

Mobile Application for Watermarking for QR Code's Data Transmission

TECHNOLOGY DESCRIPTION

This technology is a mobile application to provide an additional level of security in mobile data transmission.

TECHNOLOGY FEATURES

This technology is able to provide a security feature by using watermarking in variables of data to be wirelessly transmitted. The basic approach for implementing this watermarking technique consists of a few simple steps. This technology is easy to use. When the user scans a QR Code using this mobile application, the scanned data will be converted to binary numbers and held as another set of variables, known as QR Code's variables. Before the records can be displayed on the user's mobile device, the database variables will be attached to the watermarking variables for security protection during its transmission to the user's mobile device.

ADVANTAGES

- Absolute confidence in receiving data
- Easy application

INDUSTRY OVERVIEW

Prospect: Cyber Security Vendors, Application Security Vendors,, System Integrators, Consulting Firms, Government Agencies

This mobile application is to provide an additional level of security in mobile data transmission. In addition to the use of data encryption, the proposed security feature is to use watermarking in variables of data to be wirelessly transmitted. Thus, the mobile application potential consumers would be parties such as cyber security vendors, application security vendors and government agencies or authorities. The application security market size is estimated to grow from USD 2.24 billion in 2016 to USD 6.77 billion by 2021, at a Compound Annual Growth Rate (CAGR) of 24.8% from 2016 to 2021. The rise in security breaches targeting web and mobile applications and demand for SaaS-based security solutions are fueling the market for the market to grow in the next five years. Potential companies that could be purchasers for this application are security solution and service providers such as IBM Corporation, Hewlett Packard Enterprise, Veracode, Qualys, Checkmarx, Rapid7, Acunetix, Cigital,; system integrators such as CSC and HP, and various consulting firms such as Accenture, Deloitte, and Ernst & Young who sell these application security solutions to end users to cater to their unique business requirements and security needs. Government agencies like the Immigration Department of Malaysia, Road Transport Department of Malaysia would also be a potential business client for this applications since many processes and activities related to these departments require documents to be verified and secured.



Assoc. Prof. Dr. Fatimah Sidi
Faculty of Computer Science and Information Technology