It sounds like our situations have some overlap but significant differences, so I’ll try to keep my advice as relevant to yours as possible. We’re in the middle of testing and revising our app, so most of my experience has been in the early stages. For background- I was an intern in the spring, and a grad student assistant this summer, and the plan is to release an app for the fall term. This is (we know now) an extremely ambitious deadline for a very small team with some limitations re: available technology. I’ve been acting as designer and developer; there are several librarians, IT staff, and students who have been involved at various points in the process.

The first things to consider:

1. *Exactly what do your users want from an app?* Catalog searches? Access to e-materials? All of the databases or just one or two? Reference? Contact with librarians or library staff? The more specific you can be with this, the easier it will be for you (or your IT team) to determine the best course of action with regard to technology. Depending on the scope and timeline of the project, you might be able to fit several features into the app for the first round, but in my experience it’s better to make the most crucial feature work really well and then add features in later rounds.
2. *What devices and platforms are your users using?* iOS, Android, Windows Phone? There are several other platforms that are much less common, but if you have a particular user group that is dedicated to their Blackberries, you might need to develop for that, too. Each platform has it’s own native development tools, but there are options that allow you to build apps like you build websites; what will work best really depends on what your needs and limitations are. My app was originally supposed to be for iOS. Once we got started, it was clear that Android far more popular among our users… but the library loaning devices are iPads. We went with Phonegap development, which allowed us to build an app using web languages. There are pros and cons to this approach, but it was the one that suited us.
3. *What are your limitations for the app?* There are several categories of things you’ll need to determine. Some of them IT may be able to help you with.  
    Timeline and budget are big ones, of course. We have an excellent mobile site, which has been great because we don’t need to recreate those features for the app. It’s also limiting, because the design and functionality of the mobile site restrict some of our design options for the app, and because other teams need to be involved in order to implement particular features.  
    Other limitations involve your licensing agreements and whether your libraries have access to APIs for mobile development. (Mine did not, and I suspect most won’t, unless you’ve paid for it.) What kind of access you’ll need depends on the app you decide to build, but it’s a good idea to know what you’re working with while you’re planning.  
    Ongoing maintenance and support – depending on the app features you plan to use, again, what happens when the app needs updating or upgrading? Whose responsibility is that? How often can you reasonably expect to release fixes and updates?
4. *Who is responsible for the information architecture and the software architecture?* Those need to match; whoever is handling content and design and the tech have to be able to talk to one another, and future updates will be much easier if the content naming conventions match the code comments and labels.

Resources:

I made a libguide for beginner iOS development when we started the project: <http://libraryschool.libguidescms.com/aecontent.php?pid=545834&sid=4907327> The Additional Resources tab has some library app examples that I found helpful in the planning stage.

I have found Stack Overflow (forum), A List Apart (webzine), and Smashing Magazine (webzine) to be extremely useful when designing and developing the app. Once you’ve determined what approach makes sense for your app, I recommend taking a look through their archives to see if they’ve made any particular recommendations or warnings regarding the tools you’re using. (I discovered, thanks to a reply on a Stack Overflow post, that Phonegap apps using jQuery mobile can’t work with underscores in file names once they are moved to Android devices. I would not have figured this out on my own in a million years.)