

## ABSTRACT

Along with the development of information and communication technology is rapidly increasing, it should be more media information that does not use paper (paperless) in its delivery, mail is one of the example. Mail is a media to send information which has a format of writing and delivery procedures that must be considered. Mail also must have a compact storage media. Sometimes also a mail is an authentic evidence which must have valid identification. Therefore, we need an application system that has all the elements contained in a mail, has a format of writing, has a dynamic storage media, and have a valid ID.

e-surat is an application implemented in an agency (in this case the campus IT Telkom, in particularly the Faculty of Electrical and Communications) and will facilitate the parties involved in them in managing the mails to be issued by that agency. This study used digital fingerprint algorithm (Digital Signature) as a complement to the security of this system.

To support the process of correspondence on campus IT Telkom Bandung, especially in the Faculty of Electrical and Communication, the authors make web applications that can support the process of such correspondence. In designing the authors use the programming language PHP and MySQL.

This final project will have a delivery system based on hierarchy, thereby providing convenience in controlling the circulation of the letter. This application will also have a dynamic storage medium that will allow a user to access the mails that have been issued and select the format of the required mail. This application will also have a valid identification (digital signature) using RSA algorithm, so it can serve as strong evidence of authentic.

**Keywords :** mail, PHP, MySQL, hierarchy, digital signature, RSA