

The Challenges of Understanding Security in Web Browser
Case study: Internet Explorer and Mozilla Firefox

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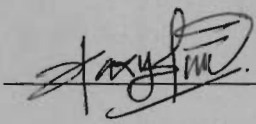
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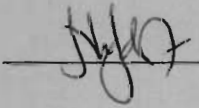
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ABSTRACT

Many applications contain security features that are available for the end user to select and configure, as well as the ability to place the users in situation where they must take security related decisions. Web browser is one of these applications which consider as the only way to browse the internet. This study exposes the available security features in both of Internet Explorer and Mozilla Firefox in Microsoft Windows XP; moreover describes results of survey over 232 students in Universiti Utara Malaysia from different educational background to explore typical Internet user awareness and understanding toward web browser security features within windows XP through internet user behavior when using a Web browser to access the Internet. The study reveals some significant area of difficulty, with many standards security features presenting usable security challenge for large proportion of respondents. The results and finding highlight the lack of internet user understanding and awareness toward security features in the web browser.

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LIST OF ABBREVIATIONS

CSS	Cascading Style Sheets
DHTML	Dynamic Hyper Text Markup Language
FF	Firefox
HTML	Hyper Text Markup Language
HTTPS	Hyper Text Transfer Protocol over Secure Socket Layer
IE	Internet Explorer
P3p	Platform for Privacy Preferences
RSS	Really Simple Syndication
SSL	Secure Socket Layer
TLS	Transport Layer Security
UAC	User Account Control
UIPI	User Interface Privilege Isolation

CHAPTER 1

INTRODUCTION

The accelerating number and sophistication of attacks against computers connected to the internet and systems has markedly increased the demand for computer security professionals. This demand has recently motivated a significant increase in the number of security techniques and different mechanism, which it applies those techniques in suitable methods to come up with different types of attacks.

The Internet is an interconnected Computer Networks that enable user to access web pages and allow users to navigate from one to another via hyperlinks Might be exposed to the attacks through navigating the web resources.

The only way to navigate and browse the internet can be done by using software that can access the resources of the Web called Web Browser. Some of the famous Web browsers available for personal computers include Internet Explorer, Mozilla Firefox, Safari, and Netscape. All of these types have a security mechanism, which is only effective when used correctly (Alma, W, and J & D. Tygar. 1998). However, security mechanism depends on both users and technology.

A web browser is a software program that allows accessing of information on the internet. Followed by the Worldwide Web software that was written by Tim Berners-Lee and released to the public in 1991, numerous web browsers have been developed and

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only

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