

ABSTRACT

Digital data communication technology progress makes ease for data manipulation. Thus makes no guarantee for content of file, especially document file. Protection using password on document file does not give guarantee because there are applications than able to know the document password.

This final project will produce a system that able to give guarantee for document file authenticity for user by inserting watermark data to a document file which will be sent using digital communication media. Watermark data insertion will not change document content and file size addition because insertion will not burden document file, therefore file size addition must be minimized.

System do watermark by hashing document file. Data result of hashing process, owner name, and email are inserted to document file as watermark data. Before inserting, watermark data are encrypted using RSA algorithm (asymmetric encryption) to secure watermark data. In receiver side, document is verified by comparing data result of hashing process of document with watermark data that was decrypted.

This system implemented using Microsoft Visual Basic language that involves Microsoft Word application to insert watermark data and to verify document file. This application gives ease for user to insert watermark data and to verify document file. With encrypted watermark data, file receiver can more assured to document authenticity.

Key word: *Document verification, watermarked document.*