

## 1 File Contents

Apart from this file, the contents of this repositories are:

**Extended Paper.pdf** Contains the extended contents for the paper

**files/simpleapp.apk** A simple test app which contains no method calling and exception handling in the program. This app is compiled using the option of no-optimize.

**files/apkreader.apk** A prototype of the proof of concept. This app can read other app's APK and then check it against the certificate. The checked app can not contain method calling and exception handling. The app must also compiled with the flag no-optimize.

**files/APKReader/** The source code for the prototype. Two main contents of this app are the component to parse another file's apk, and the type check it.

**files/dx\_ocaml/** The source code for the OCaml files to provide a certificate for an app given its classes source. This component will first parse the JVM class, do a naive JVM type inference, then translate the certificate.

**files/SimpleApp/** The source for the test app.

## 2 Instructions for Constructing Certificate

## 3 Instructions for Compilation

### 3.1 APK Reader

### 3.2 Test application

### 3.3 Certificate Translation

## 4 Instructions for Type Checking