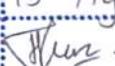




PROJECT REPORT
COMPRESSION AND ENCRYPTION SMS ON
ANDROID

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APPROVAL AND RATIFICATION PAGE

PROJECT REPORT

Compression and Encryption SMS on Android

This project report has been approved and ratified by the Dean of Faculty of Computer Science and Supervisor on July, 18th 2014

With approval,

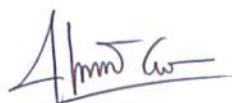
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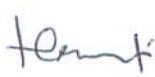
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STATEMENT OF ORIGINALITY

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Semarang, July 18th 2014



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10.02.0032

ABSTRACT

SMS (Short Message Service) is one of Instant Messaging (IM) which is cheap, simple and easy to be used, that's why SMS can be used by people from every economy class. One of weakness in SMS is its insecurity. Encryption and compression are two alternative options that can be used to make secure the contents of the sent messages in different ways. Encryption camouflage contents of message by substitution, permutation, expansion, and blocking, whereas compression hide the contents of message by compressing it. The objective of this research is to make double protection in sending SMS with side benefit to reduce the cost of sending SMS. Caesar algorithm and custom byte manipulation are being used for encryption, whereas huffman, LZW, and shannon fano algorithm are three optional algorithm for compression method. The result show that encryption and compression could be implemented in SMS. It bring out an encrypted and compressed message which gives double protection in contents of SMS.

Keyword : SMS, encryption, compression, huffman, LZW, shannon fano, caesar algorithm, custom byte manipulation.

FOREWORD

Praise, worship, and give thanks to God for the gift, blessing, and His presence that make author finally finish this final project entitled : “COMPRESSION AND ENCRYPTION SMS ON ANDROID”. This report of final project is one of the perquisite requirement to achieve of Bachelor's degree in Faculty of Computer Science Soegijapranata Catholic University Semarang This final project guiding, and supporting the author from the beginning of decide research topic until finish this report. Therefore with all sincerely in this opportunity. I would like to thank to:

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Last but not least, author realizes that this report is far from perfect, therefore, author would like to apologize if there are mistakes and inconvenience words to the reader, and critics and suggestions are accepted. Sincerely, author hope this final project report can be helpful to all parties, God bless

Semarang, July 18th 2014

Ricmawan Adi Wijaya

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