ABSTRACT

Copy-paste activity and freely downloading digital data on the Internet are vulnerable to changes the data. Digital datas that are spread can be text, images, sound, and video. The deployment process is too easy is feared would lead to the acquisition of digital data everywhere by some unauthorized person, where the copyright in a creation is difficult to prove if there is no characteristic of the creator's creation on the digital data. Therefore we need a technique to digital creations so that the authenticity of the creation is maintained. One technique used is watermarking.

In this final project is given the analysis of the implementation of image watermarking using spread spectrum and DWT running on an Android device with assisted by a server as a data processor. DWT technique will transform signal from the spatial domain to the wavelet domain and with the method of spread spectrum the watermark signal is distributed evenly on each frequency domain, the use of this method is intended to improve the level of robustness and invisibility watermark.

Watermarking performance in this final project obtained by testing on watermarked file. By doing the test both in the process of embedding and extraction so the obtained results on the implementation of watermarking parameters of this value reaches 100% detection rate for the extraction File Mode and 60% for extraction Capture Mode, reaching more than 40dB PSNR and 0.999 SSIM The result is maximum results obtained in this watermark system.

Key Words*: image watermarking, Android, spread-spectrum, DWT.*