Website Usability Testing with Custom Tools in a Community College Environment

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BACKGROUND

- How to modify the library's webpage according to users needs?
- What type of information is needed to support updates?
- Why this is not a systematic effort?
- Challenges:
  - Librarians have to step up and lead this effort
  - Funding is needed

Definition

- Usability Test is a way to evaluate a service with your target-market customers. Focusing on user experience (UX) testing: measuring library users' (faculty and students) interactions with the library webpage.
- Usability testing involves actual target users and matches real-world experiences (Prototypes).

Process

- Requested a PSC-CUNY Grant and it was approved on September 2016.
- Redistributed the funds according to a plan and establish an incentive to recruit participants.
- Training course for investigators involved in Social/Behavioral Research with human subjects
- An exemption granted by the University Integrated Institutional Review Board during Fall/2016. Two reasons:
  - To be able to work with Faculty and students
  - To be able to publish our results

Process (cont.)

- It is an iterative approach in which the prototypes are redesigned constantly.
- A decision made to move all our webpages to CMS-LibGuides
- Establishing the different recruitment approaches.

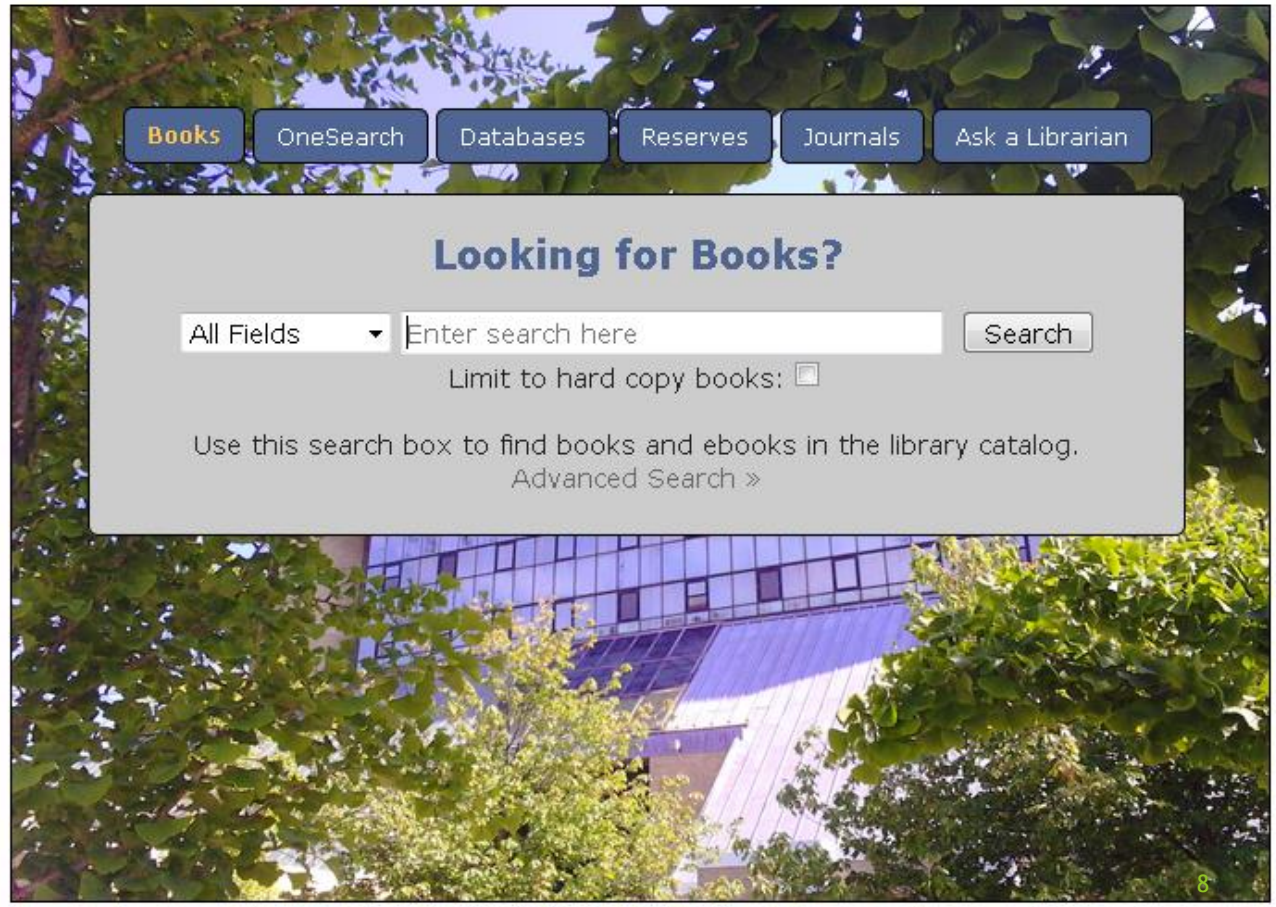
Setting up the tasks

- Review our website
- Made a list of the different library services and collections available
- Listed the main areas we wanted to test
- Elaborated the questions base on the prototypes designed

Data gathering at scale

- Sample size: 225 students
- Automate the testing
- We put a lot of effort into building our own tools

CUNY+ Catalog
A-Z list of Databases
Periodicals at KCC
Ebooks/Textbooks
Other Catalogs
EReserves
Academic Works @ KBCC
Information Literacy/ Library Instruction
Interlibrary Loan
Service Request Forms
Tutorials & Guides
Ask a Librarian
Library Services
Media Services
About Us
Calendar/Hours
Faculty / Staff



LibGuides CMS

Pros

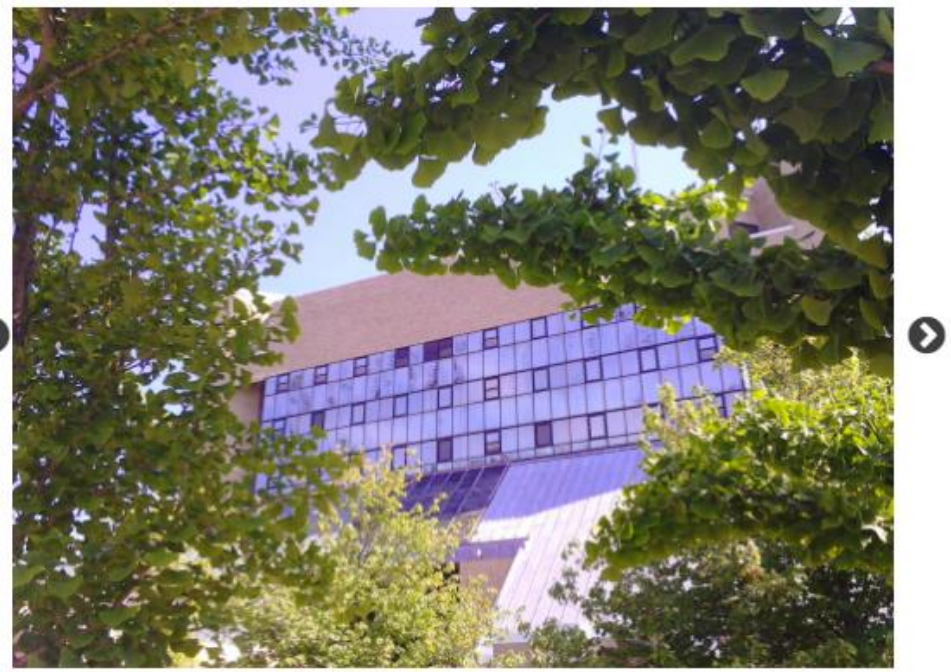
- Groups
- Group-level JavaScript and CSS
- Ease of building prototypes

Cons

- After a while, all LibGuides start to look the same

Kingsborough Community College Library (16): Home

Robert J. Kibbee Library



Looking for articles, books, ebooks, DVDs, and more?

OneSearch

Enter search here | Search

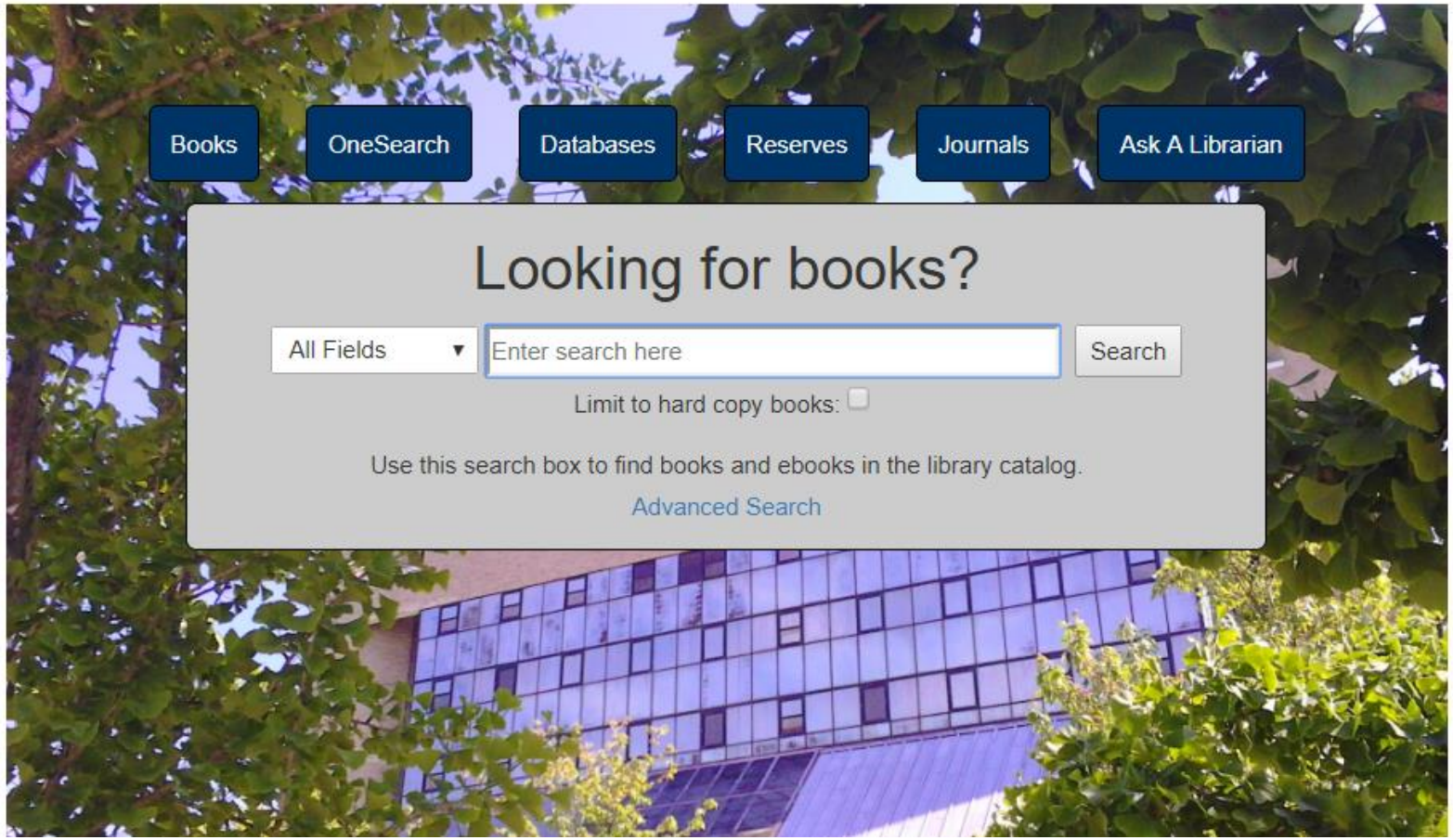
- Search across many (but not all) library resources for articles, books, ebooks, DVDs, and other materials, on one convenient platform.
- To see the most possible results, log in with your Kingsborough ID barcode.

Find it!

Find books | Find articles | Find databases

Kingsborough Community College Library (17)

Home
OneSearch
CUNY+ Catalog
A-Z list of databases
Periodicals at KCC
Ebooks/Textbooks
Other Catalogs
EReserves
AcademicWorks
Information Literacy / Library Instruction
Interlibrary Loan
Service Request Forms



Kingsborough Community College Library (14): Home

Databases

A-Z list of databases

Looking for books?

CUNY+ Catalog

Use this search box to find books and ebooks in the library catalog.

All Fields ▾ Enter search here Search

Limit to hard copy books:

Looking for articles, books, ebooks, DVDs, and more?

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Enter search here Search

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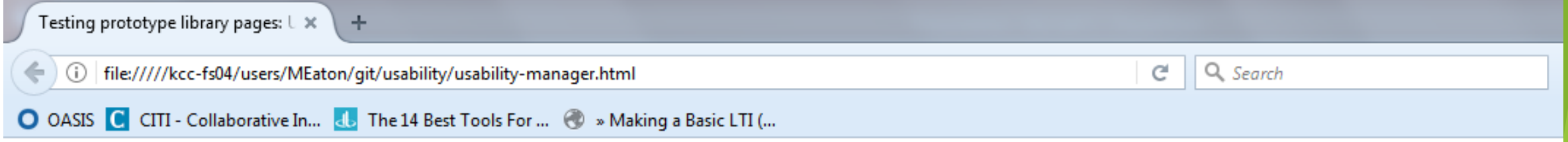

Welcome to our usability test!

- Click on the buttons below to try the activities.
- In the left-hand window, you will be given instructions to complete your task.
- In the right-hand window you can attempt to complete your activity.
- Stop when you reach the page that says "Activity Completed", or when you feel that you have completed the task.
- Close the exercise window to move on to the next exercise.

Activity #1	Try it now!
Activity #2	Try it now!
Activity #3	Try it now!
Activity #4	Try it now!
Activity #5	Try it now!

Testing prototype library pages:

Mozi...

about:blank

Activity #3

Check to see if the book **The Goldfinch** is available to borrow for a four week period.

Home - Kingsborough Community College Library (11) - LibGuides at Kingsborough Community College - Mozilla Firefox

kbcc.cuny.libguides.com/prototype11

Webmail | IT Helpdesk | Directory: Name | Directory: Dept. | Directions | Library | Access-Ability Services

KINGSBOROUGH COMMUNITY COLLEGE

★ DREAMS BEGIN HERE ★

Library / LibGuides / PSC CUNY Grant (2) / Kingsborough Community College Library (11) / Home

Kingsborough Community College Library (11): Home

Home | Find It! | More Resources | Services | Tutorials and Guides | About Us

Looking for books?

CUNY+ Catalog

Use this search box to find books and ebooks in the library catalog.

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Robert J. Kibbee Library

More Information

About the Library

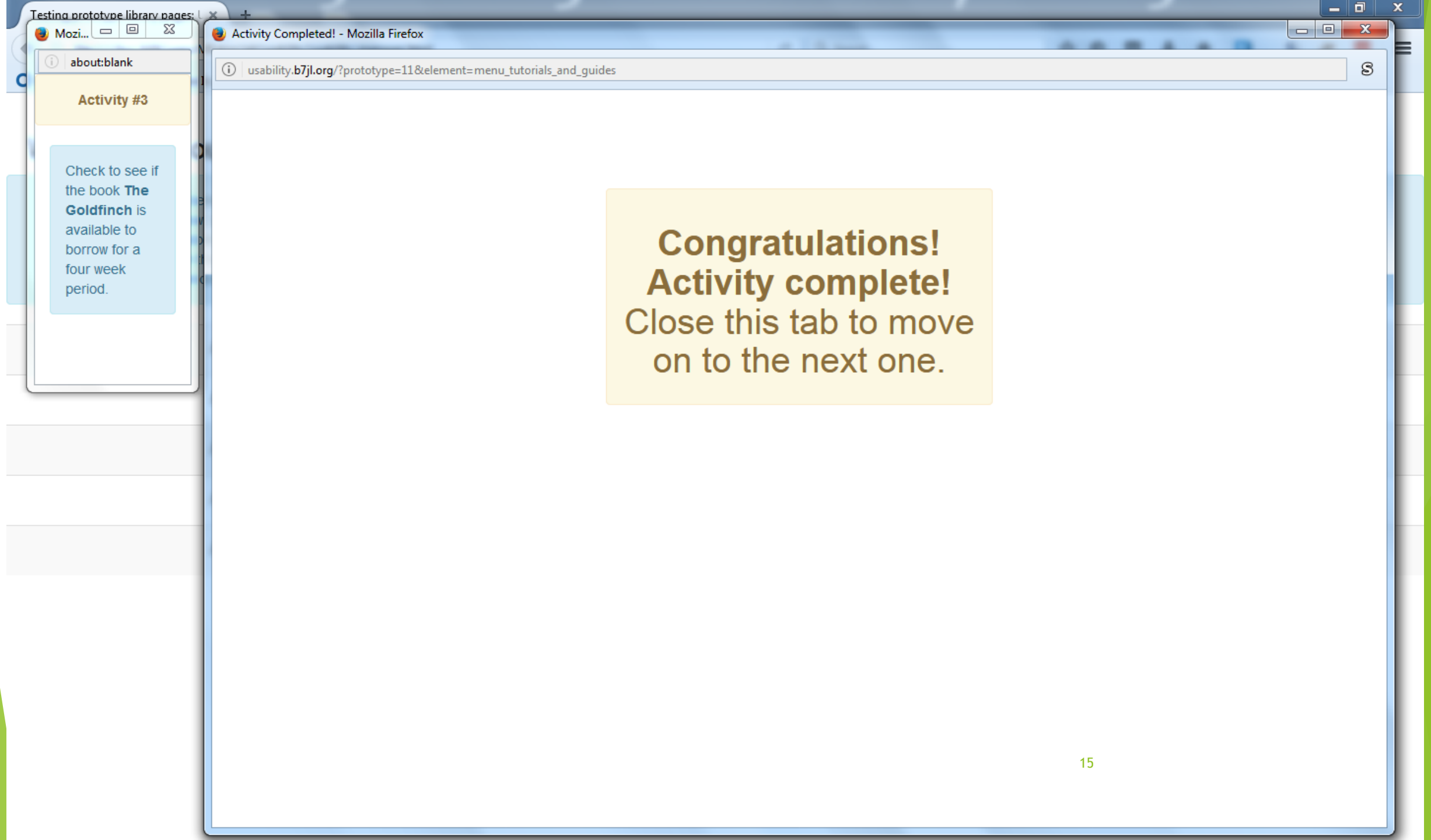
- Hours
- Ask a Librarian
- Directory
- About

The Library on social media

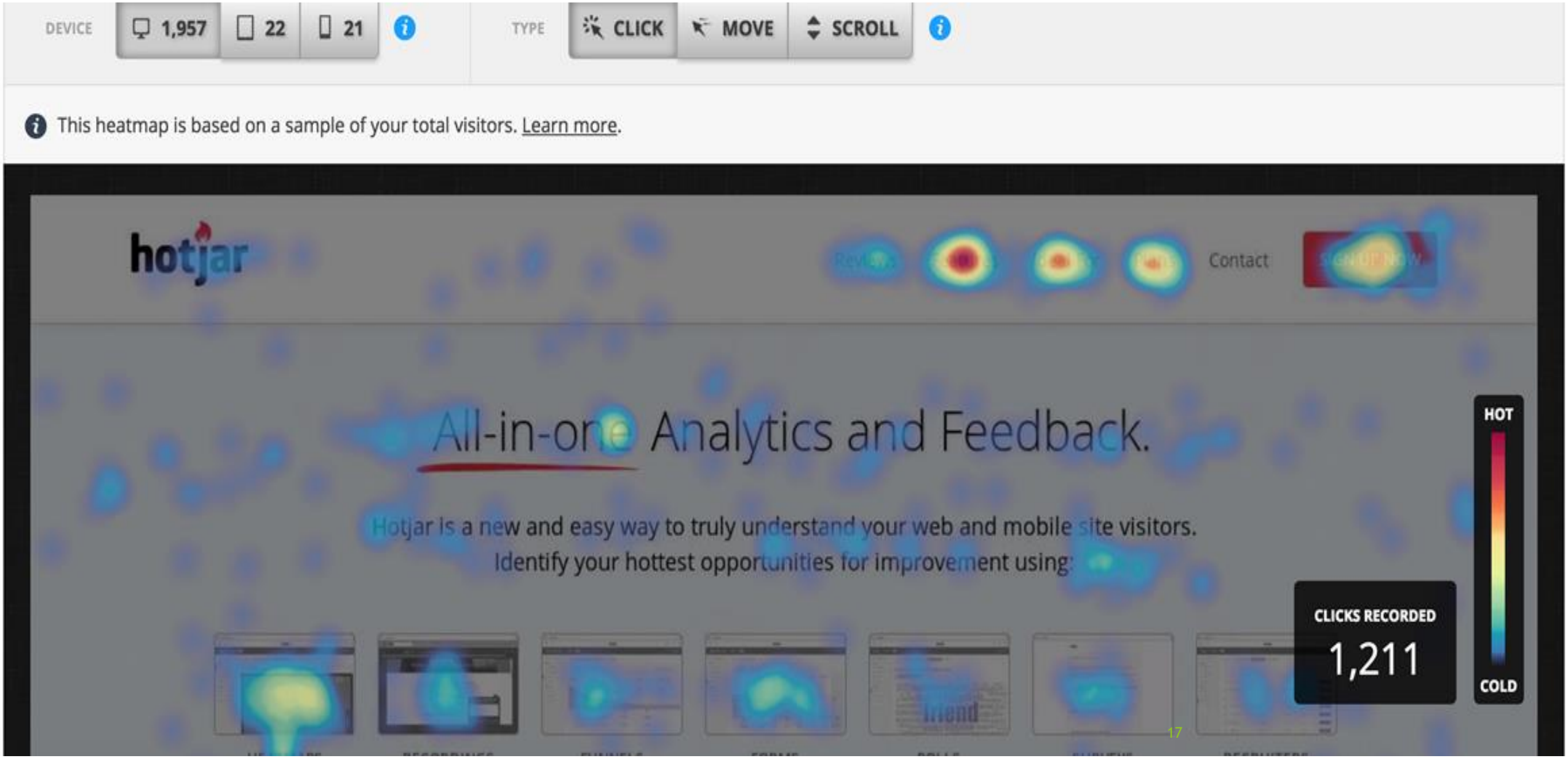
- Twitter
- Goodreads

Scripts Partially Allowed, 3/4 (gitcdn.xyz, jsdelivr.net, libguides.com) | <SCRIPT>: 12 | <OBJECT>: 0

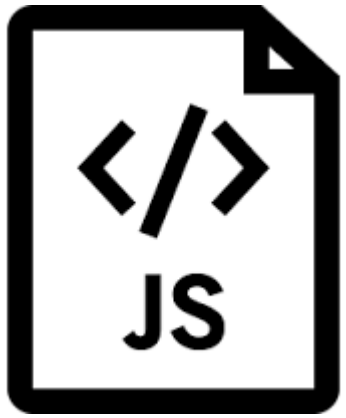
Options...


Testing prototype library pages:
Mozi...
about:blank
Activity #3
Check to see if the book **The Goldfinch** is available to borrow for a four week period.
Activity Completed! - Mozilla Firefox
usability.b7jl.org/?prototype=11&element=menu_tutorials_and_guides
Congratulations!
Activity complete!
Close this tab to move on to the next one.

hotjar


DEVICE
1,957
22
21
TYPE
CLICK
MOVE
SCROLL
This heatmap is based on a sample of your total visitors. Learn more.
hotjar
Contact
All-in-one Analytics and Feedback.
Hotjar is a new and easy way to truly understand your web and mobile site visitors.
Identify your hottest opportunities for improvement using:
CLICKS RECORDED
1,211
HOT
COLD

- http://kbcc.cuny.libguides.com/prototype1?cohort=2
- http://kbcc.cuny.libguides.com/prototype1?cohort=3
- http://kbcc.cuny.libguides.com/prototype1?cohort=4

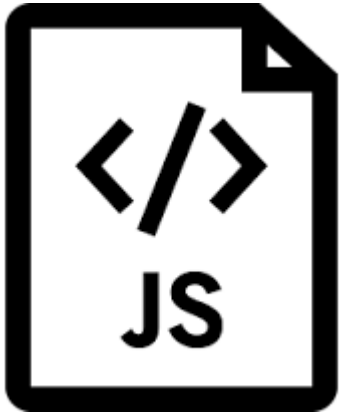


hotjar

Fail!

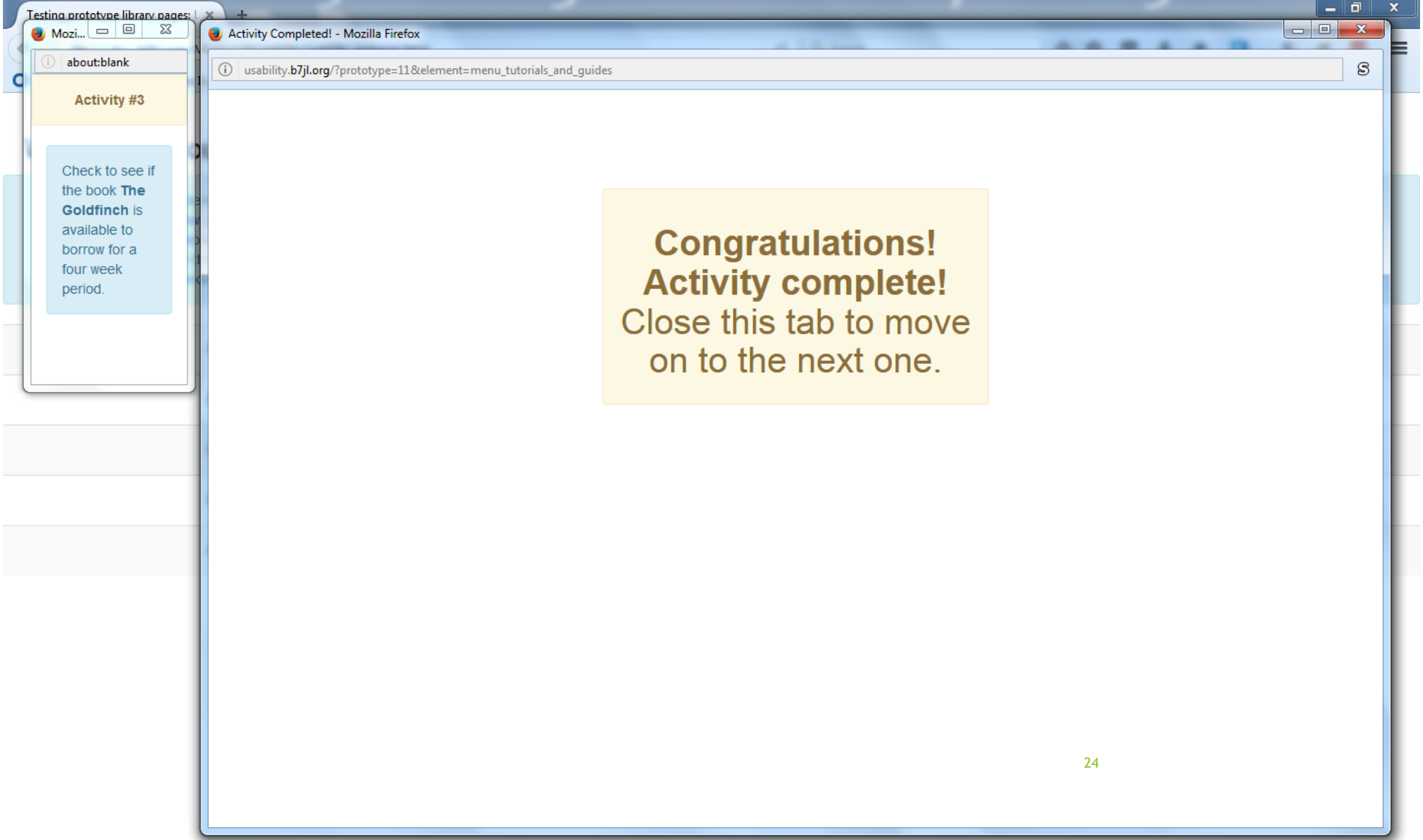
What we learned

- Test more rigorously
- Keep it simple
- Rely less on others' code


JS

hotjar

How will we track the data now?


Testing prototype library pages:
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about:blank
Activity #3
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Activity Completed! - Mozilla Firefox
usability.b7jl.org/?prototype=11&element=menu_tutorials_and_guides
Congratulations!
Activity complete!
Close this tab to move on to the next one.

- http://usability.b7jl.org/?prototype=9&element=menu_periodicals
- http://usability.b7jl.org/?prototype=10&element=widget_catalog
- http://usability.b7jl.org/?prototype=12&element=box_calendar_hours

Flask

web development,
one drop at a time

pythonanywhere

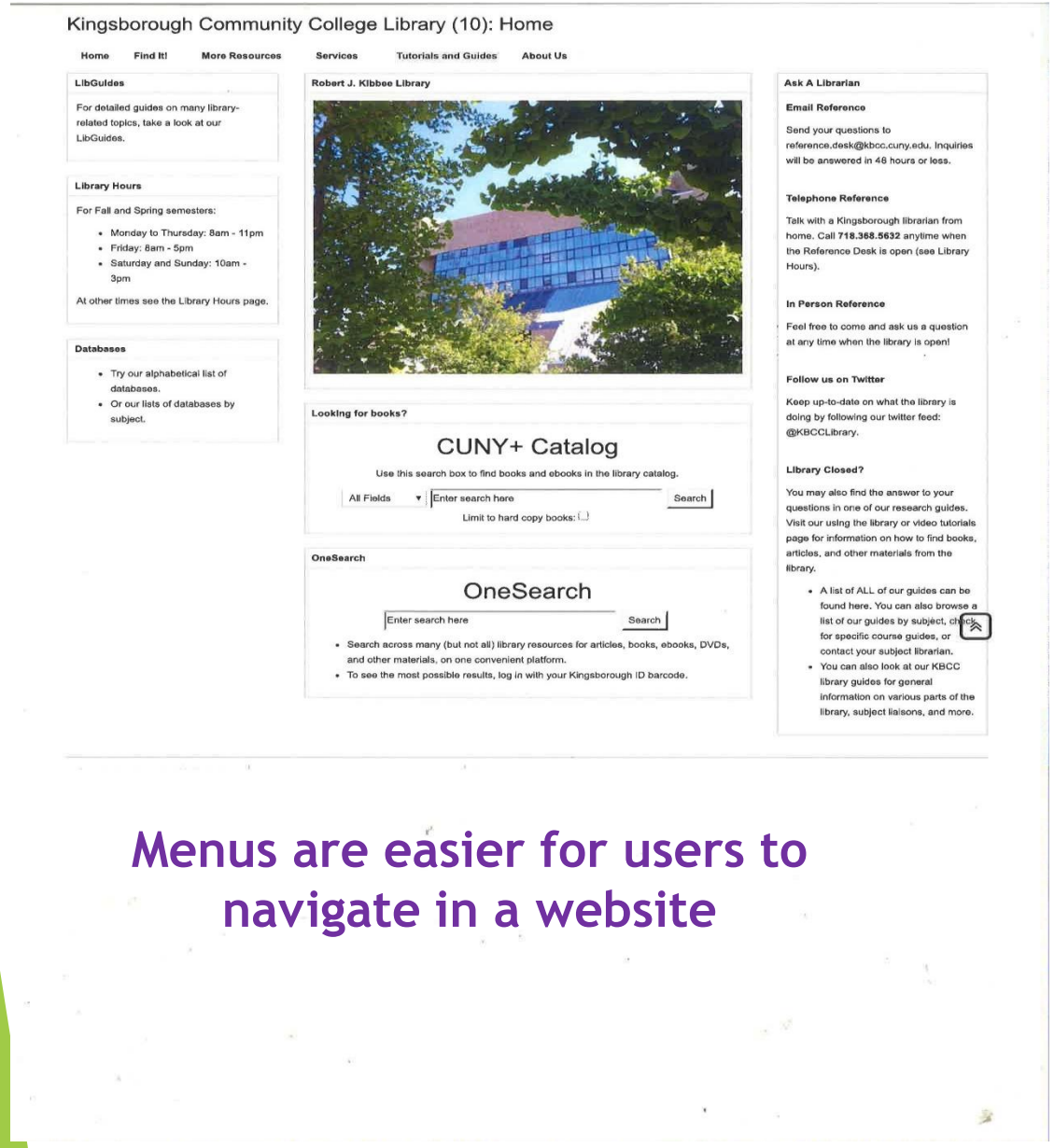
- API?
- Web application?
- Microservice!

- Data quality
- Reliability
- Hotjar visuals

$12

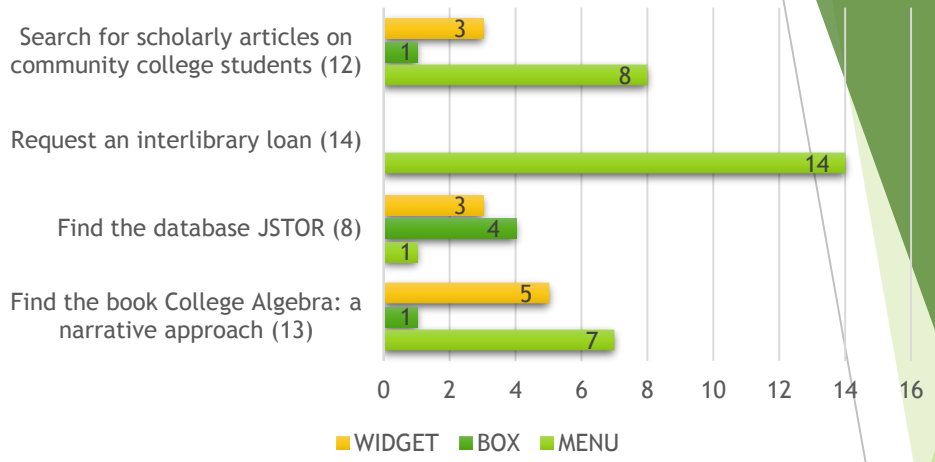
- Existing approaches and tools did not meet our needs
- We built our own tools to fill the gap

github.com/MarkEEaton/usability-python
github.com/MarkEEaton/usability-testing-interface

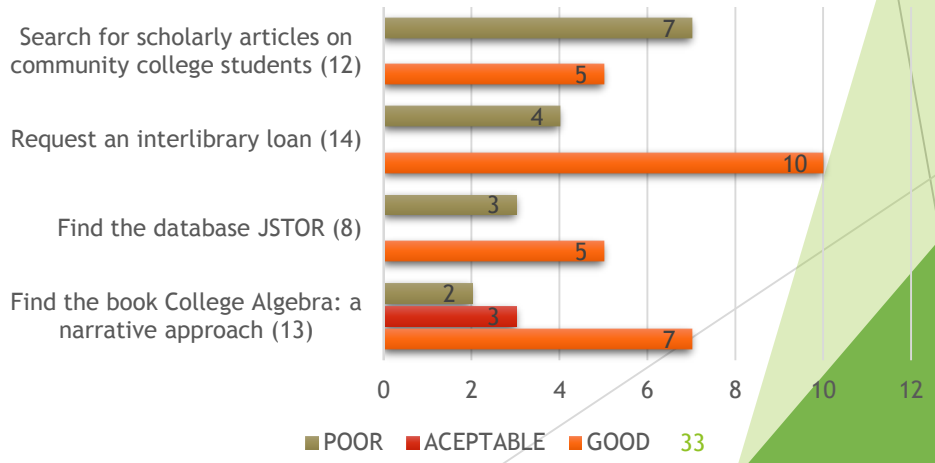


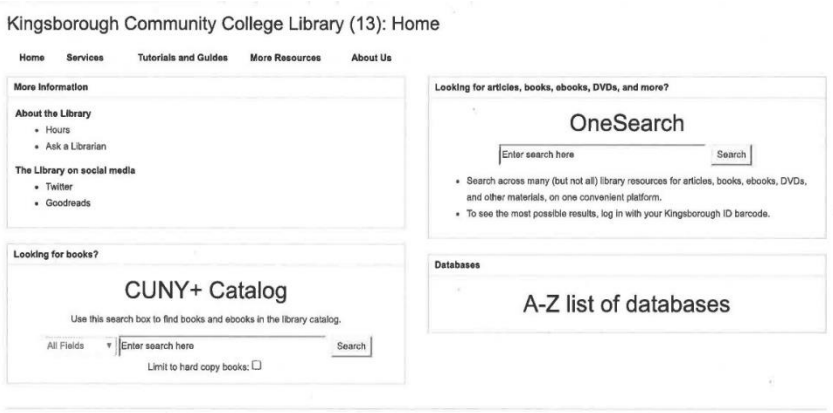
Menus are easier for users to navigate in a website

PROTOYPE No. 10 – User Strategy

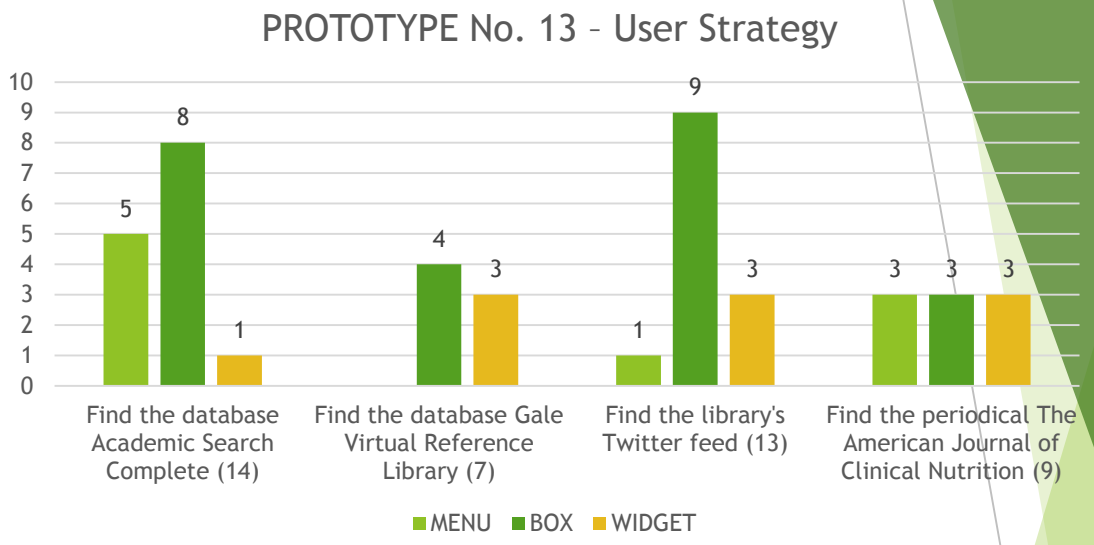


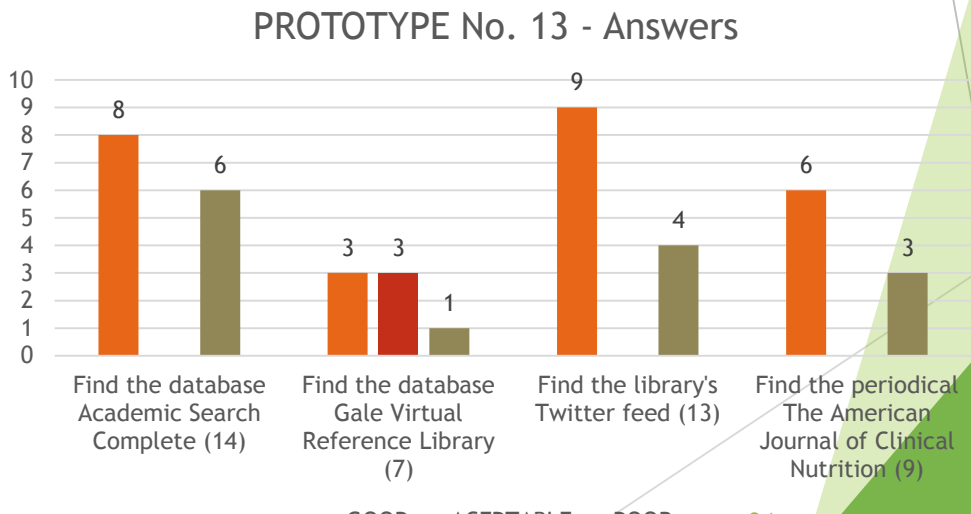
PROTOYPE No. 10 - Answers

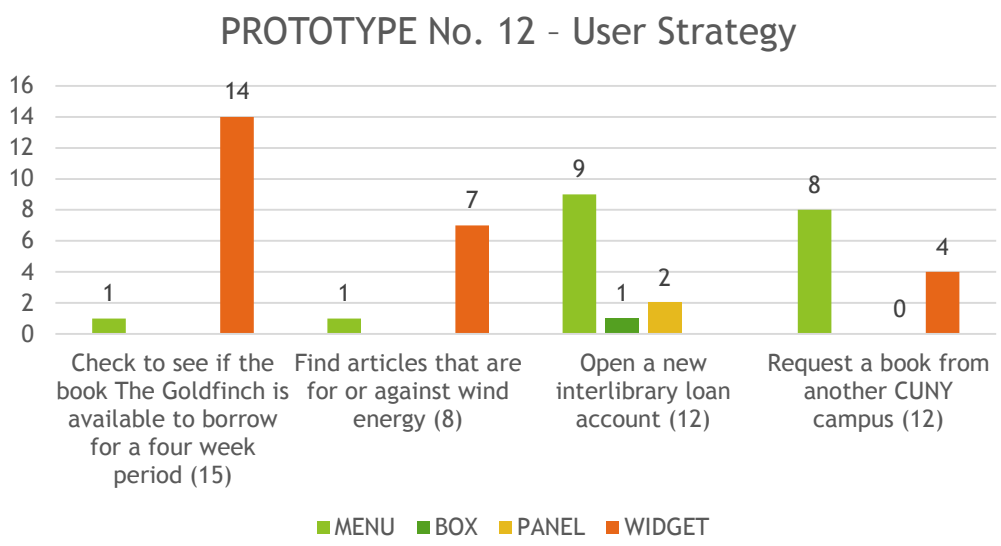


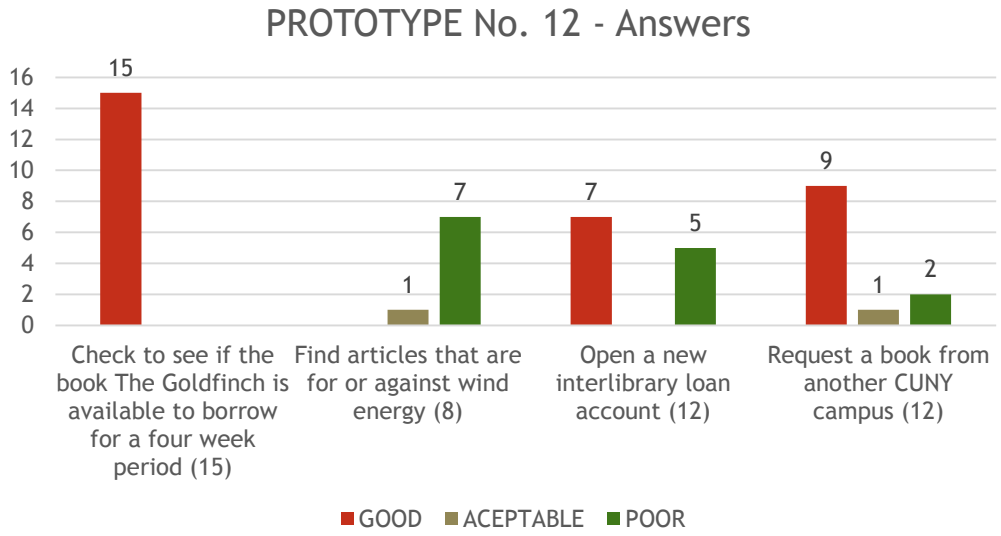


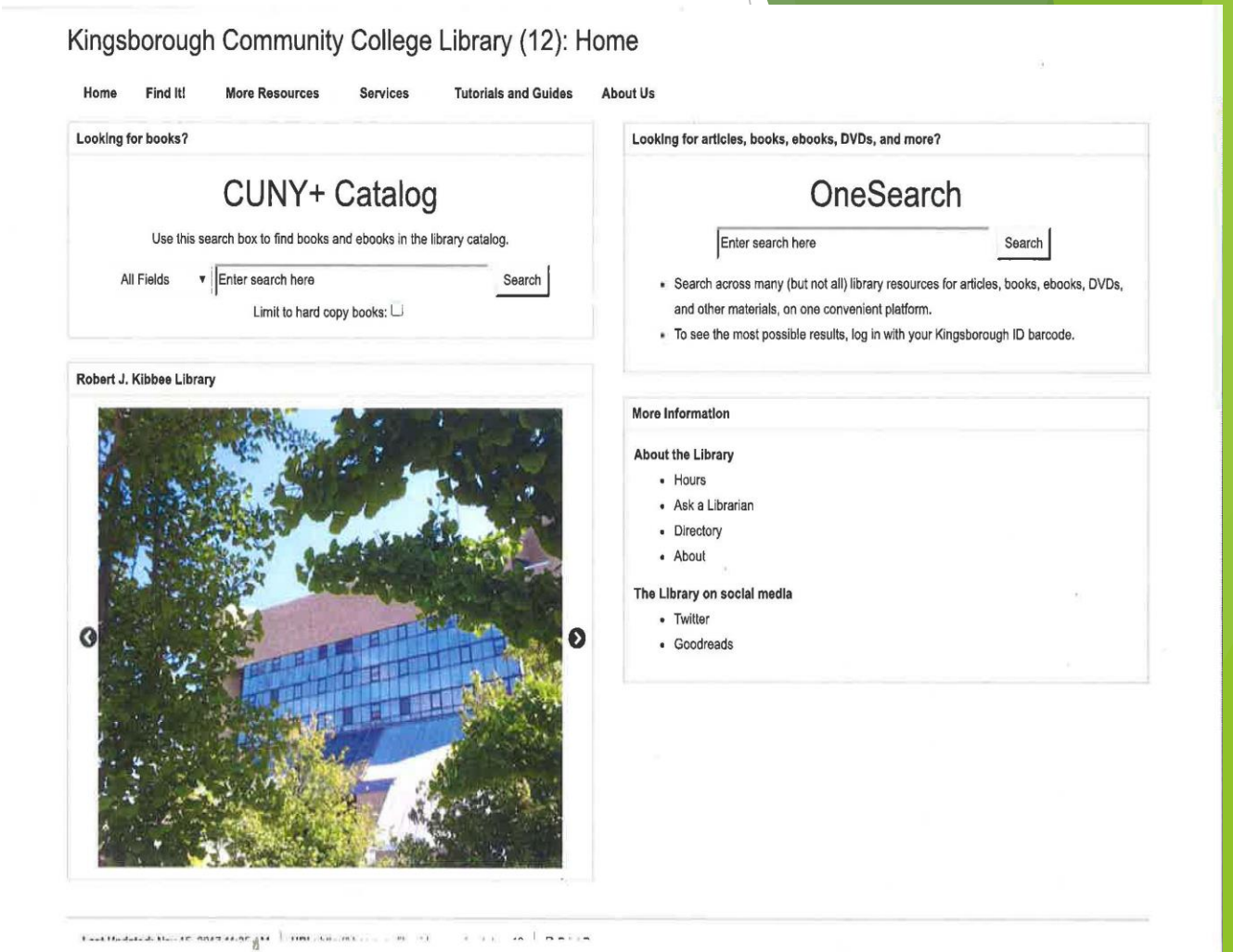
Users have a tendency to prefer the use of box type when given the option











Widgets are an important point of access to information resources

Conclusions

- Usability testing should be an institutionalized and ongoing process.
- Testing is a basic support for website design
- Trouble finding tools for UX that meet our needs
- Difficulty communicating with IT Department and selling the idea.
- Time consuming process.

THANK YOU

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