A STUDY ON ONE WAY HASHING FUNCTION AND ITS APPLICATION TO FTMSK WEBMAIL

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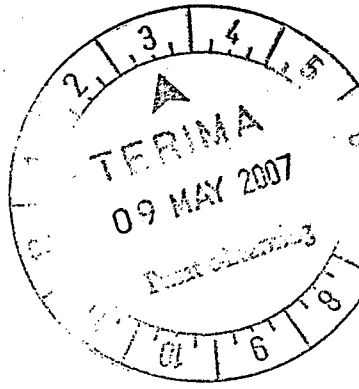

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Dengan segala hormatnya perkara di atas adalah dirujuk.

Sukacita dimaklumkan bahawa pihak IRDC meluluskan permohonan tuan/puan dan ahli-ahli projek seperti berikut untuk mendaftarkan projek penyelidikan tuan/puan bertajuk seperti di atas yang sedang dijalankan dengan menggunakan **pembiayaan sendiri.**

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LAPORAN AKHIR PENYELIDIKAN "A STUDY ON ONE WAY HASHING FUNCTION AND ITS APPLICATION FOR FTMSK WEBMAIL"

Merujuk kepada perkara di atas, bersama-sama ini disertakan 3 (tiga) naskah Laporan Akhir Penyelidikan bertajuk "A STUDY ON ONE WAY HASHING FUNCTION AND ITS APPLICATION FOR FTMSK WEBMAIL" oleh kumpulan Penyelidik dari Fakulti Tekologi Maklumat dan Sains Kuantitatif untuk makluman pihak tuan/puan.

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ABSTRACT

Password is a normal way to securing data from intruders. The widespread use of password is in email account. The advances of technology have reduced the function of password in security, where there is a chances to be sniff or hack by intruders. This situation was shown in FTMSK staff webmail which using password (in plaintext) as security purpose but staffs are not allowed to send exam question or other important document through email. The reason given is for security purpose. There are several techniques use to transform plaintext password to other form of password which is call encryption. Encryption need to be done on the client side on client server architecture to obtain secure password during transmission. One type of encryption is 'one-way hashing function' which consists of several algorithms such as Message Digests (MD), Secure Hash Algorithm (SHA) and RIPEMD etc. MD5 and SHA1 are the most common hashing function currently in use. Both are produce at the same year (1994) and come from the same extension, which is MD4. The research are aim to study on Message Digests version 5 (MD5) and Secure Hash Algorithm version 1 (SHA1) with the use for password in email account. Prototypes are developed for both MD5 and SHA1 in one way hashing function using evolutionary approach. It tests for the processing time and length of hashing value.