Objective-Droid

A compiler for Objective-C that produces Android apps

Motivation

- It is interesting
- Apple would be happy
- Google would be happy
- Devs would be happy
- Users would be happy

Details

- Issues
  - porting libraries
  - translating App idioms

- Thus concentrate on
  - backend
  - command line programs
  - being easy to build on

Implementation

- LLVM/clang
  - Obj-C to llvm code
- Obj-Droid
  - llvm code to smali code
- smali
  - assemble smali code to .dex
- apktool
  - package .dex to .apk

Evaluation

- Correctness:
  - desktop Obj-C program
- Performance:
  - mobile Java program

Timeline

October: .dex and LLVM knowledge

November: first attempts

December: improve

January: document and evaluate

February: improve more

March: write-up