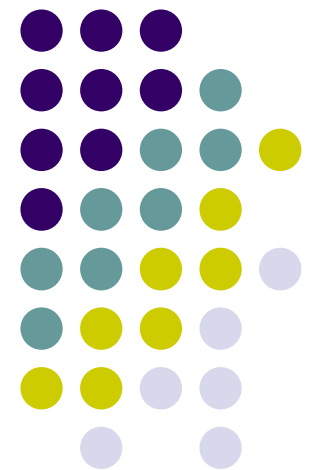


CS 525M Mobile and Ubiquitous Computing Building your Prototypes

Emmanuel Agu





Programming your Prototype

- 4 different levels of programming
- Best choice depends on:
 - How much access you need to device, sensors
 - Your programming background



Funf in a Box (funf.org)

- Fill form, specify sensors to log, intervals
 - App Generated
- **Good for:** just logging,
- **Con:** no UI



funfinabox

General (displayed in app)

App Name: _____

Contact (Email): _____

Description: _____

General (not displayed in app)

Your Name: _____

Your Email: _____

Organization Name: _____

Location: _____

Configuration

The following are the default data collection and configuration settings. They can be modified at `Dropbox\Funf In A Box\[Your App Name]\config\funf_config.json`.

Device

Android Info every _____ seconds

Battery Info every _____ seconds

Hardware Info every _____ seconds

Mobile Network Info every _____ seconds

Time Offset every _____ seconds

Device Interaction

Audio Files every _____ seconds

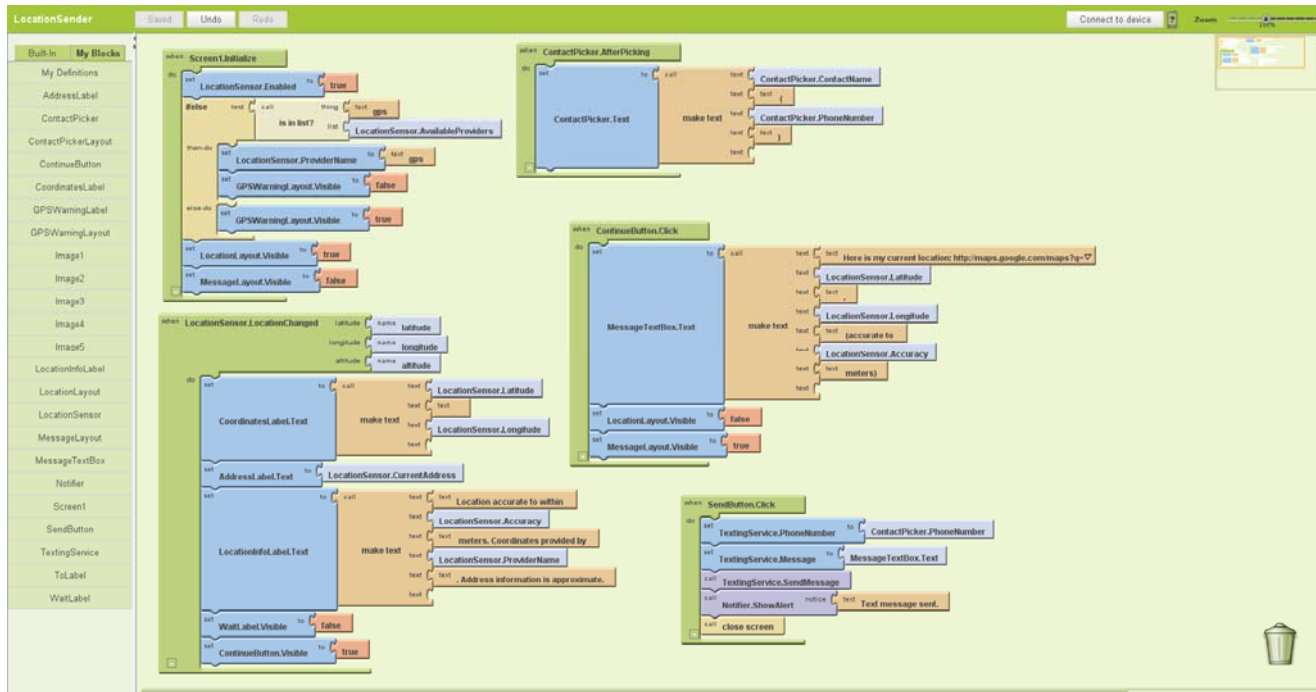
Browser Bookmarks every _____ seconds

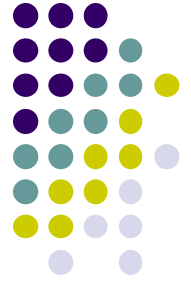
Funf In A Box: Android Application Set Up Form

AppInventor (<http://appinventor.mit.edu/>)



- MIT project, previously Google
- Use lego blocks to build app, easy to learn
- **Pro:** Quick UI development
- **Con:** sensor access, use third party modules restricted

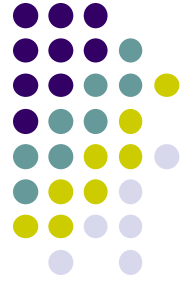




PhoneGap

- Develop Apps using HTML, javascript
- **Pro:** Access to most native APIs, sensors, UI
- **Con:** Need to know HTML, javascript





Android SDK

- Java-based, full access (phone, UI, sensors)
- **Pro:** Minimal restrictions, emulator available
- **Con:** Must know java well

