

CYT230-Mobile Application Security Assessment
Project 1: Exploring mobile app security tools

**WARNING: DO NOT PAY FOR ANYTHING. DO NOT ENTER YOUR CREDIT CARD INFO ANYWHERE.
ALL REQUIREMENTS ARE EITHER FREE OR TRIAL VERSION IS AVAILABLE. EVEN FOR TRIAL
VERSION DO NOT ENTER CREDIT CARD INFO.
THIS WARNING APPLIES TO ALL LABS, PROJECTS, AND ASSIGNMENTS.**

Objective

In this lab experiment, you will explore mobile app security assessment tools and perform a practical experiment using MobiSec. The tasks include investigating mobile security tools, selecting a preferred tool, and performing a lab experiment with your selected tool. Additionally, you will conduct a detailed lab experiment using MobiSec.

Requirements

- Android Emulator
- MobiSec

Instruction

Part 1: Investigate Mobile Security Tools

Step 1: Perform a research study on the following tools/toolsets (no installation needed). Provide a brief explanation of each tool/toolset (1-2 pages per tool). Explain which tool(s) you prefer for mobile app security assessment (for Android apps and iOS apps) and for what purpose.

Tools to research: (Pick 2-3)

- iMAS
- Goat Droid
- iGoat
- Damn Vulnerable iOS
- MobiSec
- Androick
- Frida
- Drozer

Step 2: Research a free or open-source mobile security tool/toolset other than the above items. Explain the pros and cons of this tool. Discuss if you prefer this tool over the one you recommended in Step 1 and provide your reasoning.

Step 3: Perform a lab experiment including installation, configuration, and utilization using the tool/toolset you recommended in Steps 1 and 2. Ensure the tool is free, open-source, or has a trial version available without requiring payment or credit card information.

Part 2: Lab Experiment Using MobiSec

You will need an Android emulator and MobiSec for this part. Follow the step-by-step instructions provided in this video: Mobisec 2.0 Intro (Link:).

Instructions:

- Perform the lab experiment using MobiSec, including installation, configuration, and utilization.
- Insert screenshots of significant steps and clearly explain what is being done at each step, including the results.
- Use the "Figure Caption" feature in MS Word to explain what is shown in each screenshot.
- Ensure your name and date are shown inside the virtual machines (either as machine name, background, or in the terminal).

Useful Information:

- MobiSec login password: **mobisec**
- [Latest MobiSec version \(Link: https://sourceforge.net/projects/mobisec/files/\)](https://sourceforge.net/projects/mobisec/files/)
- Additional resources:
 - [ExploitMe \(Link: https://securitycompass.github.io/AndroidLabs/index.html\)](https://securitycompass.github.io/AndroidLabs/index.html)
 - [AndroidLabs \(Link: https://github.com/SecurityCompass/AndroidLabs\)](https://github.com/SecurityCompass/AndroidLabs)