

Mobile Security Coursework-1

Coursework 1 is a team project, where you develop a mobile application capable of exfiltrating contents from the mobile phone and hiding the malicious intent using smart algorithms to prevent the reverse engineering of Android APK. You will be evaluated based on the following three parts of the coursework.

Part 1:

Design a basic Android application that does the following

1. Display the name of the Team members
2. Detailed information on each team member when clicked on their name

Make sure you have an intuitive self-contained application design.

Part 2:

Spy-friendly version of your application.

1. Modify the application to perform **at least** one malicious activity
2. Gather and exfiltrate information from the mobile phone
3. Malicious activity should be stealthy and not evident to a common user
4. Example: reading SMS, copying images, and sending it to a remote destination.

Creativity is the key to getting additional points in this section.

Part 3:

Make analysis harder

1. Obfuscate/Hide the malicious intent of the program so that it is hard for an analyst
2. You can use obfuscation tools or design custom-made obscuring algorithms

Submission

The team should give a presentation and demo of their application before the 10th of February 2023. Presentations will be scheduled during the 3rd and 10th February lab hours (Weeks 5 and 6). The code should be uploaded in LMS with proper documentation and a project report by 17th February 2023.