## "Stay Hungry, Stay Foolish" STEVE JOBS

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## ABSTRACT

Android, one of the leading smartphone operating system nowadays, was initially developed by Google based on Dalvik Virtual Machine. Actively maintain by large open source communities and supported by big smartphone manufacturers, keeps Android in having positive numbers of user growth each year. 45,3% by Oktober 3<sup>rd</sup> 2011, highest user market share of Android 2.2 Froyo has ever been achieved.

Common problem with any popular technology is having security breaks. And the needs to fix them ha ve become an interesting challenge among Android developers. This final exam is about to analyze any weakness of the security system on both Android 2.2 Froyo stock rom and Android 2.2 Froyo rooted. Four methods will be applied to find any security break possibilities, which are availability threat, confidentiality threat, integrity threat, and application bug. By this analysis, security weakness of both Android 2.2 Froyo stock rom and Android 2.2 Froyo rooted would be concluded proven and hopefully become a solid reference in order to have better security system.

Key Word : Security, Android 2.2 Froyo Operation System, Android smartphone, Android Security Bug, *availability threat, confidentiality threat, integrity threat*