Background Information:

Smartphones and Mobile Library Applications

- The number of smartphone users in the world is estimated to be over 1 billion (Strategy Analytics, 2012).
- At one university studied in 2011, researchers found 67% of students used a smartphone, a number that was steadily increasing (Paterson, 2011).
- In that same study, 60% of students responded that the ability to search the library catalogue would be useful for a mobile device.
- After creating a mobile application that mapped library call numbers, one academic library had a 20% reduction in patron inquiries related to finding a book in the stacks (Bauer, 2012).
- In another study, subjects were presented with two searches: one where they selected facets before searching and the other where the results were ranked. Subjects responded that they felt the faceted search was easier to use and more efficient (Heimonen, 2008).

Article Search: Behind the Scenes

- Summon has a lot of powerful search tools, but how to fit them on a small screen?
  - Solution: collapsible blocks to save screen space. Prompt users to pick subject filters right away so that the first results are more relevant.
- Many databases: many formats for article display. Not all are mobile-friendly.
  - Solution: exclude problem databases LexisNexis and ProQuest Dissertations and Theses.
- Android can’t display embedded PDFs. ProQuest’s PDFs are all embedded.
  - Solution: None found.
- Many types of mobile device: different operating systems, different versions, different screen sizes and layouts.
  - Solution: Phonegap, a platform that allows you to write apps in Javascript and HTML, and release for multiple platforms: both Android and iOS. However, an Apple developer’s license is expensive, so we’re concentrating on Android for now.

Challenges

- The feature that would be of the most use to patrons of the library would be a Location Map, showing where in the stacks a resource can be found.
- Sending citations directly to RefWorks doesn’t look like it will be possible, however we have already created a Citation Manager that saves the citation information that has been selected, and sends it via email to the user.
- More research on what other library mobile apps have done with social networking might help design the features of our app.

Conclusions and Future Enhancements

- Based on user response, the feature that would be of the most use to patrons of the library would be a Location Map, showing where in the stacks a resource can be found.
- Sending citations directly to RefWorks doesn’t look like it will be possible, however we have already created a Citation Manager that saves the citation information that has been selected, and sends it via email to the user.
- We are working on adding more settings options to the app, to allow users to change the number of facets, turn citation saving on and off, and change the preferences for PDF downloading among other options.
- Users indicated that they would use advanced search options if they were available, so this is a feature we’d like to add. More study may be needed to determine what to call the advanced options, and how to present them on a mobile interface.

References


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