



# Creating a Cloud Based Bibliography Manager

**CS615 Internet Solutions Engineering**

**Joe Duffin • Patrick Marshall • Michael O'Neill**

## BIBLIOGRAPHY MANAGER: FUNCTIONAL REQUIREMENTS

A bibliography manager is a tool used by researchers for organizing literature. The tool stores a database of the metadata concerning papers, for example:

- title of the paper,
- year it was published,
- name of the publisher,
- conference at which it was published.

A refined list of the metadata is given in the next section.

Related papers can usually be grouped together into libraries (*similar to the concept of folders*). If you are unfamiliar with the idea of bibliography management software then you should download and try JabRef (<http://jabref.sourceforge.net/>) before continuing.

Your main task for continuous assessment is to implement a cloud based bibliography manager similar in style to JabRef.

The following is an absolute minimum list of the functionality that your solution must offer:

1. A visitor to the website must be able to register as a user.
  - 1.1. The email address must be validated before registration is complete.
  - 1.2. When a user registers two libraries called 'Trash' and 'Unfiled' must be created automatically.
2. A user must be able to update their registered details.
3. A user must log in to the website to view the references in the active library.
4. A user must be able to logout from the website.
5. A user must be able to create a new library to store their references.
6. A user must be able to change the active library.
7. A user must be able to rename a library
  - 7.1. 'Trash' and 'Unfiled' must not be able to be renamed.
8. A user must be able to delete a library.
  - 8.1. The system must prompt the user where the references stored in that library should be moved to.
  - 8.2. 'Trash' and 'Unfiled' must not be deleted.
9. A user must be able to add a reference to a library.
10. A user must be allowed to update all of the fields for a reference in a library.
11. A user must be able to delete both a single reference and a group of references
  - 11.1. A deleted reference must be moved to 'Trash'.
12. A user must be able to move one or more references at a time from one library to another.
13. A user must be able to empty their 'Trash' library.
14. If a user owns a library then they must be able to share that library with other registered users.
  - 14.1. You cannot share a library that you do not own (*i.e. created*).

- 14.2. If an attempt is made to share a library with a non-registered user then the system must notify the user.
- 15. If a user owns a library then they must be able to see who that library is shared with.
  - 15.1. A user must not be able to see who a library is shared with if they do not own it.
- 16. The owner of a shared library must be able to unshare it.
- 17. The user must be allowed to sort the references in both ascending and descending order by: title, author, year and key.
- 18. A user must be able to search for references that match criteria for: author, title and year. The search must allow for one or more libraries to be included in the search.
- 19. Inputs must be validated on the client and server side.
  - 19.1. Prevent SQL injection attacks etc.
- 20. Add your own 'bonus feature'!

## BIBLIOGRAPHY MANAGER: DATA REQUIREMENTS

The following table contains data that your application should store. However, you may tailor this to meet your individual needs.

Table 1 *Suggested schema for the database.*

User	Reference	Library	Shared Library
Email	ID	ID	ID of Library
Password	Author	Display Name	Email of user to share with
Display Name	Abstract	Owner Email	
	PDF		
	Address		
	Annote		
	Book Title		
	Chapter		
	Cross Reference		
	Edition		
	E-Print		
	How Published		
	Institution		

	Journal		
	BibTeX Key		
	Publish Month		
	Note		
	Issue Number		
	Organisation		
	Pages		
	Publisher		
	School		
	Series		
	Title		
	Publish Type		
	URL		
	Volume		
	Year		
	Added At		
	Id of Library Where Stored		

