

The OpenBookcase: Let your books be read!

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IS282/Blanchette

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Final Project: Connected Bookcase



Your Old Bookcase

Boring...Depressing...Analog



neat!



The People You Know..

“awesome!”



“rad!”







WiFi modem and antennae allows connectivity with all your devices

Introducing The OpenBookcase

**RFID Antennae embedded in every shelf
Electromagnetic Opaque lining maintains shelf integrity**



**Compact RFID Reader
makes the whole thing possible**



**Custom designed Raspberry Pi Microserver
discreetly hidden in rear compartment
solid state hard drive
USB and ethernet connectivity**



AC Power Supply

The OpenBookcase

Let Your Books Be Read!

The Bookcase that Reads Your Books!

The Bookcase that Reads You!

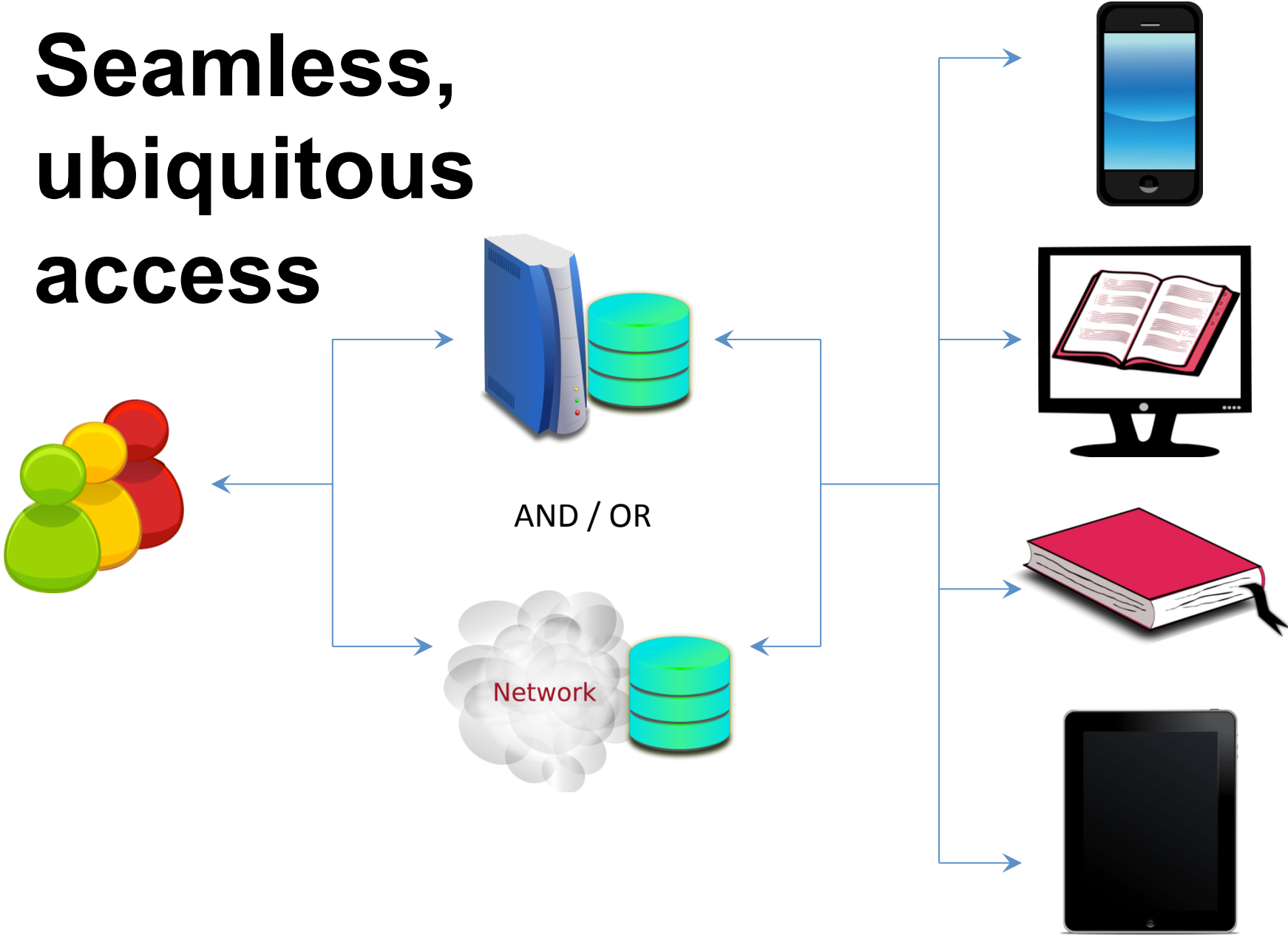
The Well-Read Bookcase!

Open Your Books To the World!

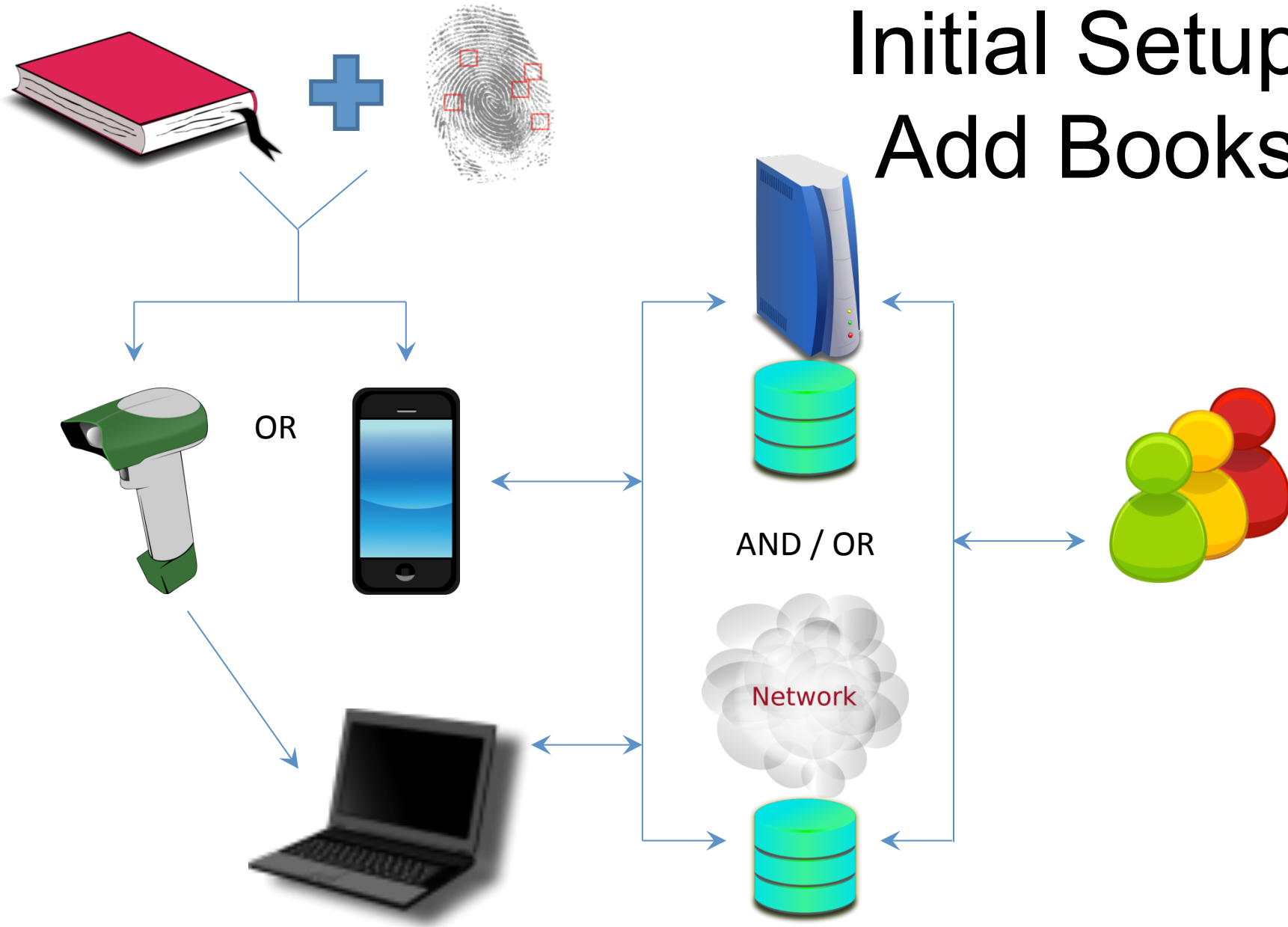
Features

- Keep a history of every tagged object ever placed on the shelves
- Monitor your reading habits, remember all your books
- Receive reminders and recommendations
- Tag your own possessions and keep track of them from anywhere
- Share and compare the contents of your bookcase (books, vinyls, DVDs) with an online community
- Sell your books online
- Keep track of your possessions
- Organize your collection by different criteria

Seamless, ubiquitous access



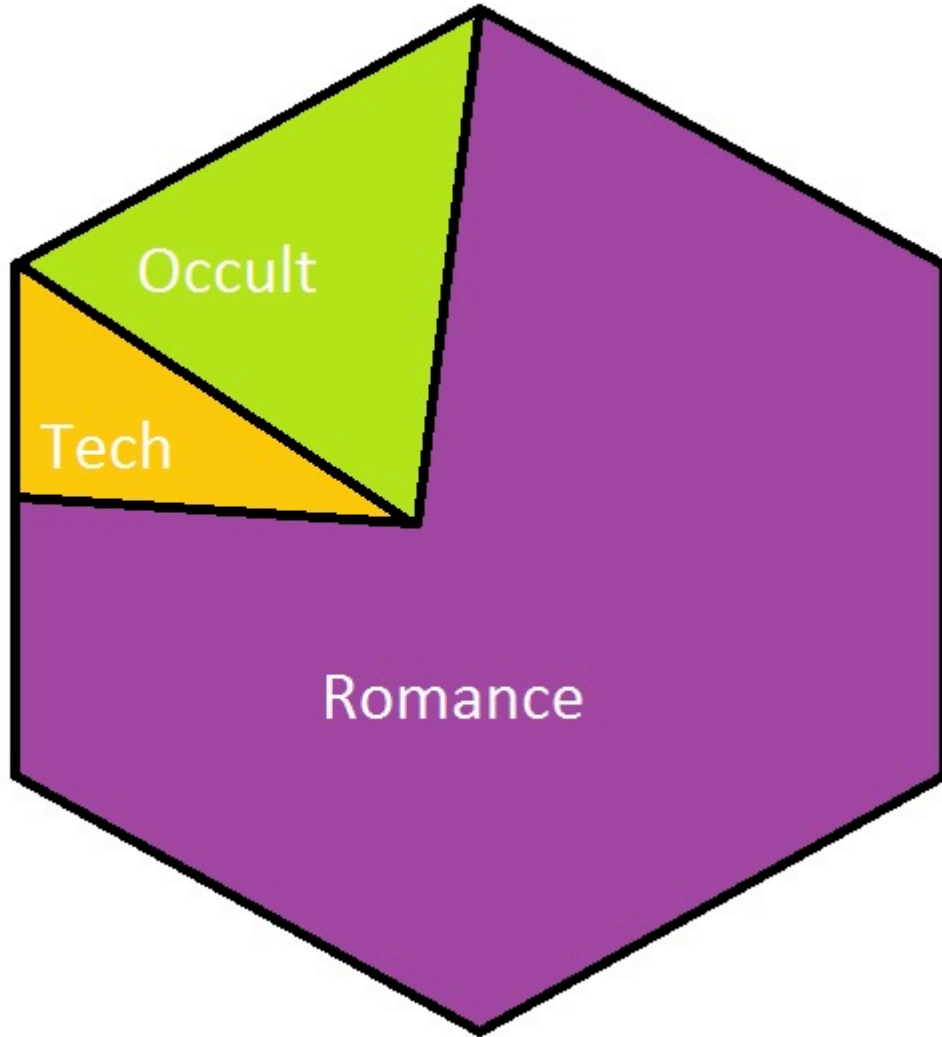
Initial Setup: Add Books



Real Life Scenarios

1. Where'd I leave my wallet? Where's my textbook?
2. I can't find my well worn copy of Schismatrix...
3. I keep meaning to read Middlemarch but I forget...
4. Do I already have a copy of Cannery Row, or should I buy this one?
5. What else should I read?

Map your collection, receive recommendations



Have you considered Paranormal Romance?

Books like

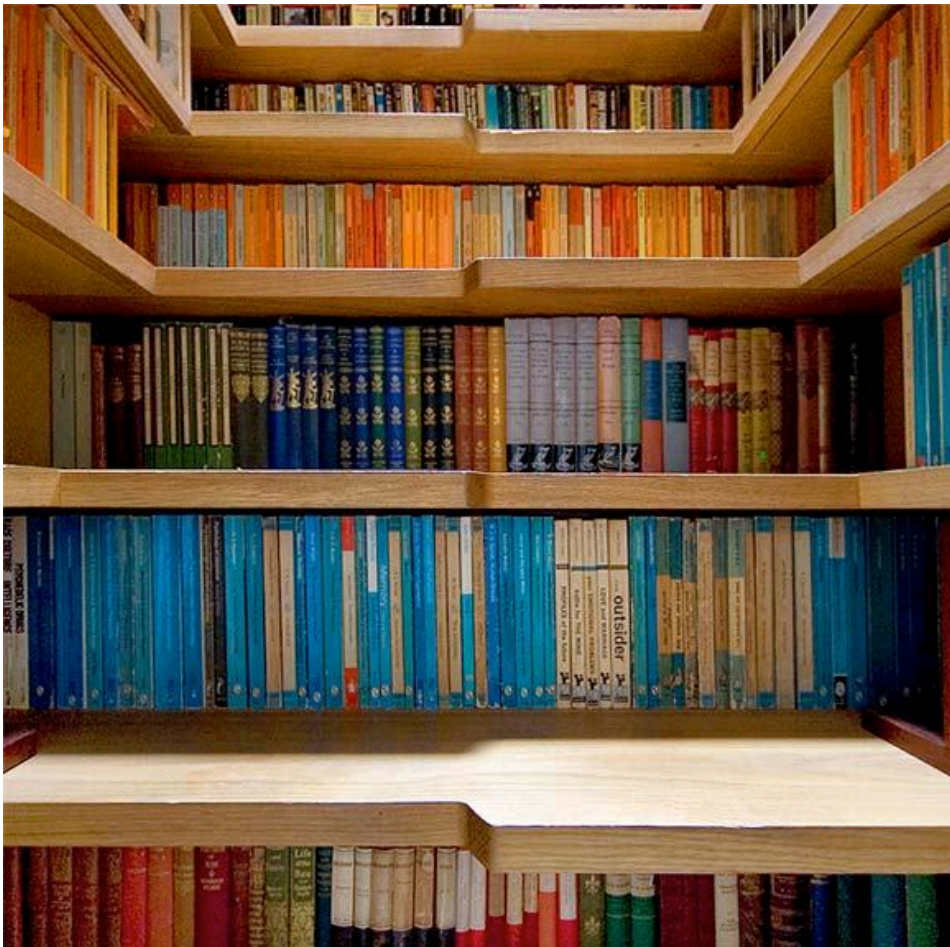
Strange Brew

Thorn Queen

Blaze of Memory

The Perfect Poison

Organize! By size



**By
color**



By subject



By author



By language

By audience age

Gaplatz Developers "Open Bookcase": Functional Requirements Matrix

Category of Function	Functional Requirement	Core?	Prio rity	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 system software; door lock;
Security	Optional remote-controlled door lock. (Glass door option required.)		3	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

The End!

Questions
?
Comments?



2015 CHEVROLET CRUZE
EFFICIENT AND CRAFTY
 CRUZE BENDS THE RULES WITH AN EPA-EST. 38 MPG HWY AND AVAILABLE 4G LTE Wi-Fi*
*Important info



Build & Price
 Current Offers
 Locate A Vehicle



Close the Book on the OpenBookcase

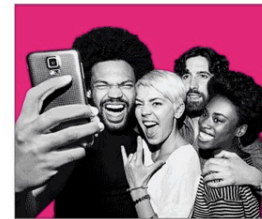
by TechJerk | @nicole | 1 hr ago



OpenBookcase, the latest product of Gaplatz Industries, is a connected bookcase that tracks the reading habits of its owner. Utilizing RFID technology, the shelves track whatever tagged object is placed on its shelves. The device uses this data to provide notifications and reminders, foster reading habits with recommendations, and connect the owner to a community of readers with similar tastes. For example, if the bookcase senses that a particular book has never been moved, it provides the user with a timely reminder, letting them know that they might want to read it. If a book is removed from the shelves quite often, the system provides the reader with little known information about the book, and makes recommendations of similar books.

The editors here at Endgadget were at bit of loss on this one. It seems to us that this enormous piece of connected furniture epitomizes all this wrong and unproductive with the fabled internet of things. At over \$1500 dollars, this behemoth better provide the solution to some dire problem toot sweet. But rather than do so, the OpenBookcase downs the user with a multitude of non-essential functions. The OpenBookcase solves that age old dilemma of absolutely needing to know what is in your reading collection while away from the house. And just in case you required even more annoying digital reminders in your life, hogging up all your cognitive resources, your furniture will now nag you about that copy of *The Rise and Fall of the Third Reich* which you've never wanted to crack open. One can't help but wonder why spend this sort of money on capabilities that, for the most part, can just as easily be acquired by manually searching the internet?

To be fair to the creators, Gaplatz Industries envisions their connected bookcase one of many RFID-tracking household furnishings. In a world where everything is connected, the bookcase that tracks its contents does seem like a rational step in that direction. And the use of RFID tags ensure flexibility and thrift when it comes to storing additional items on the shelf. Just about anything could be stored in this way, and the bookcase's computer will look up any information encoded on the tags such as ISBN, ISSN for your books, or UPC codes for your music and video. As the RFID tags slowly displace barcodes to completion, perhaps we'll acquire a new appreciation for this monstrosity.



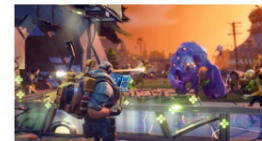
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