An Anthology of Applied Computer Technologies

Zulkefli Muhammed Yusof
M.M Hafizur Rahman

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ABSTRACT

Currently, almost everyone is connected online via a proper device and has his or her data stored in a particular database server. This data which is personally identifiable information (PII) may include: student personal account, bank account, credit card account and many more. Illegal access to this sensitive data stored at the backend database will harm the owner. SQL Injection attacks are identified as the top and prevalent risk which allows a malicious or crafted attacker to steal users' information. In June 2005, due to an SQL injection attack, CardSystems had 263,000 credit card numbers stolen from its database. As these credit cards were unencrypted, over 40 million credit card numbers were exposed to attack. Due to this threat of SQL Injections, many big companies are losing businesses and reputation among potential clients. Vulnerabilities in Web Application are mainly due to a less secure coding implementation by the developers. In this penetration testing tutorial, we will expose users (students, lecturers, web developers and researchers) on various SQL Injections attacks type, have hands on few pen testing on web applications in order to identify the vulnerabilities. Finally we will suggest few secure coding approaches which are a must for any web developers to avoid SQL Injections attacks.