#### **Course Reserves Unleashed!**

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## **Brief Description**

**Course Reserves Unleashed!** will streamline student access to course reserves. Course reserves are library materials chosen by faculty to support class instruction. Course reserves data, managed by LTS, will be made available to Harvard Library units and Harvard schools. The project will enable libraries to present course reserves data on websites and may enhance interoperability by fueling applications like Stack View/Shelf Life, Map It, and future course management tools. The result will be improved student access to required course readings.

## **Current problem**

Harvard students are expected find course reserve readings in the courses section of <a href="mailto:my.harvard">my.harvard</a>. Opening an individual course listing will bring up an option to view reserves information, if there is any, with links provided to readings that are available in electronic format. To locate course reserves information, students must navigate several screens. If, for some reason, they want to locate the reserves information for more than one course at the same time, there is no shortcut; they must re-navigate those same screens.

Local surveys show that current students prefer to "search" for reserves by author and title keywords, rather than "browse" a series of screens and lists. At the Divinity School, our service logs show that large numbers of students look for assigned titles in HOLLIS, and then check the circulation status of each item, rather than consult the official reserves list in <a href="mailto:my.harvard">my.harvard</a>.

HOLLIS may be adequate for locating monographs checked out to "reserve", but HOLLIS cannot reliably locate printed copies of journal articles and essays on reserve, or uncover documents deep within licensed e-resources. Some students fail to access licensed content on course pages, and instead hunt on Google rather than attempt to locate a known title in Harvard's labyrinthine collection of licensed e-resources. Most students know that Harvard Library licenses e-resources, but are daunted by the complexity of finding a text that that professor says is "online". Despite what librarians teach about navigating e-resources, students teach one another to Google a text and then add (from memory!) "ezp-prod1.hul.harvard.edu" to the URL, mimicking the Harvard LibX tool. Moreover, data suggest that some students who succeed in finding reserves on course pages may be sharing copies of copyrighted texts with struggling classmates by email as a courtesy.

According to a recent Harvard Library update, Harvard Library mobile traffic increased by about 30% in fall 2012 semester compared to the same period in 2011. The current Harvard Library mobile application offers quick access to HOLLIS, library hours, etc., but lacks convenient access to required course readings. We hope that a future Library Lab project will use **Course Reserves Unleased!** to create mobile access to course reserves.

#### **User Stories**

Following are frequently asked questions posed to librarians at the Andover-Harvard Theological Library. In each case, the solution involves showing students how to navigate course information in my.harvard.

- I am looking for something on reserve, but HOLLIS gives me a call number in the stacks and the book is checked out to someone. I wish there were an easier way to find what my professor put on reserve.
- Can you help me find a reading for my class? The professor said that Peter Brown's essay is online, but I don't know where to look.

- How do I find readings for class? I looked at the course page, but do not see the call number.
- How do I find an article cited in my syllabus? I don't see it in HOLLIS.

In combination with Map It and Shelf Life, Course Reserves Unleashed! may also answer questions like

- I would like to check out a book on reserve (asked while standing at an incorrect service point)
- I came to find a book on reserve, but don't see it on the shelf (student does not distinguish between "reference" and "reserve" service points)
- When was Robert Putnam's Bowling Alone (2000) first put on reserve for a Harvard class?

# The Project:

We propose a project to create a mechanism that will streamline student access to course reserves. **Course Reserves Unleashed!** will enable libraries to take the reserves data managed by LTS and present that data on library websites or School websites, such as the Drupal-based Andover-Harvard Theological Library Students who wish to study a reserved text closely, for more than 3 hours at a time, may prefer to find alternative copies in the circulating stacks, at area libraries, or via Borrow Direct. To facilitate access to other available copies, **Course Reserves Unleashed!** will provide seamless connections to WorldCat and Borrow Direct.

If we can take advantage of the Library Cloud for data storage as part of a pilot, we could develop an enhanced personalization experience for the student, allowing them to combine all their course reserves, with the potential for checking off those reserves they have either finished with, or have no need to pursue.

In his comment on this project during the Library Lab proposal comment period, David Weinberger wrote,"This data would be really useful. And a valuable addition to Interoperable Harvard!" In conversation with him, he expressed enthusiasm for integrating the API for **Course Reserves Unleashed!** with on-going Stack Life enhancements, making both applications even more valuable.

### **Technology:**

Underlying the ultimate delivery of the service would be a new RESTful, read-only API to LTS's Reserves Tool. Used in conjunction with other RESTful API's already in place (LTS's PRESTO service, WorldCat's and Borrow Direct 's APIs, possibly others (PUBMED Central?), we propose to develop a pattern that can be used in a Drupal module, or as a JQuery plugin or widget.

## **Hours:**

- Technical research and development (Bobbi/HUIT)
  - Designing and implementing the new base RESTful API: 40 hours over 4 weeks
  - Enhancing the base API with WorldCat integration: 10 hours
  - Enhancing the API by offering a direct link to Borrow Direct: 6 hours. *Note: requires informational help from HUIT LTS's Library Systems Group*
  - Creating a Drupal module: unknown. May require a time commitment of several hours from the HUIT Administrative Web Services.

- Intellectual property research, testing, and publicity (Gloria): 2-3 hours per week for the duration of the project. Testing will be most effective if we have a beta version (or at least wireframes) to test with students during the Spring semester.
- Adding the new API to the Andover-Harvard Theological Library website
  - 10 hours at HUIT's AWS to modify the design of the homepage and integrate the API

## **Funding:**

We request funding to cover an estimate of 40 – 56 hours for technical research and development.

We request funds to cover approximately 10 hours of HUIT AWS time to modify the Andover-Harvard Theological Library homepage.

We also request a budget of \$500 for usability testing at multiple stages of the project, from wireframes to first release. The funds would be used on publicity and incentives to encourage student participation.

The total estimated cost of the project: \$5770

## Stages:

## Stage 1 -- Research

- Intellectual property issues: is the list of readings by itself IP? If so, what is the scope we need to limit access?
- Open Source issues: Reserves Tool **could** be open source, but it's very complicated and not a good candidate for releasing to the world without significant work.
- Data requirements for Next Generation I-sites?
- Identify partner libraries (Gutman, Design, Countway?)

### Stage 2 -- Develop

- Design the course reserves RESTful API
- Negotiate a development and release plan with LTS for the course reserves RESTful API
- Negotiate with the Library Cloud team for data storage usage; bone up on any new technologies that requires

### Stage 3- Test

 Test with students and amend as needed. We will use focus groups and other means of gathering live feedback from students. The development process will be "agile", seeking student feedback on both prototypes and a beta version. Success will ultimately be proven by fewer student inquiries about reserves in the 2013 fall semester than in previous years. The Andover-Harvard Theological Library has more than 7 years of reference statistics for comparison.

### Stage 4 - Launch

- Develop API in time for implementation no later than September 3, 2013 (the first day of the fall semester)
- Publicize the tool to new and returning students