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Analysis on Secured e-payment Authentication Model for E-commerce Portals

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Declaration

We declare that this thesis is our own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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Abstract

The research focuses on to introducing a secure e-payment authentication model for e-commerce portals. E-commerce can be defined as one of the most rapidly development mechanisms in the world economy. Therefore, a secured payment authentication model is essential for any e-commerce portal. Also today there are various security mechanisms to ensure the security of these e-commerce portals. However, the research background analysis has recognized that there are still problematic areas in existing payment methods. Therefore, this research mainly focuses on introducing a secured e-payment authentication model for e-commerce portals which will ensure the exchange of money more securely and conveniently over the internet.

The introducing system is a web based electronic payment authentication processing system that can be used to make a secured electronic payment. In order to provide high security to the electronic transactions, the system validates the payments by using a onetime transaction code generating software installed into users PC or mobile phone. This code generating software uses unique hashing polynomial equation for each individual. The system only validates the transactions, only if the user enters the correct secure code in the transaction processing web page. The solution can mainly provide good security against the man in the middle attacks and the phishing attacks. Also this system has been designed to minimize the issues in existing electronic payment systems by providing a great convenient to the users. As a result, this research can be brought into play as a guide for e-payment authentication.

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