So you are thinking about apps?

{ Using MIT's App Inventor to Make Apps for Library applications

Nancy A. Young MLIS Candidate (University of Western Ontario) Co-op Student (Memorial University of Newfoundland, Health Sciences Library) \aleph What is an App?

& Android vs iOS

& Introducing App Inventor

k The Designer

& The Blocks Builder

& Demo

Objectives

An application, typically a small, specialized program for a mobile device (dictionary.com)

- Mobile devices and mobile software are now everywhere and everyone wants to have their content available mobilely
- k Libraries are no different, but still lag behind many commercial enterprises due to our special challenges.

 - ø tight budgets
 - σ often, lack of in-house expertise





& Apple iOS

the most popular and the most expensive to get into - \$99/year to post to iTunes App Store.



& Google Android

 Rapidly gaining in popularity, \$25 per app to post to the Play store.



 k Kindle Fire (Amazon), Blackberry Playbook (RIM), Windows (Microsoft) are other popular alternative operating systems.

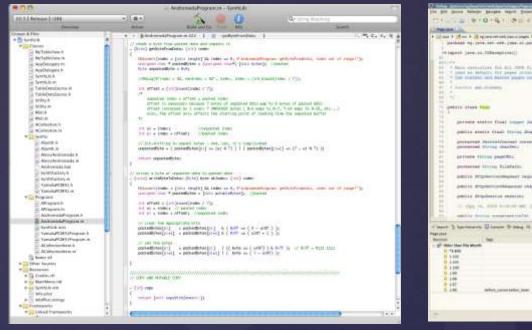


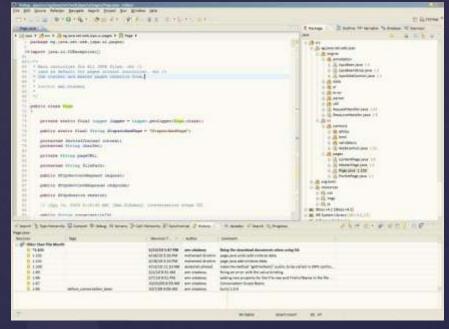
k IDEs are one of the main tools used to develop software

ℵ Normally they consist of a source code editor, build automation tools and a debugger.

k However, you still need to know how to program to use most of them.

IDES (Integrated Development Environments)





rif http://a.fsdn.com/con/app/proj/eclipse.mirror/screenshots/Ec

xCode and Eclipse – 2 of the most common IDEs for app development (iOS and Android)

& An MIT-Google collaboration

App Inventor consists of 2 parts – the inbrowser Designer and the java program Blocks Editor.

App Inventor – An IDE that lets you program without knowing how

appinventor.mit.edu

The Designer allows you to decide what the app will look like and what components it will have.

MIT App Investor	My Projecta Design Learn (Det	ugging) Welcome to the App Inventor tetta retraine. The sure to check the list of <u>latown issues</u> and <u>release not</u>	ees Try the Ace Inventor Community, Gallery (Beta)	ning)put an 🚘
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Figure 1: App Inventor Designer showing the current project. Note the 5 sections, Palette, Viewer, Components, Media and Properties.

The Blocks Editor allows you to do the actual programming using a "Visual programming" interface (see figure 2). That is, each "block" is actually a section of code. Combining blocks creates code statements.

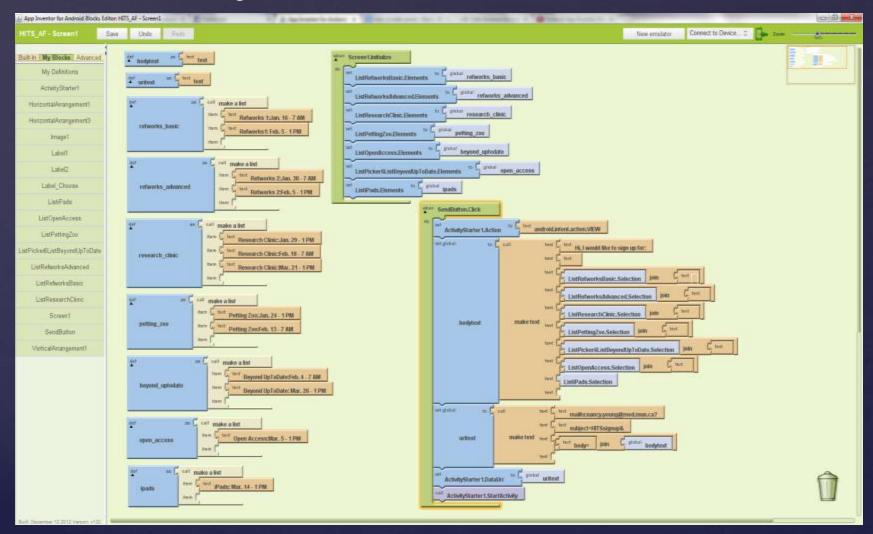


Figure 2: Blocks Editor "visual programming" interface.

- App Inventor is designed as a teaching tool and, as such, comes with a number of online tutorials to teach the basics of how to use the various components of the App Inventor Designer (and Blocks Editor).
- There are also a number of completed projects with accompanying explanations and source code available for free on the web.
- My app is based on such a project by Jason Tyler, who made a short <u>YouTube tutorial</u> on how to send pre-formatted emails through an app made with app inventor.

Teach Yourself



HITS App Screenshots

Make a sign-up app demo

- ℵ Apps are software little programs on little computers
- Mobile sites are cut-down websites in phone or tablet browsers
- Apps are best if you want content available offline or otherwise independent of the internet connection available to the mobile device.
- & Mobile sites are best in all other situations.
- & Currently the largest problem with mobile sites is that they are too large – they use up people's data plans too quickly.
- Hybrid web apps that have offline content but which seamlessly connect to web content are rising in popularity – and this seems like an excellent option for a library.

Apps vs Mobile Websites

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Questions?