a. Record

Developers/Tests

1. APP
2. getevent command
3. GUI events
4. getevent logs

Device

b. Mine

Data Collector

GUI tree

ADB

5. getevent logs

Events Clusterer

Input commands generator

6. Event-sequence

API Analyzer

dex2jar
Procyon
apktool

e. Generate

7. Tokens vocabulary (dynamic)

8. APP (APK file)

9. Tokens vocabulary (static)

9. Event-sequence

10. Vocabulary + Event-sequence

Sequences generator

11. Model

Model generator/extractor

12. Event-sequences

13. Executable/Feasible scenarios

Chimp

ADB

uiautomator

hierarchyview

r2lib.jar

14. Input commands

15. Executable/Feasible scenarios

Actionable scenarios

adb shell input tap 29 308
adb shell input tap 29 308
adb shell input tap 5 167
adb shell input tap 29 308
adb shell input tap 5 167
adb shell input tap 5 167
adb shell input tap 684 167
adb shell input tap 308 167
adb shell input tap 1195 1824 5 167 0
adb shell input keyevent 4
adb shell input keyevent 4
adb shell input keyevent 4
adb shell input keyevent 4
adb shell input keyevent 4