# Managing References and Research with Software and Tools: An Experience on 'Mendeley'

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### **Abstract**

In today's modern world, the relevant information has become one of the most essential commodity and the adoption of a systematic approach to serve this need is mandatory in order to save time. As a matter of fact, the provision of a suitable environment to access and use the information is must and the current information scenario is facing the information burst when it becomes difficult to obtain and organize the right kind of information. The advent of various tools such as originality check software and reference management tools has paved way for better, timely and community-wise information management. The present paper has tried to discuss about the application of reference management software for example, Mendeley reference management software. Mendeley is one such reference management tool that contains all the scholarly knowledge inbuilt in it. Mendeley is a free, ready to use and modern software for giving citations, references and others bibliographical details. Due to its simplicity in handling and multifunctional, it is popular among research scholars for managing their data in a systematic way and other activities also.

**Keywords:** Reference Management Tools; Mendeley; Bibliographies; Free Software.

## Introduction

The research work solely depends on gathering of own thoughts and contributions' of others for which the references are sought to support the idea reflected by the researcher. Collecting references, managing and saving for future are few tasks which are well supported by reference management software, thus reference management tool, which is also known as citation management software used by research scholars and writers to be used for recording and utilizing in reference purposes. The citation is recorded and may be utilize over a period of time for the creating bibliographies. These are varied lists of references in scholarly articles and in their books. Creation and utilization of reference management software and tools are being driven by fast expansion of different scientific activities. Reference management tools are generally consist of various databases which contains full bibliographic records

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and references that may be inserted, and system for creating varied lists of research papers or articles in various styles to be used by the noted publishers and scholarly journals.

The latest reference management software must be combined with word processors so that an appropriate reference styles can be generated as a bibliographical record automatically by reducing the risk if cited resource is not included in the reference list. Such tools have an integrated facility for importing the bibliographic details of publications from their respective databases. Reference management software is different from the bibliographic databases, which locate the list of all articles published by the publishers in a specific subject or group of subjects such as Medline by Ovid Technologies, Web of Science by Thomson Reuters and mono-disciplinary reputed societies such as American Psychological Association (PsycINFO) etc. All the databases are large in its size and should be installed on major server installations. The Reference management package collects very small databases of the publications that can be used or are likely to be used by a particular research scholars or particular group in particular institutions. Such reference management software can easily be installed on an individual's laptop and desktop or personal computer.

In addition to managing the references, most of the reference management software provide the researchers to browse literature and collect references from the online databases as well as from online libraries. In case of unavailability of related literature or references, the users are encouraged to search, download and organize the searched files in the

library provided in Mendeley. The organization of 'bibliographic contents' by using reference management tools gives freedom to researchers to use later or share with colleagues. Following list displays few reference management software that are being used by many universities, institutions around the globe:

Table 1: Reference management tools

Software	Developer	First public release	Latest stable release date	Latest stable version	<u>Free</u> software
Aigaion	Aigaion developers	2005-01	2012-01-18	2.2	Yes
Bebop	ALaRI Institute	2007-11-08	2009-11-10	1.1	Yes
BibBase	Christian Fritz	2005	2013-07	v3	No
BibDesk	BibDesk developers	2002-04	2014-08-11	1.6.3	Yes
BibSonomy	University of Kassel	2006-01	2016-01-29	3.4.1	Yes
Bibus	Bibus developers	2004-06-03	2009-10	1.5.0	Yes
Docear	Otto-von-Guericke University	2009-05-11	2014-05-21	1.1	Yes
	Magdeburg and University of California, Berkeley				
EndNote	Thomson Reuters	1988	2015-08-11	X7.4	No
JabRef	JabRef developers	2003-11-29	2016-01-16	3.2	Yes
<b>KBibTeX</b>	KBibTeX developers	2005-08	2014-05-19	0.5.1	Yes
Mendeley	Elsevier	2008-08	2015	1.15.2	Yes
Pybliographer	pybliographer developers	1998-10-30	2014-11-30		Yes
		(0.2)			
refbase	refbase developers	2003-06-03	2014-02-28	0.9.6	Yes
RefDB	refdb developers	2001-04-25	2007-11-05	0.9.9	Yes
Referencer	Referencer developers	?	2014-02-27	1.2.2	Yes
Wikindx	Mark Grimshaw	2004-02	2013-08	4.2.2	Yes
Zotero	Roy Rosenzweig Center for History and New Media atGMU	2006-10-05	2015-04-08	4.0.26.4 [9]	Yes

Source: https://en.wikipedia.org/wiki/Comparison\_of\_reference\_management\_software

## **Understanding Mendeley**

The 'discovery' of Mendeley in year 2007 by Gregor Mendel, Biologist and Dmitri Mendeleyev created significant buzz in the world of research as research support tool. This discovery was followed by a similar service, launched by the University of Warwick, called Piirus On August 2011. The basic purpose of the Mendeley is to discover research material and collaborating it online, a desktop and web program for managing citation styles and sharing research paper among the registered users. It is a combination of a desktop application and a website that helps to share, discover and manage the contents and contacts in research work. Mendeley manages the literature e.g. saving the data in all formats at one place and performing searching the data.

It also requires the researchers to collect and save all basic citation data on its servers and store copies of related documents at its discretion. It is a mixture of Mendeley Desktop, a PDF and reference management package which is available on the platform for Windows, OS X and Linux including Mendeley Web, an online social network for

researchers (Fitzpatrick, 2009). Mendeley is a free reference management tools for the arrangement of bibliography in different styles which organize the citations in different styles within a fraction of second. The current features include the compatibility with Android Mobile Phones and especially with Iphone, Ipad and tablets. The Mendeley is an online application which is free to install and can be used by anyone who have such devices. It provides researchers with free web storage space up to 2 GB, which can be enhanced or increased with some cost involved in it.

The Salient Features of the Mendeley are for Desktop Computers:

- To automate the extraction of bibliographic details such as title, authors, journal, publishers, year of publications etc. from the Mendeley library database. This feature saves the time of the researchers.
- To efficiently manage the research articles: It searches kinds of papers in various formats

- supported by bibliographic details that are already stored in the Mendeley library
- To filter the library: Mendeley Desktop also allows filtering library by keywords, authors and journals, document collections, notes and tags etc. It can also be used to organize and export the document in different citation styles.
- Synchronization of data: Sharing and synchronization can be synchronizes data when the users are away doing some other work in different places and they have to sync among a number of devices.

#### Website Features

- An online backup of the library: backup data can be accessed from anywhere through web browsers.
- Detailed statistics interesting things: users can upload their own publications to their research

- profiles thus retrieving the readership.
- Besides there are other detailed statistics for each academic discipline and research topic
- Provision of a research network that facilitates in retrieving the scholars' publications, its conference participations and awards etc. It also helps in discovering new people with the same research interests.
- Facility of a recommendation engine that allows users to know the papers which might interest them in future which are not procured in library so far.

## How to Use Mendeley

To use the Mendeley, reference management tools user visits the website www.mendeley.com. Then, user will have to create an account to be used for its features. After logging in create user account so that it could recognize user's details.

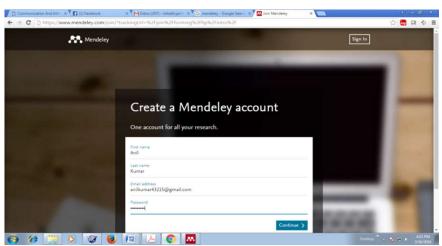


Fig. 1: Creating account on mendeley

After the creation of user's account in Mendeley download application for the desktop version/

iphone/ipad/ so that user can further use the application of this software.



Fig. 2: Login in mendeley on desktop

Remember once user is logging in to the Mendeley makes sure that user checks the sign box as "stayed signed in" for desktop log in screen so that next time user needs not to logging it again as is given below. Now, Mendeley is ready for user to use it.

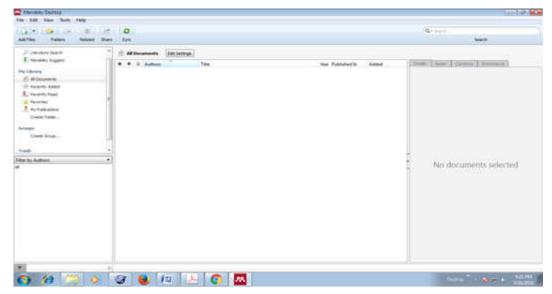


Fig. 3: Mendeley menu toolbar

Once user enters the above screen will appear in user's desktop computer. There are three parts to be used for the sake of bibliographic data, article, author, publication, tag, keywords etc.

These aspects are:

- Menu bar will appear and the following features are ready for use:
- File, edit, view, tool and help for different task to be perfumed
- Sub-menu as add files, folders, related, share and synchronization task
- Under the All document menu will be shown for user to look the details of user's articles, author, title papers and other details
- The third part is for bibliographic details of the article etc

The users can add files, folders, sub-folders, import, and export and manually add the bibliographic details which are not available online. User can fill the details accruing to user's choice from the given open for the refinement of the search. One can also delete, merge, and rename any file to his/her choice. Similar activities can be done with the other menu as well. Users can share with their fellow researchers and synchronies it that can be seen in the website instantly after synchronization.

- Literature Search: It searches all the details of user search in the Mendeley library
- Mendeley also suggests user to give something

- which is not in the directory of the same
- In My Library Menu:
- All documents show all the documents uploaded in user's library
- Recently added the latest addition of user's papers, journal titles etc.
- Recently read show the details of documents users just read
- Favorites one can add his/her favorites items in this folder
- Needs review it tells user that user needs review for the papers, articles
- My publications it is up to one's to add his /her own publications into it
- Unsorted all the documents are added in this menu
- Create folders users can create folders, subfolders and other folders of user's choice
- Filters: There are different type of filters user can search the pdf details such as:

Author, title, year of publications, published in, and timing for the same.

- Bibliographic details are the third part:
- Details regarding the bibliography
- Notes can be added for instant information
- Contents can be seen from this option

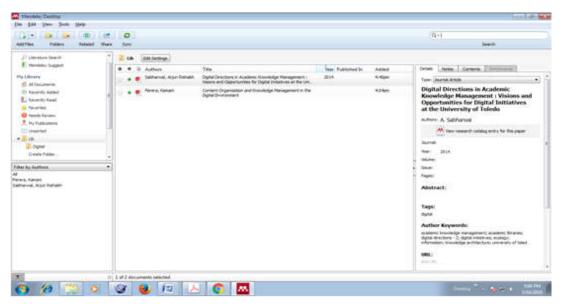


Fig. 4: Showing user's documents on Mendeley library

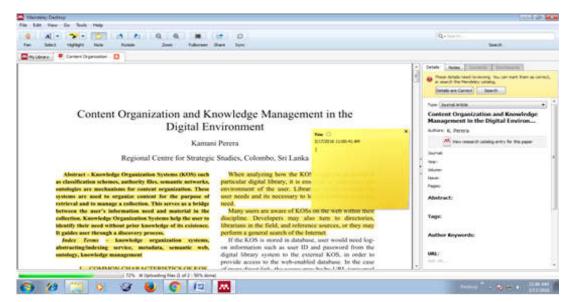


Fig. 5: Showing user's paper on Mendeley library

The above screen shots are the details of the information provided in this menu.

## Limitations

- We cannot search sticky notes which are given along with pdf file.
- Users cannot search scanned documents
- MS Office files are not searchable
- Full details of bibliographic record is not available for the researchers, it can be added manually by the users.
- There are some other limitations which can be managed by the user manually.

Awareness and Experience at Central Library, Jnu

The Central Library at Jawaharlal Nehru University (JNU), New Delhi has been instrumental in creating awareness among library users about these reference management tools specially Mendeley. The need of the reference management tools and software has been realized at vast level among a sizeable community of research scholars. The library has endeavored to organize workshops, training programs for academic community and library staff too. Here, it is worth mentioning that training of library staff in using and helping library users for the reference management tools is significant in order to building library relations with research scholars in context with research related services. The library,

thus, is extending its role as research supporting organization in the academic environment. The library has involved faculty members, research scholars and other students in the reference management tools' training programs by organizing these sessions a number of times during last couple of years. Apart from Mendeley, the library has created awareness, use and application of software like EndNote, Zotero etc.

#### Conclusion

As we all are aware that the Mendeley is a free software and compatible with desktop PC, laptop, ipad etc. very useful for the research scholars as well as state of the art libraries. It is to be kept in mind the maneuverability and other features make this software modern wherein all the latest information and other research and developmental activities can be performed quickly. It can simultaneously be used indoor and outdoor at the same time by sitting anywhere and anytime. Searching inside the Mendeley library is so much fast that user can reach anywhere within no time. Mendeley is very efficient and easy for giving citations, references and easy to understand by its users. Users can modify the styles in different formats such as APA, MLA, Chicago, Turabian, IEEE etc. according to the institutions guidelines. Users are given options to make different type of addition like notes, tag and sticky notes which are very powerful tool for the scholars. Scholars can complete his/her research work efficiently without the help of others.

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