

ABSTRACT

The research of security has gone through a remarkable progress in the past few years. Yet there are still weak links in security, especially in the human factor. A psychology study supports the hypothesis that humans have better capabilities to recognize pictures and recall things using visual imaging.

User authentication is the pioneer of system defense. Therefore, a sturdy system that could be relied upon is needed. Aside from being sturdy, a system should be user-friendly.

In this final project, an application of security authentication, which uses image selection as password (simply put, picture password), is designed and implemented. The images would be the input interface, which contain nodes combined as password. The application is built with the hope that it could be implemented on Personal Digital Assistance and that it would alter security to have more fun.

From the evaluation done towards the application, it is known that this system method would be more appropriate to be put in to use in stylus-using apparatus, such as PDAs. It is also known that there are two errors found in this application, which are 6% of erroneous selection and 3% of erroneous code. Other than that, it is known that the average system total process time is 18 seconds, brute force cracking method would take approximately 118.73 years, and that 94% respondents are satisfied with this application.

Keywords: user authentication, image selection, picture password.