

# Feedback Report (Week 04)

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Title: Mobile & Cloud Security

Speaker: Professor Sungjae Hwang

After attending this week's seminar, please write a brief summary of the content along with your comments. Your response should be approximately half a page in length.

이번 주 세미나를 듣고, 세미나의 내용을 간단히 요약한 뒤, 이에 대한 본인의 생각이나 의견을 작성하시기 바랍니다. 전체 분량은 약 0.5페이지 내외로 작성하여 제출하시기 바랍니다.

## 1. Summary

Briefly summarize the main content of this week's seminar.

이번 세미나의 주요 내용을 간단히 요약하세요.

Professor Sungjae Hwang briefly went through two of his research. The first research was an analysis of the possibility of phishing attacks on android applications. An issue was found within the security framework and by exploiting this issue, the professor was able to perform the phishing attack without permission. Then he was able to develop a malicious activity detection tool. The second research was regarding cloud security, specifically virtual machine security. The professor recognized errors and security issues in how Java Virtual Machines (JVMs) handle Java Native Interface (JNI) functions. Several unspecified cases were not properly check by JVMs. So this research focused on building an analysis framework called JUSTGEN that generates test cases from the JNI specification. JUSTGEN was able to find 34,990 unspecified cases due to faulty error handling.

## 2. Comments

Please include your comments, noting what you found interesting, what you would like to learn more about, and your personal thoughts on the seminar.

이번 세미나에서 흥미로웠던 부분, 더 알고 싶은 주제, 그리고 본인의 생각을 자유롭게 작성하세요.

The first research was an eye-opener to how even android apps nowadays could be vulnerable to simple malware attacks. It would be an interesting topic to learn how to differentiate these apps. If I were to study more about this research, I would like to dive deep into possible ways of malicious attacks and their corresponding security mechanisms. The second research showed how JVM machines may actually have several errors that are not noticed. I would like to know possible ways of improving the error handling of the JNI functions.