Two Level QR Approach Using Security Purpose for Private Message Sharing And Documentation Authentication

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Abstract- *The Quick Response (QR) Code has been developed for strong information and high speed reading applications. We introduce a new rich code QR Code that has two layers of storage and can be used for document authentication. This Latest rich QR has Both public and private level storage tiers. The public level is same as the normal level of QR code storage .The private level is built by replacing the black modules with complex textured patterns. It consists of information encoded using a QR code with an error correcting capability.*

Keywords- Private key,Public key,QR code,Textured Pattern

I. INTRODUCTION

The Quick Response Code is used to access and read information through the easy use of barcodes.The QR code also contains different patterns search patterns, alignment patterns, timing patterns and other types such as formatting information.

II. LITERATURE SURVEY

The QR code is widely employed in all walks of life due to its large information capacity, strong error correction ability, and fast reading speed. The Hamming code is constructed with the column vector.

The ubiquitous presence of surveillance cameras severely compromises the security of private information.

The QR code used to encode various data formats and languages. The automatic extracted key phrases could then be used to original query and narrow down the search.

Different color patterns of quick response (QR) codes, such as RGB, grayscale, and binary QR codes, are widely used in applications. In this paper, we propose a novel XOR-based visual secret sharing (VSS) scheme using grayscale QR codes as cover images and binary QR code as secret image.

III. PROPOSED SCHEME

The proposed system replacing the black module specific textured patterns. patterns can be designed to be sensitive to distortions due to the p&s(print and scan) process.The two level QR(2LQR) code contains of a first level accessible for any standard QR code reader, therefore it keeps the strong characteristics of the QR code .

Modules:

1.QR Code Features
2.Rich QR code with public and private levels
3.Two level QR codes(2LQR) generation
4. Storage capacity of 2LQR

QR Code Features:

High capacity encoding of data. QR code carries information both horizontally and vertically .QR code is capable of encoding the same the amount of data in one tenth of the length.

Rich QR code With Public and private levels:

The public level is same as the standard QR code storage level. The private level is constructed by replacing the black modules by specific textured patterns.

Two level QR (2LQR) code generation:

2LQR code has the same specific structure, which consists of position, alignment patterns, timing patterns, version and formal patterns. Replacement of black modules of the standard QR code generation patterns.

Storage capacity of 2LQR code:

The public level can be store the surname, First name, date of birth and place of a birth person. The secret information, which are bank account details, encoded in the private level.

IV. ALGORITHM USED

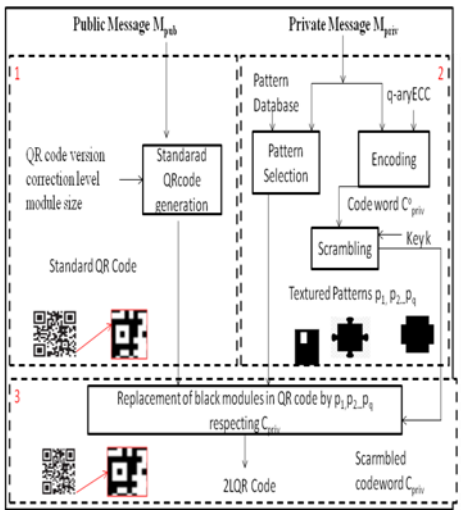
SHA-1

In cryptography, **SHA-1** (**Secure Hash Algorithm 1**) is a cryptographic hash function which takes an input and produces a 160-bit (20-byte) hash value known as a message digest – typically rendered as a hexadecimal number, 40 digits long.

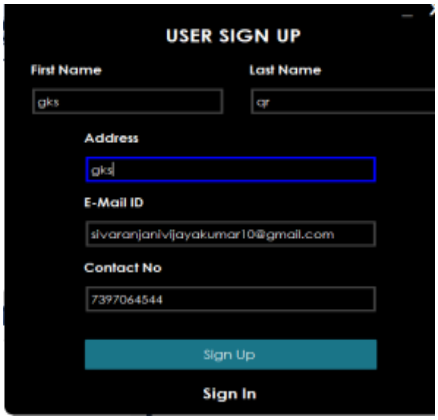
TEES

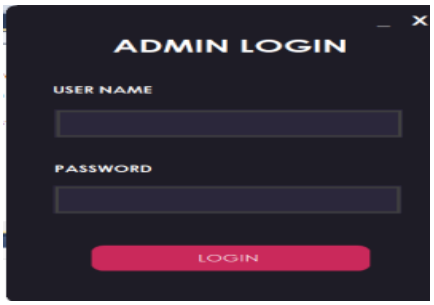
Traffic and energy saving encrypted search (TEES), a bandwidth and energy efficient encrypted search architecture over mobile cloud. The proposed architecture offloads the computation from mobile devices to the cloud, and we further optimize the communication between the mobile clients and the cloud. It is demonstrated that the data privacy does not degrade when the performance enhancement methods are applied.

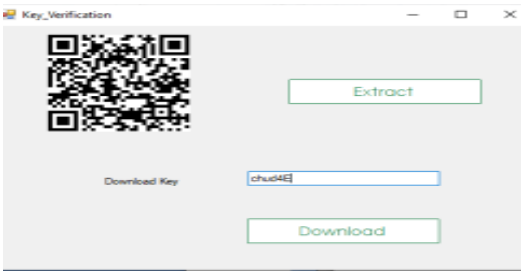
SYSTEM ARCHITECTURE



ARCHITECTURE







V.CONCLUSION AND FUTURE WORKS

The project was undertaken to design a novel method for evaluating the information of electronic documents using QR code, especially concerning confidentiality for the rapidden of information and documents at high speed. A number of known attacks satisfies security mechanisms through the building of this new QR code model that satisfies security requirements while maintaining the speed features unique to the QR code.

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