PASS-COLOUR: GENERATING PASSWORD WITH COLOURED GRAPHICAL ASSISTANCE

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JANUARI 2007

ACKNOWLEDGEMENT

We would like to express our tremendous gratitude to all research members and those who had given us the support and helped in gathering the facts either directly or indirectly. The appreciation also goes to Mr Rudy Lasarus, our Research Assistant, for his wonderful job, commitment and effort in making this project possible.

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ABSTRACT

Regular text-based password was the most common method of authentication these days, but it often leads user to choose weak password. As a result, the password was easily broken or cracked through password dictionary attack or brute-force attack. Therefore, the objective of this study was to employ colour-based password authentication in order to provide secure and memorable password authentication. A prototype of this password authentication, called Pass-Colour, was proposed to enable the creation of a secure and memorable password based on colour. Based on the survey performed on fifty one offline respondents and nineteen online respondents, majority of the offline respondents thought that colour-based password authentication is not feasible and not memorable. However, majority of the online respondents who tested the prototype said that it is feasible and memorable. Overall, it is encouraging and has potential to be secured plus memorable password authentication. In spite of that, further study required to explore some aspect of this password authentication in the future.

CHAPTER 1

INTRODUCTION

This chapter describes the background of the research and the description of the problem, which led to this study. Also included here are objectives of the study, its significance, scope and limitation of the study as well as overview of the research approach and methodology.

1.1 Overview

The main purpose of this research is focused on employing colour-based password. Traditional password that is based on characters normally lead users to choose words or numbers that are easy to remember. However, those passwords can be guessed by crackers extracting words or numbers from dictionaries in systematic or automatic ways. Good passwords must be made up of random combination of characters and the password's length should not be less than eight characters. However, such passwords are hard to remember even though they are secure. Therefore, good passwords should be secured and memorable at the same time.

Thus, by employing colour-based password it can aid users to generate secure and memorable password. To prove this concept, the researchers developed a prototype of colour-based password called 'Pass-Colour' and conduct a user testing to evaluate this type of authentication system.