*slow and unsteady Internet connections, out-dated software and hardware components etc*) and above all, the limited financial support.

Fortunately, competition among software producers; and individuals and groups who have identified the value of expanding the usage of information for the betterment of human life on Earth have come-up with very impressive solutions. Consequently, numerous open source projects and resource sharing networks have been initiated to bridge the gap between the two worlds – information rich and information poor. With the combination of open access initiatives and the resource supplying services rendered by the libraries (*through subscriptions of full-text databases and article delivery services*), a substantial amount of information resources needed for academic activities, are currently being provided. Besides, researchers are getting a considerable amount of information through their professional friends. As mentioned above, even with the significantly increased access for information over the years, there are numerous issues that are causing difficulties for the information seekers.

The purpose of this paper is to discuss free and open source software (FOSS) tools that are useful in dealing with the issues related to accessing, viewing, downloading, organizing and sharing of digital information. The toolkit presented in this paper was developed to address the difficulties encountered by the author during her information explorations over the years and to find solutions for researchers (*OUSL academic staff members and postgraduate students*) who have come for the reference interviews. The toolkit has been successfully used for information literacy programs conducted at the Open University of Sri Lanka (OUSL) Library since late 2010. In the post-workshop evaluation forms, all the participants mentioned that they were certain about the usefulness of the toolkit in achieving their educational and research goals. The online version of the toolkit could be accessed via the OUSL library website at <http://lib.ou.ac.lk>.

2.0 TOOLKIT FOR SCHOLARLY PURPOSES

Note: The tools that were marked * are commercial tools. However, they provide simplified versions or limited number of services free of charge.

2.1 Web Search Engines

The Internet is a gigantic source of information with a little or no organization. Hence, retrieving the required information is a time consuming effort for the average user. The web search engines play a very big role in facilitating retrieving of information. The problem with general search engines is that the low precision ratio of the results. It is much easier to work with search engines that are designed to search specific types or formats of information namely scholarly articles, books, images, maps, PowerPoint templates, people etc. In addition, there are specially designed web portals and online stores with powerful search engines that deliver particular forms or formats of information.

2.1.1 Specialized web search engines, web portals and online stores

Scholarly articles, research papers and learning resources

Scholar Google - <http://scholar.google.com/>

Genamic Journal Seek - <http://journalseek.net/>

Free FullPDF - <http://www.freefullpdf.com/>

BASE - <http://www.base-search.net/>

iSEEK - <http://education.iseek.com/iseek/home.page>

refSeek - <http://www.refseek.com>

Books

Google Book Search - <http://books.google.com/>

Book Finder - <http://www.bookfinder.com/>

Amazon - <http://www.amazon.com/>

Images, clip arts, PowerPoint templates, backgrounds

Google Images - <http://images.google.com/>

Animation Factory: <http://www.animationfactory.com/en/>

Fppt.com - <http://www.free-power-point-templates.com/>

Maps and atlases

Google Maps - <http://maps.google.com/>

Worldatlas - <http://www.worldatlas.com/>

Videos

Internet Archive - <http://archive.org/details/movies>
Academic Earth - <http://www.academicearth.org/>
YouTube EDU - <http://www.youtube.com/education>
TeacherTube - <http://www1.teachertube.com/>

People

PeekYou - <http://www.peakyou.com/>
Wink - <http://wink.com/>
Skipease - <http://www.skipease.com/>
YoName - <http://yname.com/>

2.1.2 Metasearch engines

Metasearch engines (*that pile several leading search engines into one*) are helpful for users who want to produce comprehensive lists of available information under a given topic. In other words, using a metasearch engine minimizes the possibility of failure to retrieve certain hit/s due to the technical constraints of the selected search engine. For example Dogpile metasearch engine fetches results from Google, Yahoo!, Bing, Ask.com and About.com.

Dogpile - <http://www.dogpile.com/>
Metacrawler: <http://www.metacrawler.com/>
Webcrawler - <http://www.webcrawler.com/>
Mamma - <http://www.mamma.com/>

2.2 Reference Materials

When conducting extensive literature surveys, researchers have to face various language related issues such as use of terms in the relevant context, synonyms, polysemys (*words having more than one specific meaning*) and above all different languages. Reference materials such as dictionaries, glossaries, encyclopaedias are very helpful in this regard. Using printed reference materials is always a somewhat cumbersome activity for novice users. The electronic publications of reputed reference materials such as Encyclopaedia Britannica as well as innovative products such as Wikipedia have provided enormous flexibility and freedom for their clients. It is true that Wikipedia is not a standard authenticated reference tool since its platform allows anyone to create or modify the content. However, it is a very popular tool among researchers in identifying the boundaries of unfamiliar terms, concepts or products.

Wikipedia (English) - <http://en.wikipedia.org/>
Wikipedia (Sinhala) - <http://si.wikipedia.org/>

Wikipedia (Tamil) - <http://ta.wikipedia.org/>
Britannica Online - <http://www.britannica.com/>
Webopedia - <http://www.webopedia.com/>
Dictionary.com - <http://dictionary.reference.com/>
Thesaurus.com - <http://thesaurus.reference.com/>
Reference.com - <http://www.reference.com/>
DictionaryBoss - <http://download.dictionaryboss.com/>
Kapruka Sinhala Tamil online Dictionary -
<http://www.lanka.info/dictionary/EnglishToSinhala.jsp>
Madura Online Dictionary - <http://maduraonline.com/>
Sinhala Dictionary Resources online – <http://www.sinhaladictionary.org/>
English-Tamil/ Tamil-English Dictionary - <http://www.dictionary.tamilcube.com/>

2.3 Translating Tools

Most of the online translation tools are unable to generate 100% accurate translations of the documents or websites. However, these tools are very helpful for researchers to understand the contents written in foreign languages and get clues to proceed with the exploration.

Google translate - <http://translate.google.com>
WorldLingo Translate Free Online - <http://www.worldlingo.com/>
SDL FreeTranslation - <http://www.freetranslation.com/>
IM translator Prompt Online - <http://text-to-speech.imtranslator.net/>
Dictionary.com Translator - <http://translate.reference.com/>

2.4 Transliterating Tools

Transliterating tools allows typing word/words of a language using letters of another language (transliteration) and then converting the text into the letters of the first language. For example, the transliterating tool converts the words typed in English language directly into Unicode script of another language. The user can cut and paste these words into email messages, word documents or PowerPoint slides. Given below are the transliterating tools of Sinhalese and Tamil (*the national languages of Sri Lanka*). However, there are free and open source transliterating tools for almost all languages.

Tamilcube.com (English to Sinhala converter) -
<http://www.tamilcube.com/translate/sinhalese.aspx>
Tamilcube.com (English to Tamil converter) - <http://www.tamilcube.com/res/tamilpad.html>

2.5 Information Sharing and File Hosting Services

Sharing and archiving information is very much easier in the digital environment. There are various tools and services that facilitate saving and sharing of information and collaborating with colleagues.

2.5.1 Photo sharing tools

Flicker - <http://www.flickr.com/>

Picasa - <http://picasa.google.com/>

ImageSack – <http://www.imageshack.us/>

2.5.2 Presentation sharing tools

Slideshare - <http://www.slideshare.net/>

Slideboom - <http://www.slideboom.com/>

Slidesnck - <http://www.slidesnack.com/>

2.5.3 File storage and organization services

Dropbox - <https://www.dropbox.com/>

Google Drive - <https://drive.google.com>

CX.com - <https://www.cx.com/>

2.5.4 Remote desktop sharing tools

Crossloop* - <http://www.crossloop.com/>

TeamViewer* - <http://www.teamviewer.com/en/index.aspx>

2.5.5 Tools to shorten long URLs

Tiny URL - <http://www.tiny.cc/>

Google URL Shortener - <http://goo.gl/>

Bitly - <https://bitly.com/>

Long URL (tool to expand shortened URLs) - <http://longurl.org/expand>

2.5.6 File compressing tools

Online Convert.com (compress files to zip format) - <http://archive.online-convert.com/>

7-Zip - <http://www.7-zip.org/>

2. 6 File Format Converters

Users, frequently, have to handle different file formats in accessing and sharing of information or publishing manuscripts. Hence, the tools that are capable of promptly converting a file from one format to another are very crucial for today's information seekers. For example, the file format of Microsoft Word 2007 (Docx) needs to be converted to Doc format if it is necessary to open the document using a lower version of Microsoft Word. Similarly, in order to fulfill the publishing requirements, sometimes, authors need to convert word documents into PDF format.

Free File Converter - <http://www.freefileconvert.com/>
PDF Converter - <http://www.freepdfconvert.com/>
Docx to Doc converter - <http://www.doc.investintech.com/>
Format Factory (video, audio, picture formats to others) - <http://www.formatoz.com/>
NCH Software - <http://www.nchsoftware.com/software/converters.html>
ZAMZAR - <http://www.zamzar.com/tools/>

2.7 Screen Capture Tools

Capturing computer or web screens is another task that both teachers and learners want to perform in creating tutorials, user guides, presentations etc. Screen capture tools allow the client to capture the full screen, individual windows, or user-specified capture areas much easier.

Greenshot - <http://getgreenshot.org/> (*capable of auto-scrolling to generate the screen prints of entire webpage in case the page is longer than a single screen*)
Snipping Tool – available in the Microsoft Windows version Windows 7 and Windows Vista
ScreenHunter* - http://wisdom-soft.com/products/screenhunter_free.htm
Screen Capture - <http://screencapturer.com/>

2.8 Download Managers

Downloading documents and software tools is one of the popular uses of the Internet today. Download managers accelerate downloads by splitting files into sections and then downloading them simultaneously. Download managers are also capable of resuming broken downloads. Therefore, the user needs not to start downloading from the beginning after casual interruption.

Free Download Manager - <http://www.freedownloadmanager.org/>
FlashGet – <http://www.flashget.com/en/download.htm>

2.9 Reference Management Tools

Recording of bibliographic citations (*references*) and generating bibliographies according to a standard referencing style manual (*e.g. APA, Harvard, Chicago*) is one of the cumbersome tasks that should be performed by the authors and researchers. Reference management tools make this task quite easy and save a lot of time for the clients. In addition, the following reference management software packages offer facilities such as accessing the papers from anywhere online, discover new articles and resources, share references with the peers etc.

Zotero - <http://www.zotero.org/>
Mendeley - <http://www.mendeley.com/>

CiteULike - <http://www.citeulike.org/>

2.10 Plagiarism Detection Tools

Copying and pasting is very easy today due to the abundance of digital information. Copying others work without giving credit where it is due, is unethical in one hand and a serious offence under the law. Plagiarism detection tools are very useful for finding plagiarized content in text documents. Recognized universities and publishers usually check for the plagiarism before accepting for examinations and publications. Therefore, it is always advisable to make sure the write-up is free of content from even unintentional copying. The following are free online web services that can be used by the students and authors to check their tutorials, reports, articles etc.

Plagiarisma.Net - <http://plagiarisma.net/>

Plagiarism Checker* - <http://www.dustball.com/cs/plagiarism.checker/>

Free Online Plagiarism Checker - <http://searchenginereports.net/articlecheck.aspx>

PlagTracker* - <https://www.plagtracker.com/>

Viper - <http://www.scanmyessay.com/>

Dupli Checker - <http://www.duplichecker.com/>

3.0 CONCLUDING REMARKS

Invent of Internet has boosted the production rate of digital information in an exclusive manner. As a result, the information world is now in a state of overloaded. On one hand, this is a grand opportunity for information hunters since they have access to diverse collections of rich information. On the other hand, information seekers need more and more skills and support of external equipments and services to carry out a successful information seeking process. Although, the toolkit presented in this paper is not exhaustive and can be very much improved in terms of varieties and options, the author believes it serves its purpose of enhancing the awareness of software systems available free of charge. It is also hoped that this knowledge would persuade the users to seek software solutions for themselves for the problems they encounter in handling digital information.