

BookCub Princeton

Product Guide

bookcubproject.appspot.com

May 2017 - COS 333

Patrick Boroughs

Mohamed El-Dirany

Grace Miles

Alex Vogelsang

User Guide

Purpose

BookCub Princeton provides a clean, streamlined way for Princeton University students to buy and sell used textbooks amongst themselves. As Princeton students ourselves, the BookCub Team recognize the need for an efficient textbook marketplace. Too often, unneeded books sit in a student's room while the person down the hall is busy buying a new copy from Amazon. Users of BookCub can efficiently buy and sell textbooks listed by department and class, so there's never a need to scroll through pages and pages of irrelevant listings. BookCub provides waitlist alerts for students who don't immediately find the textbook they need, and supports a convenient alert system so you'll know if the book you wanted was sold to someone else. The BookCub platform incentivizes users to be honest on the site by its rating systems, in which each party in a transaction can participate. May all your textbook searches be happy, affordable, and efficient!



My Profile

My Profile is a user's home base at BookCub for all listings, activities, waitlists and ratings!

My Listed Books

- Lists book for sale by the user along with the associated course, date posted, offers button, and editing option.
- Editing a listing can be done by selecting the small yellow pencil next to the "Title" field of each book and changing the information on the update form provided. Deletion of a listing can be done by selecting the red X on the far right of each listing.
- Offers may be viewed by clicking the button under "Interested in Purchasing." This button will read "No Offers" if no offers have been made on that book listing, and "View Offers" otherwise.

Title	Course	Date Posted	Interested in Purchasing
PQuod Packet	HIS322 / EAS324	May 6, 2017	No Offers
A Modern History of Japan	HIS322 / EAS324	May 6, 2017	No Offers
The Guns of August	POL388	May 6, 2017	See Offers

Books I'm Interested In

- Lists all the books for which they have expressed interest. Each listing provides a link to the textbook's page, along with its associated course code, owner, contact email, and cost. Interested books that have been marked "Sold" by their seller will not appear under the interested books listing.

Title	Course	Owner	Contact	Cost	Date Posted
Computer Networks - A Systems Approach	COS461	Grace Miles	gmiles@princeton.edu	\$40.00	May 14, 2017

Waitlists

- Lists all courses for which the user has asked to be placed on a Waitlist, along with the option to be deleted from that waitlist.

Waitlists

You will be notified of new books in these course(s):

- ORF363 / COS323

Ratings

- If a user has recently bought or sold a book to another user, a user may rate the interaction below.

Selling

List A Book

- To list a book, users can either select the “Sell” button on the front of the main page, or the “Sell” button on the top right bar of every window.
- From the department listing page, a user may select the department under which he or she would like to list a book. If the book was used for a cross-listed course, the user can select any of the departments under which the course was offered.
- The selection of department leads to a “Sell Form” page. A drop down menu is provided for courses listed only under the department selected. From here, the seller may enter enough information as to provide to a potential buyer. Mandatory fields include title, author, quality, and price. Each listing may also support additional description and a photo of the item to be sold. When the user is ready, the “List Now” button is pressed and the entry is listed!

Someone Wants to Buy Your Book!

- When another user expresses interest in the listed book and selects the “I’m Interested!” button, the seller will receive an email from the BookCub team with the interested party’s net-ID. The offer will also be listed under the My Profile page.

Sold Books:

- Once a user sells a listed book, they may mark it as such on the My Profile Page under the “Offers” button next to the buyer’s offer. Once the book has been marked as sold, the seller will have the opportunity to rate his or her interaction with the user who purchased the book.

Buying: Find Book through Department

To Buy:

- A user may either press the “Buy” button on the homepage or the “Buy” button listed in the top right toolbar. Both buttons lead to a department listing page, much like the “Sell” departments page.

On the Department Page:

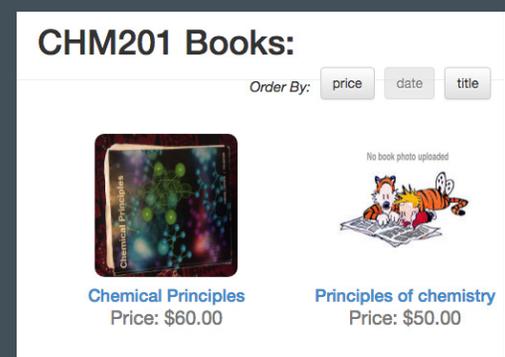
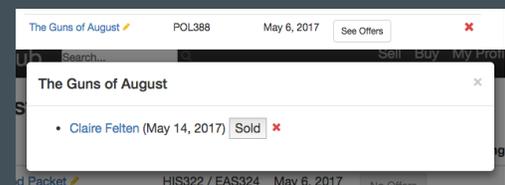
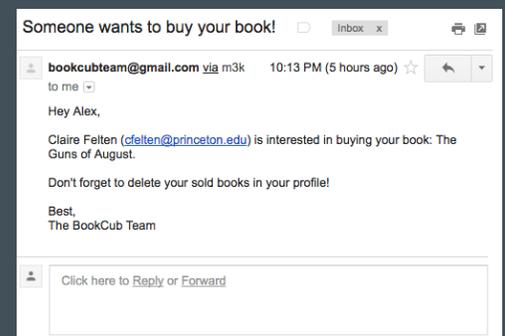
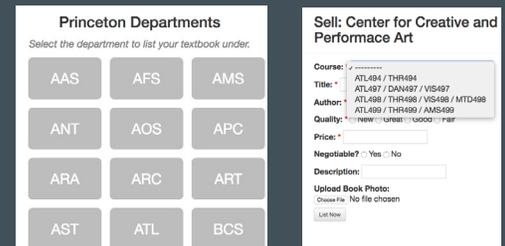
- BookCub lists all courses listed under that department in order of course code. By selecting any of these courses, a user may be brought to the book listing page for that course.

On a Course Page:

- A user may sort individual book listings by date posted, price, and title. Selecting the image icon for the book will take the potential buyer to the listing page for that book.

On a Book Listing Page:

- A user may browse the description and photo of a listing and decide whether or not to express interest in the book by



selecting “I’m Interested!”

Found the Book! Now to Buy it

- Once a user/buyer has clicked “I’m Interested!” on a book listing page, the seller is notified via email and the book will appear in “Books I’m Interested in” on My Profile.
- If a buyer/user has expressed interested in is sold, the potential buyer receives email notification that it has been sold to another user.
- If the buyer/user is able to purchase the interested book, it will be marked as sold by the seller and the user/buyer will have an opportunity to rate the purchase interaction with the seller in the Ratings section at the bottom of My Profile.

Search Feature

An alternate way to find a book! A user may enter a search on the search bar on the top left toolbar of the webpage.

Users queries search through multiple to return:

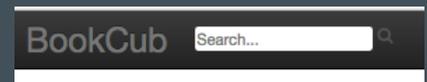
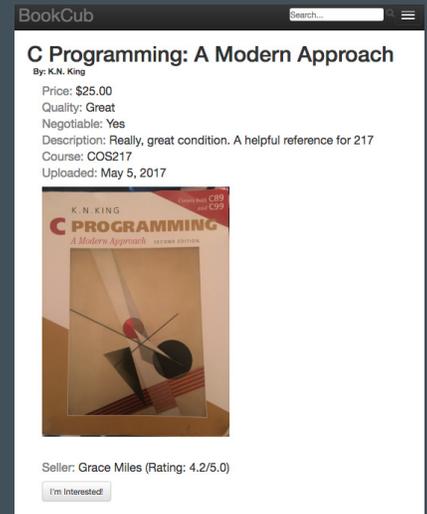
- Individual Book Listings - search by title, author, course, description, or seller
- Course Pages - search by course title or course code
- Department - search by department name or three letter code

Not Finding Your Book? - Waitlist Feature

Didn’t find the needed book? Users can put themselves on a waitlist for any course to receive email updates from the BookCub Team when a new textbook is listed under that course title. Just select “Add Me To Waitlist” at the bottom of the course page.

Providing Feedback on the Site

The BookCub Team would love to hear about any improvements we can make to the site! To submit feedback, select the ‘About’ button in the top-right corner of the page. This button leads to our About Page, where you can read about the BookCub Team and select the Submit Feedback button.



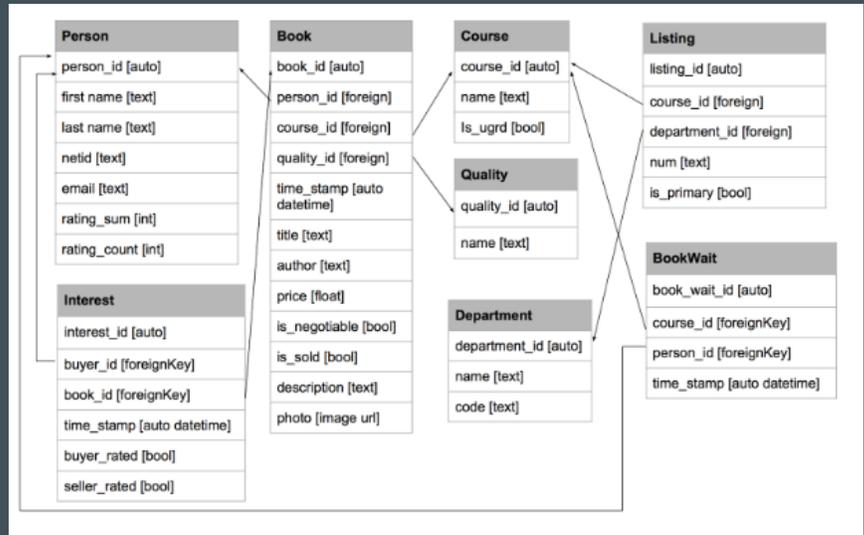
Developer Guide

Backend - Models

The BookCub backend is a MySQL database with 8 core tables for storing user-accessible information: book, bookwait, course, department, interest, listing, person, quality. Each table is generated by Django after a Model is defined.

Here is the structure:

- A Course entry has one or more Listings depending on if the course is cross-listed
- A BookWait entry is someone who has added themselves to the waiting list for a certain course
- An Interest entry is someone who has expressed interest in a book, and also stores flags for buyer and seller rating completion once the book has been sold.



Processing - Actions

User inputs that trigger actions beyond redirecting to a new page.

book_wait:

A BookWait table entry is created automatically when a user selects “Add Me to Waitlist”. A post request with the book id and user id are sent to this method, which saves a new BookWait entry and redirects to the same page, where new context information will make the “Add Me to Waitlist” button disabled.

new_rating:

When a user clicks “Rate” on the My Profile page, a post request with the star value (radio button value), the interest id, and the user id is sent to this method, which increments the person’s rating_sum by the star value, increments the person’s rating_count by 1, and sets either buyer_rated or seller_rated to True.

book_sold:

When a book is marked as “Sold” in the “See Offers” modal of the My Profile page, a post request with the interest id is passed into this method. The method then finds the associated book and sets the book_is_sold field to True. A query is made to determine all other users who were interested in the now-sold book, at which point an email is sent to each one informing them that the book is no longer available. Each user’s interest entry for the sold book is erased.

new_interest:

When a user expresses interest in a book, a post request with the buyer id and book id is passed into this method. The method creates a new Interest entry and sends an email to the associated book’s owner, informing the owner of new interest in his or her listing.

search:

When a user clicks the search icon or clicks enter when in the search bar, the user is redirected to the search results page using three querysets that are determined by the search function. The search function splits the search query into terms by space, or multi-word terms if surrounded by double quotes. For each term, the search

method loops through a group of fields that correspond to the Department, Book, or Listing search. A query looks for entries that contain the search term, and append the results to the appropriate queryset. The Listing queryset is converted into a Course queryset, and the data is passed into the search results view.

Frontend - Views & Django

Django simplifies the front end through class-based generic views. The BookCub app makes use of a variety of these views.

Generic Detail View - Provide a template with a single object's data

BookView

- Detailed information about a book listing

Generic Create View - Generate a form to add an object

SellFormView

- The sell/post listing form

Generic Update View - Generate a form with pre-filled editable fields to edit an object

BookUpdateView

Generic Delete View - Template-less view for deleting an object and redirecting to a specified url.

BookWaitDelete

- Delete a BookWait entry (redirect to profile)

BookDelete

- Delete a Book entry (redirect to profile)

InterestDelete

- Delete a Interest entry (redirect to profile)

Generic List View - Provide a standard html template with a queryset of objects and optional additional custom context data

ProfileView

- Multiple querysets including the logged-in user's listed books,***

DepartmentBooksView

- List of all the books under a department

CourseView

- List of all the books under a course

SellView

- List of all the departments to pre-populate sell-form course dropdown

BuyView

- List of all the departments to open a specific DepartmentView

Generic Template View - Provide a standard html template with custom context data (the misc. view)

DepartmentView

- Two querysets to view undergraduate and graduate courses as links to the appropriate CourseView

IndexView

- Home page

AboutView

- About page