ABSTRACT

For a developer, the making of an application license is a difficult thing to be applied, its proven with a lot of software piracy. There are many solution offered to make an application license, one of it by using XML digital signature. Its only handling data originality, thus need an encryption technique that can protect its content from XML digital signature. The reason why using XML is because XML is very flexible, that can make a data switch between different application.

This final Assignment objective is to find a way applying XML digital signature on application license, then encrypted to that digital signature, and measure the time to encrypt and decrypt. To make the objective, it will doing an XML digital signature applied at the application license by making a module that check legality of an XML document, then applying RSA encryption algorithm to the digital signature, then measuring time to encrypt and decrypt at client side and server side and make a consideration using different key length.

By using XML document as an application license, then we as a developer can arrange everyone who will using the application and how long they will use it. A digital signature XML document contents something unique to every client as a client *Harddisk Serial Number*, then it will be hard to copied or changed.

Keyword : license, RSA, XML *digital signature, Harddisk Serial number.*