

# So you are thinking about apps?

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

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- ⌘ What is an App?
- ⌘ Android vs iOS
- ⌘ Introducing App Inventor
- ⌘ 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
- ⌘ Libraries are no different, but still lag behind many commercial enterprises due to our special challenges.
  - ⌘ vast amount of content
  - ⌘ tight budgets
  - ⌘ often, lack of in-house expertise

# Apps



## & 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.

amazonkindle

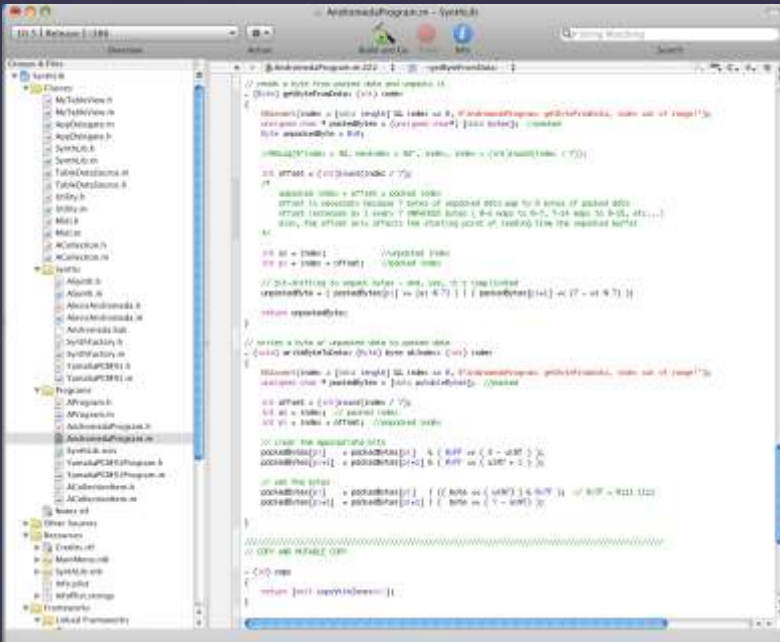


& Kindle Fire (Amazon), Blackberry Playbook (RIM), Windows (Microsoft) are other popular alternative operating systems.

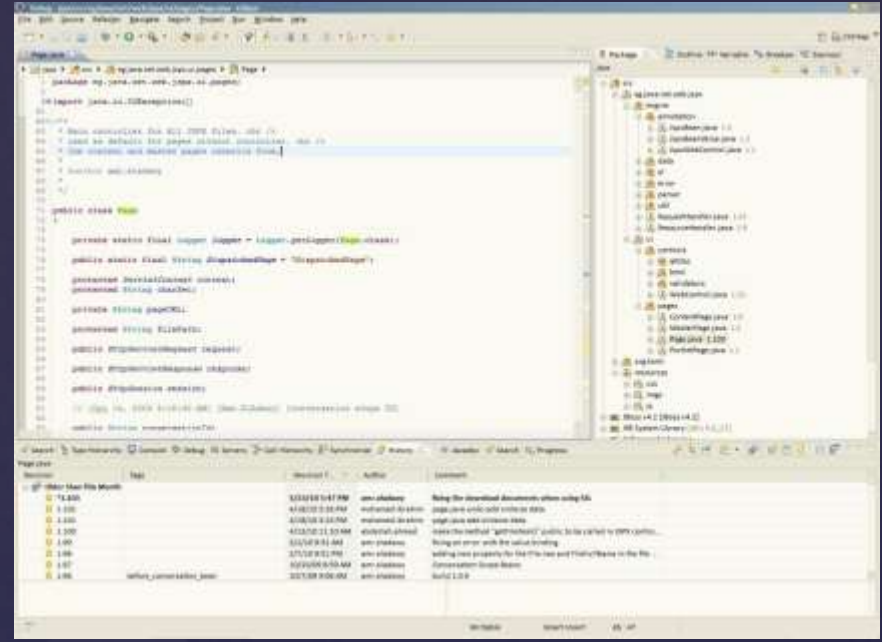
# Types

- ⌘ IDEs are one of the main tools used to develop software
- ⌘ Normally they consist of a source code editor, build automation tools and a debugger.
- ⌘ Therefore they are excellent ease-of-use tools or learning tools.
- ⌘ However, you still need to know how to program to use most of them.

IDEs (Integrated Development Environments)



<http://www.cantgetnosleep.com/images/screenshots/synth-lib-xcode1.jpg>



<http://a.fsdn.com/con/app/proj/eclipse.mirror/screenshots/Eclipse2.jpg>

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 in-browser Designer and the java program Blocks Editor.

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

[appinventor.mit.edu](http://appinventor.mit.edu)



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

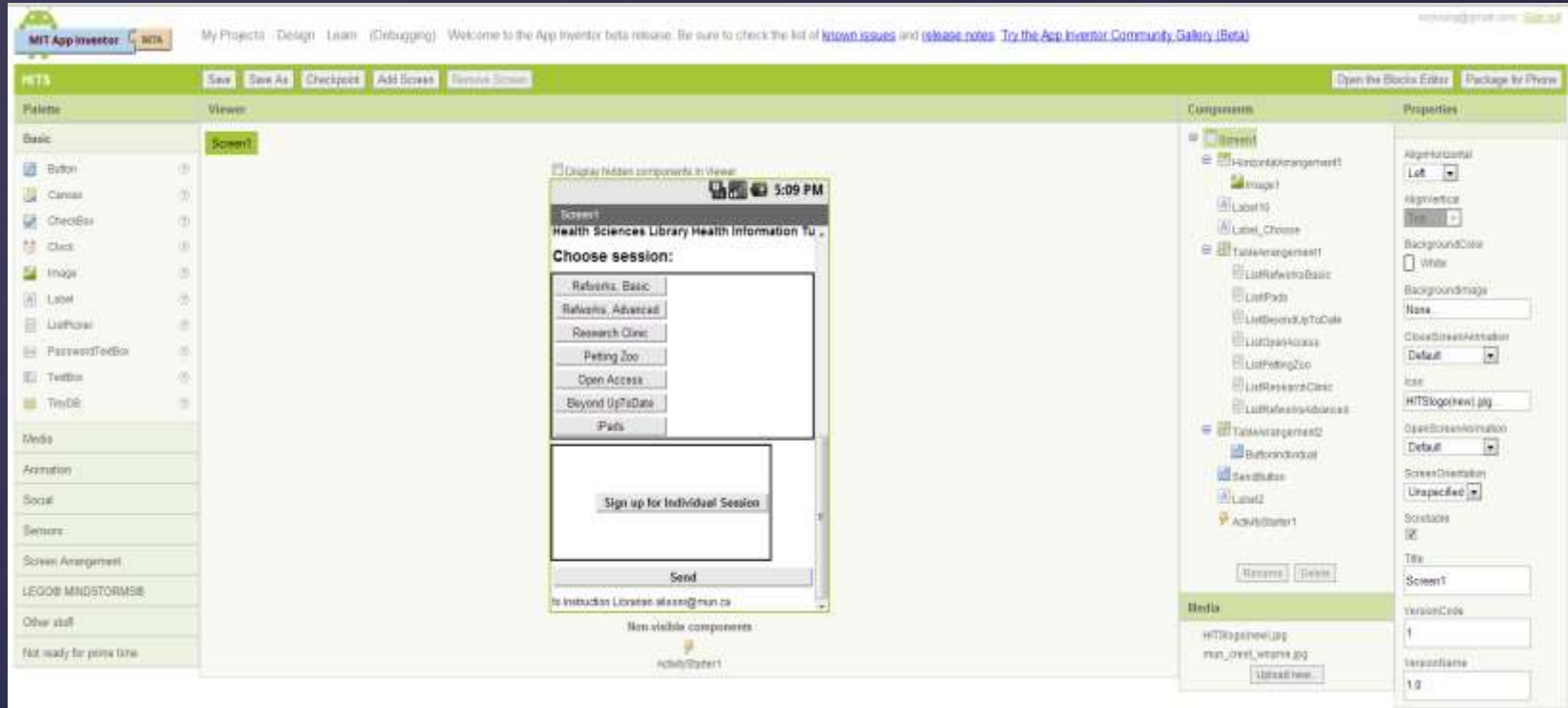


Figure 1: App Inventor Designer showing the current project. Note the 5 sections, Palette, Viewer, Components, Media and Properties.



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.

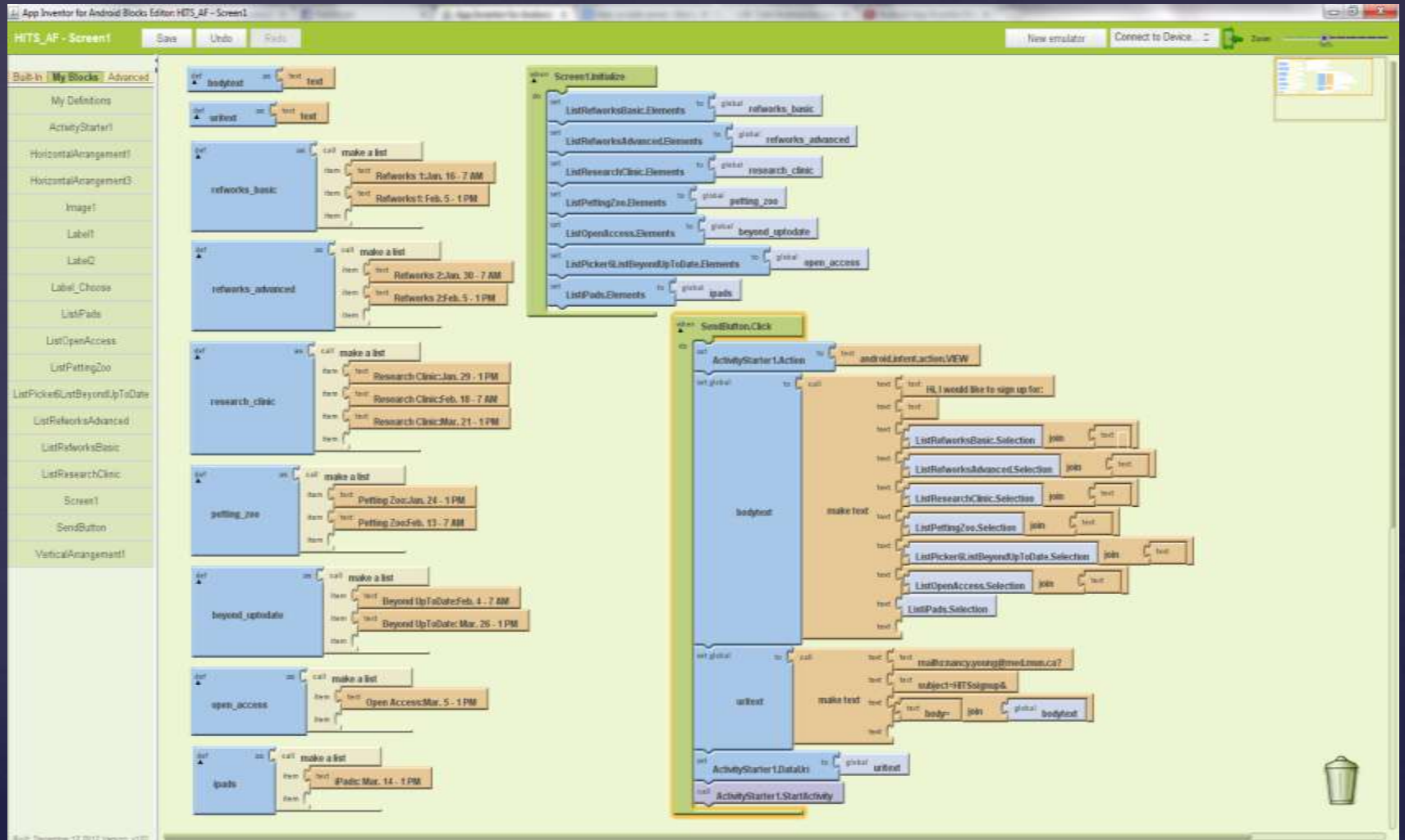
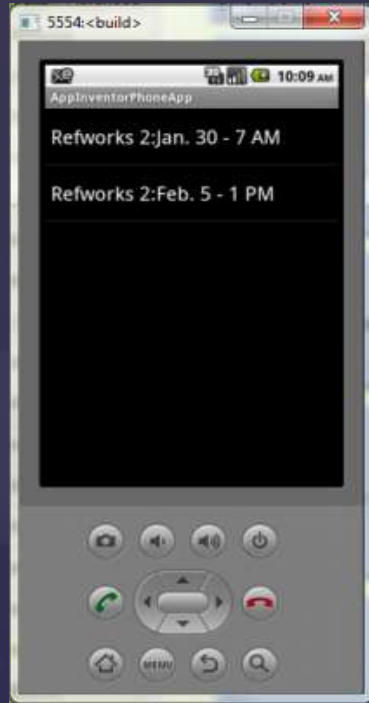


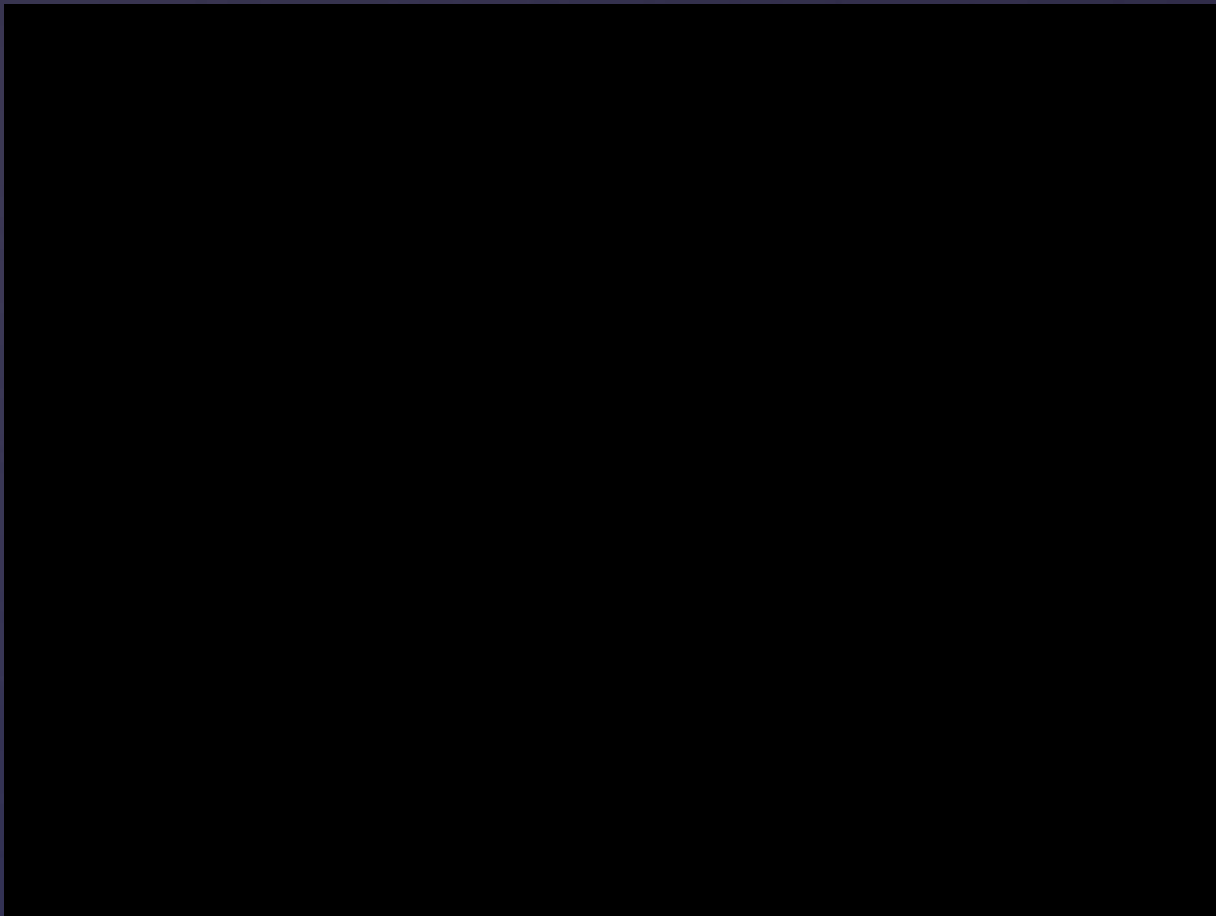
Figure 2: Blocks Editor “visual programming” interface.

- ⌘ 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 [YouTube tutorial](#) 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

- ⌘ 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

& Thanks to all of the staff and librarians at the Memorial University of Newfoundland Health Sciences Library – Especially Alison Farrell and Lindsay Glynn

Questions?