

ABSTRACT

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DATA PACIFICATION APPLICATION ON SMARTPHONE WITH ANDROID PLATFORM

(xiv + 87 pages: 47 figures, 6 tables, 2 appendices)

Nowadays, various handheld devices, especially smartphones, gain vast popularity. Smartphones have a wide range of useful, attractive and entertaining applications. Not only entertaining, some of the applications are intended to extend the functionality of the devices, such as escalating its security level. It is true that people having various handheld gadgets are bound to the risk of losing their precious devices. In the occurrence of losing any device, the owner faces at least two-fold loss. First, the device itself and second, the data stored in that device memory.

This thesis focuses on developing a mobile application to run in smartphone that supported by Android operating system Froyo and Gingerbread. The application functions primarily like a guardian protecting all private data stored in that device memory from unauthorized access. Its work follows after parent-child scheme, where parent phone acts as the remote guard for the child phone, which is known to be lost. If needed, parent phone may wipe out all the data in the child phone by sending a certain short message via SMS. At the most extreme level, the application can reset the child phone back to its initial factory setting.

From a series of tests involving two smart phones with each role, the results suggest the following significant conclusions. Not only parent phone successfully communicates with the child phone via SMS, but the parent phone can lock, wipe out the data, and also reset the child phone by sending respective commands via the same communication medium.

References: 22 (2000-2012)