

# Mobile Device Penetration Testing Framework and Platform for the Mobile Device Security Course

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**Abstract**— The authors have developing mobile device evaluation and testing platform to evaluate the mobile malware. Using the platform, the authors have created several courses in mobile device security. One of the important requirements is to provide students with a safe and sandboxed environment for malware analysis. Other features include tool enhanced lab environment, updated malware repository, log collection and exact assistance. Java based client-server application have been created to serve these requirements. Also a framework to perform mobile malware analysis and mobile penetration testing is proposed and implemented under this research work. Paper focuses on analysing requirements for such coursework to perform mobile malware analysis and mobile application penetration testing. Paper also gives details about the tools created and framework implemented to successfully teach Advanced Mobile Device Security course and perform interactive lab exercises...

**Keyword**— Mobile Malware Analysis Framework, Mobile Device Security, Mobile Penetration Testing, Mobile Application Vulnerabilities, Mobile Application Security Testing Framework, and Mobile Malware Repository.



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