

## Gaplatz Developers "Open Bookcase": Functional Requirements Matrix

Category of Function	Functional Requirement	Core?	Priority	Deliverable(s)
Aesthetics / Storage	Adjust shelf height for customized book arrangement. Additional RFID-equipped shelves available for purchase.	core	5	bookshelf hardware
Connectivity	Exchange and sync data between shelves and system.	core	5	USB ports; wifi; system software
Holdings	Identify which books are on the shelves.	core	5	RFID Reader; system software
Holdings	Access and import free cataloging data via Linked Open Data.	core	5	system software
Holdings	Access user book data remotely, e.g. to see if user already owns item.	core	5	system software; mobile device
Locate	Search user book holdings, local libraries and bookstores to locate books listed in bibliographies and footnotes.	core	5	system software
Rec'mendations	Receive reading recommendations from other users and other websites.	core	5	RSS feed
Rec'mendations	Receive notifications of new releases, e.g. series or specific authors.	core	5	RSS feed
Rec'mendations	Algorithmically-generate reading recommendations from system software based on user-specific reading patterns and book collection.	core	5	system software
Recordkeeping	Track books user has read. Track and prioritize user wishlist.	core	5	system software
Recordkeeping	Track how often each book is removed from shelf, and duration of	core	5	system software
Safety	Provide simple-to-install bookcase-to-stud bolting for earthquake safety.	core	5	bookshelf hardware
Social	Record user-generated book reviews. Post to selected social media.	core	5	system software
Social	Share user book data on selected social media: lists, customized categorizations, tags.	core	5	system software
Sorting	Optimize for multifaceted searches within user database.	core	5	system software
Sorting	Optimize for folksonomic tagging to permit multiple ways to virtually sort and categorize user collections, similarly to music playlists.	core	5	system software
Storage	Accommodate collection expansion with integration of additional	core	5	bookshelf hardware
Ubiquity	Create & update reading lists and wishlists remotely on mobile devices.	core	5	system software; mobile device
Active reading	Capture reading annotations digitally.		5	system software
Active reading	Search within text.		5	system software
Active reading	Highlight section of text to copy-paste elsewhere (blog, Word doc,		5	system software; plugin
Active reading	Highlight selections from text to create collections of quotes.		5	system software; plugin
Active reading	Generate citations without data entry. Compatible with Zotero, Endnote.		5	system software; plugin
Active reading	Follow links directly to URLs in user's book: text, footnotes,		5	system software
Circulation	Share books and track loaned books.		5	system software
Multimedia	Access user-owned books in multiple formats and on multiple devices.		5	system software; plugins
Ubiquity	Track and sync last page accessed within text to provide continuity of reading experience across multiple formats and devices.		5	system software; plugin; mobile device apps
Literacy	Track child's reading time.		3	system software
Literacy	Track child's reading selections. Generate reading recommendations. Incentivize or provide encouragement to diversify reading materials or to increase reading level.		3	system software
Active reading	Send feedback to publisher / author seamlessly.		3	system software
Aesthetics	Function as a room divider. Option of fine-finish backing or no backing.		3	bookshelf hardware
Aesthetics / Preservation	Optional glass-front doors (clear or tinted) protect contents from dust, and from sunlight with UV-coating.		3	glass doors and mounting hardware; UV coating
Aesthetics / Security	Optional under-shelf lighting with dimmer switch increases visibility of books and provides mood lighting. Programmable vacation settings.		3	system software; under-shelf lighting
Income	List and sell user's books online, e.g. via Amazon.		3	system software
Income opportunity	Sell user tracking data to data analytics companies, e.g. Google, Amazon, booksellers, etc.		3	system software; plugins
Multipurpose	Optional small built-in hidden safe for jewelry, important docs, etc.		3	bookshelf hardware
Preservation	Optional climate control within bookcase to protect and preserve books. (Glass door option required.)		3	system software; humidity and temperature sensors; temperature
Security	Optional remote-controlled door lock. (Glass door option required.)		3	system software; door lock; mobile device app
Storage	Optional modular drawers for CD/DVD storage, magazine dividers		3	drawers & slider rails; dividers
Multimedia	Optional mount for large-screen TV on the back of the bookshelf.		1	large-screen TV mount
Multipurpose	Optional pull-down projector screen. Front- or rear-mount.		1	projector screen and mount
Multipurpose	Optional white board on back of the bookshelf.		1	white board and mount
Storage	Optional under-shelf wine glass rack.		1	under-shelf wineglass rack