

# King Saud University College of Computer and Information Sciences Information Technology Department

## **Pre- MPT Project Phase**

**Phase Goal:** Preparing to be able to conduct Mobile Penetration Testing (MPT) on an APK (Android Package) **that will be provided on the next phase of the project.** In doing so, you need to get yourself familiar with Android code and set up a Mobile Penetration Testing Environment. Here is a suggestion to the required tasks and steps to accomplish that with some helpful resources (please **Feel free** to do and use whatever you want to accomplish the required goals.)

## Suggested steps:

#### Task#1: Get familiar (Review) Android code

- 1. Install Android Studio.
- 2. Program and then run a simple Android App, we suggest the **Login Activity** in [1]. While you implement, try to understand the code generally and to learn about Activity and Logging [2].

# Task#2: Set up your MPT Environment:

- 1. Get a real Android phone or create an emulated one. For the emulation, you may use Genymotion software [3]. (When used, we recommended to be installed on the host machine directly)
- 2. Install the following tools, Jadx (or Apktool instead), mobSF or (Drozer).
- 3. Figure out how you can use
  - a. **Jadx or** to decompile an APK and read the "source" code.
  - **b. MobSF** to automatically find vulnerabilities.
  - c. Android Debug Bridge (**ADB**) to communicate through terminal with your Android Phone such as previewing the Android logs and launching Activities.

### **Suggested Resources:**

- [1] https://developer.android.com/studio/projects/templates#LoginActivity
- [2] https://www.tutorialspoint.com/android/android acitivities.htm
- [3] <a href="https://www.genymotion.com/fun-zone/">https://www.genymotion.com/fun-zone/</a>
- [4] https://github.com/skylot/jadx
- [5] https://www.xda-developers.com/install-adb-windows-macos-linux/
- [6] https://github.com/MobSF/Mobile-Security-Framework-MobSF
- [7] https://kalilinuxtutorials.com/mobsf-mobile-security-framework/
- [8] https://stackoverflow.com/questions/59922229/facing-problem-in-kali-linuix-python3-pip
- [8] https://github.com/MobSF/Mobile-Security-Framework-MobSF/issues/943

#### **Evaluation and Submission**

You need to submit a comprehensive Pre-MPT report through LMS by the specified due date. Your report should **describe and demonstrate** your preparation for the coming MPT phase. It also should specify **who worked on what** (team work).