

COS 333 PROJECT DEMO | MICHAEL LI, MARK TENGI, BARBARA
ZHAN & ALAN ZHOU

PTX2

WHY PTX2?



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Learning is a treasure that will follow its owner everywhere. —Chinese Proverb

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PTX offers the easiest and fastest way to sell and buy used textbooks on Princeton's campus. It's a quick and painless way to avoid the outrageous costs that often come with buying new or used books. Come join us and help us keep up an efficient and cheap student-to-student transaction.

SEARCH BAR FROM THE 00s

Getting Started

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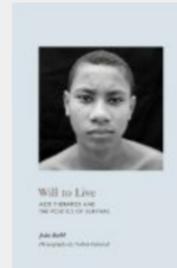
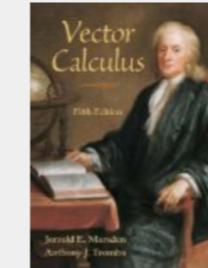
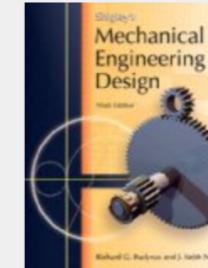
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RANDO ACCESSIBLE**BROKEN IMAGE**

New Books for Sale

[Will to Live: AIDS Therapies ...](#)[A New China \(Two Vol. ...](#)[Vector Calculus](#)[Corporate Finance \(2nd Edition\)](#)[Shigley's Mechanical Engineering Design \(Mcgraw-Hill ...](#)

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Browse by Course

Miscellaneous

[#misc \(1437\)](#)

UH ...

Program in African-American Studies

[AAS 201 \(28\)](#)[AAS 211 \(0\)](#)[AAS 310 \(1\)](#)[AAS 318 \(0\)](#)[AAS 320 \(7\)](#)[AAS 321 \(2\)](#)[AAS 325 \(0\)](#)[AAS 329 \(7\)](#)[AAS 335 \(0\)](#)[AAS 362 \(12\)](#)[AAS 374 \(8\)](#)[AAS 393 \(9\)](#)[AAS 396 \(5\)](#)[AAS 403 \(4\)](#)

Program in African Studies

[AFS 200 \(4\)](#)

Program in American Studies

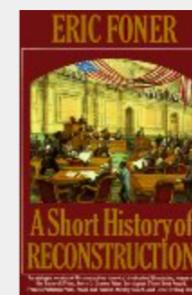
7.00
[Add this to my
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[A Short History of Reconstruction](#)

Eric Foner

An abridged version of *Reconstruction: America's Unfinished Revolution*, the definitive study of the aftermath of the Civil War, winner of the Bancroft Prize, Avery O. Craven Prize,...

ISBN-13: 9780060964313 · Edition 1



7.00
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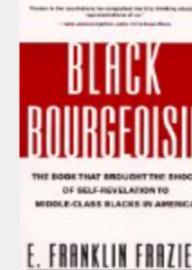
[Black Bourgeoisie: The Book That Brought the Shock of Self-Revelation to Middle-Class Blacks in America](#)

E. Franklin Frazier

None...

ISBN-13: 9780684832418 · Edition 1st Free Press Paperbacks Ed

UH...?



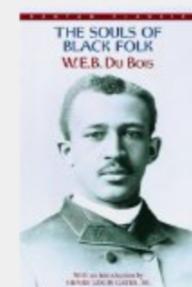
2.00
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[The Souls of Black Folk \(Bantam Classics\)](#)

W.E.B. Du Bois

"The problem of the twentieth century is the problem of the color line." Thus speaks W.E.B. Du Bois in <i>The Souls Of Black Folk</i>, one of the most prophetic and in...

ISBN-13: 9780553213362



LET'S TRY A BLANK
SEARCH! :D

31 SECONDS LATER...



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Offered Books

Here are books that are currently listed for sale.

Best Price **Information**

18.00

["Myne Owne Ground": Race and Freedom on Virginia's Eastern Shore, 1640-1676](#)

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wish list](#)

T. H. Breen

Ever since its publication twenty-five years ago, "Myne Owne Ground" has challenged readers to rethink much of what is taken for granted about American race relations. During the ...

ISBN-13: 9780195175370 · Edition 25th anniversary



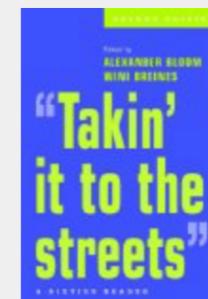
25.00

["Takin' it to the streets": A Sixties Reader](#)

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Takin' It to the Streets, 2/e is a comprehensive collection of primary documents covering political, social and cultural aspects of the 1960's. Drawn from mainstream sources, litt...

ISBN-13: 9780195142907 · Edition 2



WAIT, HOW FAR DOES THIS SCROLLBAR GO EXACTLY...?



45.00
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Algorithms (4th Edition)

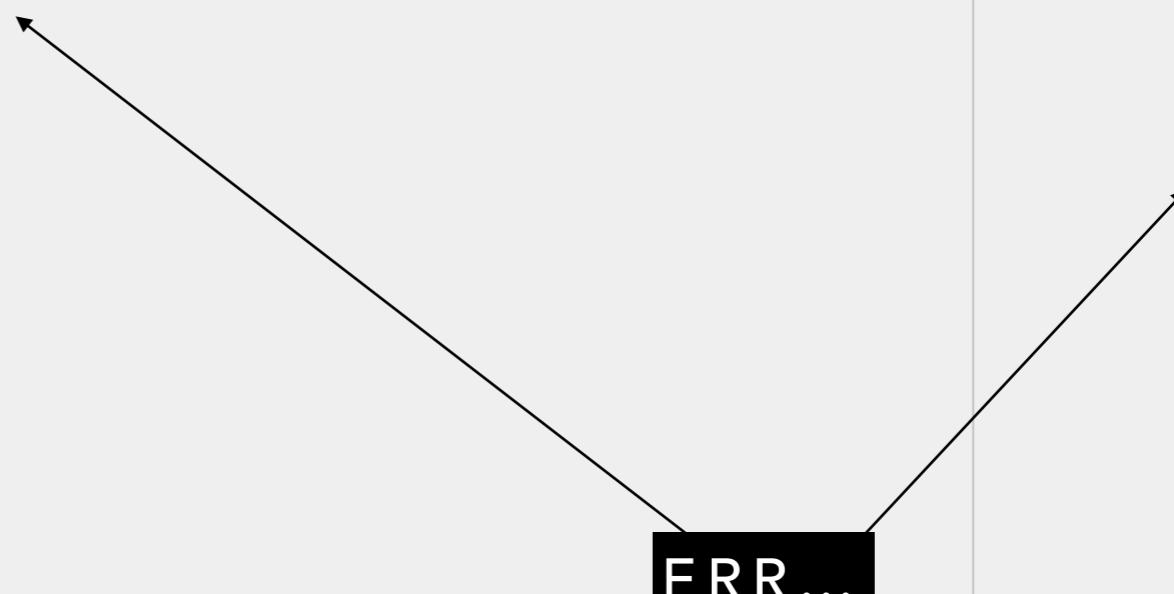
Robert Sedgewick

 <P style="MARGIN: 0px">Essential Information about Algorithms and Data Structures</P> <P style="MARGIN: 0px"> </P><l> <P sty...

ISBN-13: 9780321573513 · Edition 4

(cover)

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Learning is

SO, MAYBE NOT QUITE ACCURATE...

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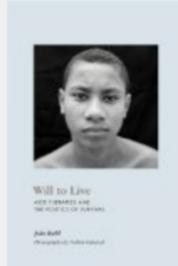
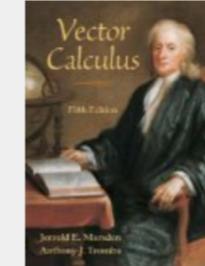
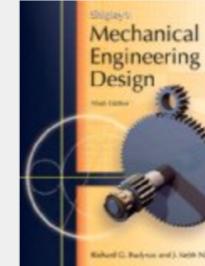
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THE COLD HARD TRUTH

[Will to Live: AIDS Therapies ...](#)[A New China \(Two Vol. ...](#)[Vector Calculus](#)[Corporate Finance \(2nd Edition\)](#)[Shigley's Mechanical Engineering Design \(Mcgraw-Hill ...](#)

TOTAL

\$2018.38

F2012	S2013	F2013	S2014
\$635.06	\$707.84	\$502.91	\$172.57

IN SUMMARY, WE NEED A TEXTBOOK
EXCHANGE SYSTEM, BUT THE ONE
WE HAVE IS A LITTLE SHAKY...

SO WE MADE PTX2

MAJOR FEATURES

- Courses included in database - no more entering in books by ISBN and relating them to courses yourself.
Ensures absolute accuracy
- Automatic population of a bookshelf based on courses - similar to giving Labyrinth your course list at the counter
- Sleeker, more user-centric interface. Heavily features modal windows to simplify navigation and maintain focus on the personalized homepage as much as possible

MAJOR FEATURES CONT.

- Price overviews - easy price comparison with Labyrinth and Amazon and links straight to the product page for each. Can see lowest student price offered
- Improved inventory management system - split up into “Books Needed”, “Books Selling”, and “Books Owned”
- Automatic transfer of books between buyer’s and seller’s profiles

DEMO

OVERVIEW OF ARCHITECTURE

- Framework: Django
- Host: Heroku
- Database: PostgreSQL
- Version control: Github
- Front-end: HTML5, CSS3, Bootstrap

DATABASE OVERVIEW

USER	PROFILE (NEW)	
NETID	NETID (LINKED TO A "USER")	
NAME	FIRST NAME	LAST NAME
PREFERRED MEETING PLACE	PREFERRED MEETING PLACE	
RATING	REVIEWS	
PICTURE	—	
	BOOKS NEEDED	
	BOOKS OWNED	
	BOOKS SELLING	
	COURSE LIST	

BOOK	BOOK (NEW)
ISBN	ISBN
ISBN10	ISBN10
TITLE	TITLE
AUTHOR	AUTHOR
EDITION	EDITION
COURSE USED IN	COURSE USED IN
AMAZON PRICE	AMAZON PRICE
LABYRINTH PRICE	LABYRINTH PRICE
BEST STUDENT PRICE	BEST STUDENT PRICE
	PICTURE LINK

LISTING	PHYSBOOK (ADDED)	LISTING (NEW)
PHYSICAL BOOK ID	BOOK	PHYSBOOK
ISBN	OWNER	—
SELL STATUS		SELL STATUS
CONDITION		COMMENT
COMMENT		
PRICE		PRICE

COURSE	COURSE (NEW)
NAME	NAME
NUMBER (INT FIELD)	NUMBER (CHAR FIELD)
	DEPARTMENT
	YEAR
	TERM
	BOOKS

TRANSACTION	TRANSACTION (NEW)
BUYER	BUYER
SELLER	SELLER
PHYSICAL BOOK ID	PHYSBOOK
PRICE	PRICE
PENDING?	BUYER REVIEW
	SELLER REVIEW

SCRAPING

SCRAPING: WHY?

- Ensure accuracy of book meta-data
- Establish course relationships (no more #misc books)
- Easier and more natural way to buy and sell books; no ISBN input needed
- Perfectly tailored to Princeton students

SCRAPING: HOW?

- Beautiful Soup: takes URLs, turns page source into “soup”, which is parseable and processable by HTML tags
- CookieJar: establishes a session by storing cookies for multiple requests - used to handle Blackboard authentication process

SCRAPING: PROCESS

Class Num	Course	Title	Dist Area	Sect	Days	Time	Location	Enrl	Max	Status	Books	Eval
43398	AAS 225 GSS 224 ENG 225	"Too Cute!" and the New Asiamania	SA	L01	T Th	10:00 am - 10:50 am	McCosh Hal 46	91	113			



* AAS225–
GSS224_S2014
Introduction to
Asian American
Studies: "Too
Cute!" and the
New Asiamania

Syllabus

Course Materials

Video Reserves

Images



Reading List - AAS225-GSS224_S2014: Introduction to Asian American Studies: "Too Cute!" and the New Asiamania

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[Print](#)

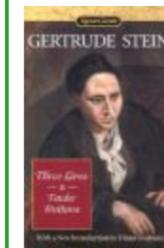


2 items in your Book Bag

[Go to Book Bag](#)

* [Student Discount Prices](#) represent a 30% reduction from the publisher list price and are only available to enrolled Princeton students. Both the Full Price and the Student Price appear in the Book Bag. [More Details](#)

Required Reading



Title: **Three Lives and Tender Buttons**
Author: *Gertrude Stein; Diane Souhami (Introduction by)*
ISBN: **9780451528728**
Publisher: Penguin Group (USA) Incorporated
Date: 2003-02-04
Binding: UK- A Format Paperback

Book condition and buyback? [i](#)

List Price New: \$6.95

Student 30% Discount Prices*:

New \$4.87

\$3.13 after guaranteed buyback

[Order from Labyrinth](#)

Recommended Reading

There are no recommended readings to display.

Book condition and buyback? [i](#)

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SCRAPING: PROBLEMS

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104 Inspect Styles Layers Node Resource

Computed Rules Metrics

Active Focus Hover Visited

Box Model

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Main Frame

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                <span class="bb_price"> $166.37 </span>
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  </tr>
</table>
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```

Blackboard Learn

https://blackboard.princeton.edu/webapps/portal/frameset.jsp?tab_tab_group_id=_2_1&url=%2Fwebapps%2Fpu-readinglist-bb_bb60%2Fmain.do%3Fcourse_id%3D_213179_1

Blackboard Learn

Michael Li 11 Logout

PRINCETON UNIVERSITY

Courses My Blackboard Notifications Organizations Library Students w/Disabilities Book Bag Help

AMS399-HIS399_S2014 In the Groove: Technology and Music in American History, From Edison to the iPod Reading List

Reading List - AMS399-HIS399_S2014: In the Groove: Technology and Music in American History, From Edison to the iPod

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Required Reading

	Book condition and buyback?
 Coursepack #: 64 Provider: Pequod List Price: \$65.00 Comment:	Not available at Labyrinth
 Title: A Spiral Way Author: Erika Brady ISBN: 9781578061747 Publisher: University Press of Mississippi Date: 1999-11-01 Binding: Trade Paper	List Price New: \$25.00 Student 30% Discount Prices*: New \$17.50 \$11.25 after guaranteed buyback Sold Out Order from Labyrinth
 Title: Capturing Sound Author: Mark Katz ISBN: 9780520261051 Publisher: University of California Press Date: 2010-10-07 Binding: Trade Paper	List Price New: \$30.95 Student 30% Discount Prices*: Like new \$16.25 \$11.60 after guaranteed buyback Order from Labyrinth

2 items in your Book Bag

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Display a menu

Search Results « Office of the Registrar

registrar.princeton.edu/course-offerings/search_results.xml?term=1144&subject=CHI

Search Results « Office of the Registrar

Home
Course Offerings
New Search

Search Results for:

Term: Spring 2013-2014 , Distribution area: Any, Subject: CHI, Catalog number: Any, Level: Any, Instructor: Any, Title: Any, Days: Any, Times: Any

Spring 2013-2014 Browse all CHI courses (including crosslistings)

Class Num	Course	Title	Dist Area	Sect	Days	Time	Location	Enrl	Max	Status	Books	Eval
42363	CHI 102	Elementary Chinese II		C01	M T W Th F	9:00 am - 9:50 am	Jones Hall 305	10	10	Closed		
44374	CHI 102	Elementary Chinese II		C01A	M T W Th F	9:00 am - 9:50 am	Frist Camp 234	1	10			
42364	CHI 102	Elementary Chinese II		C02	M T W Th F	10:00 am - 10:50 am	Jones Hall 305	10	10	Closed		
43386	CHI 102	Elementary Chinese II		C02A	M T W Th F	10:00 am - 10:50 am	Jones Hall 113	7	10			
42365	CHI 102	Elementary Chinese II		C03	M T W Th F	11:00 am - 11:50 am	Jones Hall 305	5	10			
43387	CHI 102	Elementary Chinese II		C03A	M T W Th F	11:00 am - 11:50 am	Jones Hall 113	2	10			
42366	CHI 102	Elementary Chinese II		C04	M T W Th F	12:30 pm - 1:20 pm	Jones Hall 305	11	10	Closed		
43388	CHI 102	Elementary Chinese II		C04A	M T W Th F	12:30 pm - 1:20 pm	Jones Hall 113	11	10	Closed		
42350	CHI 107	Intermediate Chinese II		C01	M T W Th F	9:00 am - 9:50 am	Jones Hall 307	7	8			
42345	CHI 107	Intermediate Chinese II		C02	M T W Th F	10:00 am - 10:50 am	Jones Hall 307	7	8			
42346	CHI 107	Intermediate Chinese II		C03	M T W Th F	11:00 am - 11:50 am	Jones Hall 307	6	8			
42347	CHI 107	Intermediate Chinese II		C04	M T W Th F	12:30 pm - 1:20 pm	Jones Hall 307	9	8	Closed		
43381	CHI 107	Intermediate Chinese II		C05	M T W Th F	1:30 pm - 2:20 pm	Jones Hall 307	9	8	Closed		

Display a menu

You have requested the reading list for a course which has more than one Blackboard course site. Please choose the course site for which you wish to view the reading list.

- [VIS213-C02_S2014 Digital Photography](https://blackboard.princeton.edu/webapps/pu-readinglist-bb_bb60/find.jsp?courseid=008907&term=1144)
- [VIS213-C01_S2014 Digital Photography](https://blackboard.princeton.edu/webapps/pu-readinglist-bb_bb60/find.jsp?courseid=008907&term=1144)

Blackboard Learn
https://blackboard.princeton.edu/webapps/portal/frameset.jsp?tab_tab_group_id=_2_1&url=%2Fwebapps%2Fpu-readinglist-bb_bb60%2Fmain.do%3Fcourse_id%3D_213223_1
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Michael Li 11 Logout
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Courses My Blackboard Notifications Organizations Library Students w/Disabilities Book Bag Help
ARC511_S2014 Structural Design ▾ Reading List
Reading List - ARC511_S2014
The reading list for ARC511_S2014 is not yet available.
OK
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Display a menu

BUYING + SELLING

- Sell button creates a Physbook with you as the owner, also creating a linked listing, which populates a listing's offers table
- Buy button asks you to confirm the purchase, then creates a transaction filling in the given information, but leaving sellerreview and buyerreview blank; associated listing is also changed to 'sale pending'
- Transaction considered pending until both reviews are filled, at which point the corresponding listing is then deleted, and the transaction is saved into the database for historical purposes
- Finally, the buyer has the book added to his 'Owned' section

FUTURE IMPROVEMENTS

- Implement usage of reviews
- “Sell All” where at the end of each semester you can opt to sell all of your books
- “Fast Buy” where you can buy all of your books needed
- Watch list where you can get email updates for when a certain price boundary is reached

QUESTIONS?