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Implementation and Design of E-Library System using QR code and Smart Mobile Phone

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Abstract:- “This paper has been show that E-library system using the QR Code and smart mobile phone implementation and design of Library digital system. In this study we found the QR code is very useful of library services and Digitization. QR code easily scan to document like a books, Journals , Library website, Library Blog, Marketing of product etc. It's very important Technology for Library automation and networking. Library staff is easily use this technology for Quick Time and user satisfaction.”

Keyword:- E-library, QR code, Mobile Technology, Library services, Digital Library

Introduction

The Use of Quick Response Codes (QR) has increased the advertising and marketing strategies that go along with the widespread use of smartphones in our daily lives. There are a wide variety of cell phones with different features and capabilities. Camera phones are very popular these days when businesses or institutions start using this feature by using the QR feature for their many marketing and advertising purposes to spread the word. The COVID-19 epidemic has propagated the food supply, which has not been compromised to limit

communication to prevent the spread of the virus. promotional food safe and uncluttered experience. Some of the most popular food joints have changed to the digital menu QR codes are K-Fry, KFC, and McDonald's. QR codes have features that allow them information sharing companies and their customers in a fast and trouble-free manner. It can handle different types of data such as numbers (numbers 0 - 9), Scan the QR, which may include information such as URLs, a location map, property details and location, and event registration. Everything can be done in a short time. Its 360-degree reading ability makes it possible to scan at an angle with a QR scanner on a cell phone. This

introduces flexible QR code representations where shapes and colors can be changed, allowing for artistic representation. QR codes have a limited amount of information compared to a single-sized barcode. Lastly, QR codes are compatible and can be read by any smartphone, tablet, or laptop computer using free software.

In this project, we are using QR code technology in an existing library system at one of the independent reading centers in Malaysia by using all its features at a low cost.

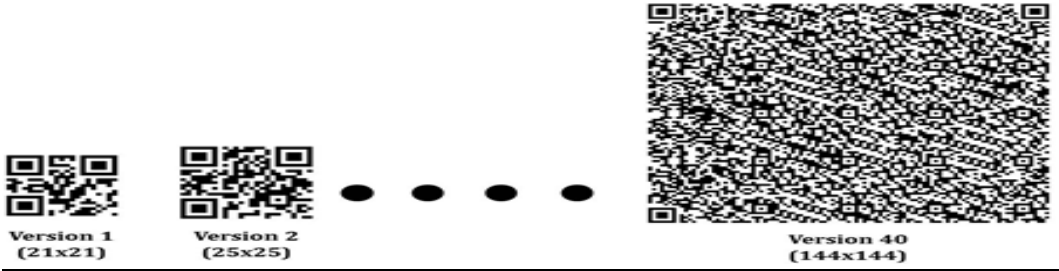
QR code helps users to track books. The user does not know if the books are borrowed or available on the premises of the library. This upgrade helps users to find books faster and avoids unnecessary delays in book search, unlike the manual method. The coded information attached to the library material reads the QR scanner to the cell phone. As these technologies are relatively inexpensive, simple, easy to use, and easy to use, there is no doubt that in the future they will be expanded to other areas of interest.

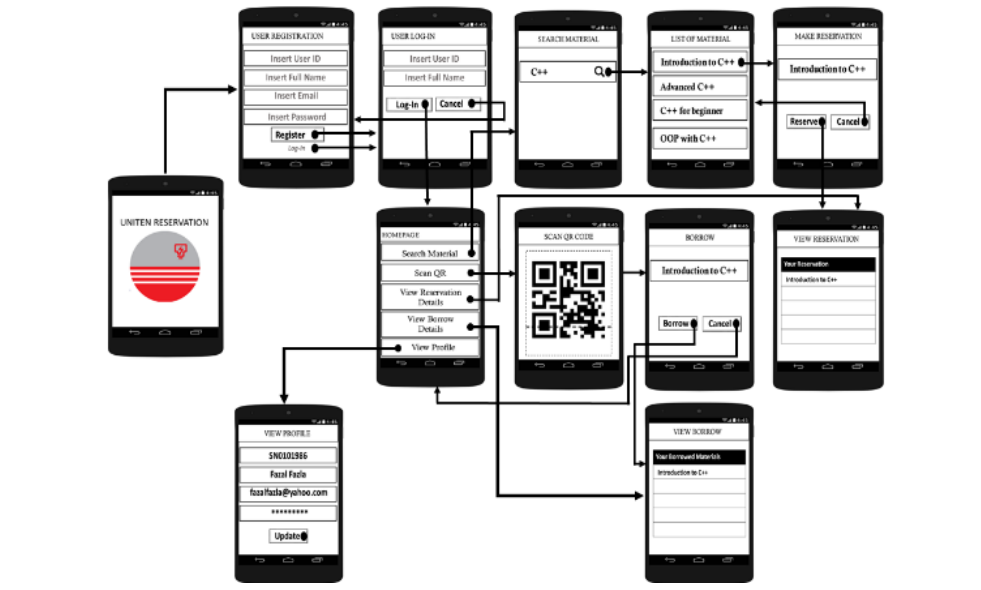
Universiti Tenaga Nasional (UNITEN) an existing library booking service allows users i.e. students and intelligence members to keep items borrowed or borrowed from other users, items found inside the building but not suitable for repayment, or items ordered. but they have not yet found it in the library. However, any resources that can be found within the library area cannot be retained by users. Meanwhile, the existing library borrowing service can be considered obsolete because users are required to personally submit the items

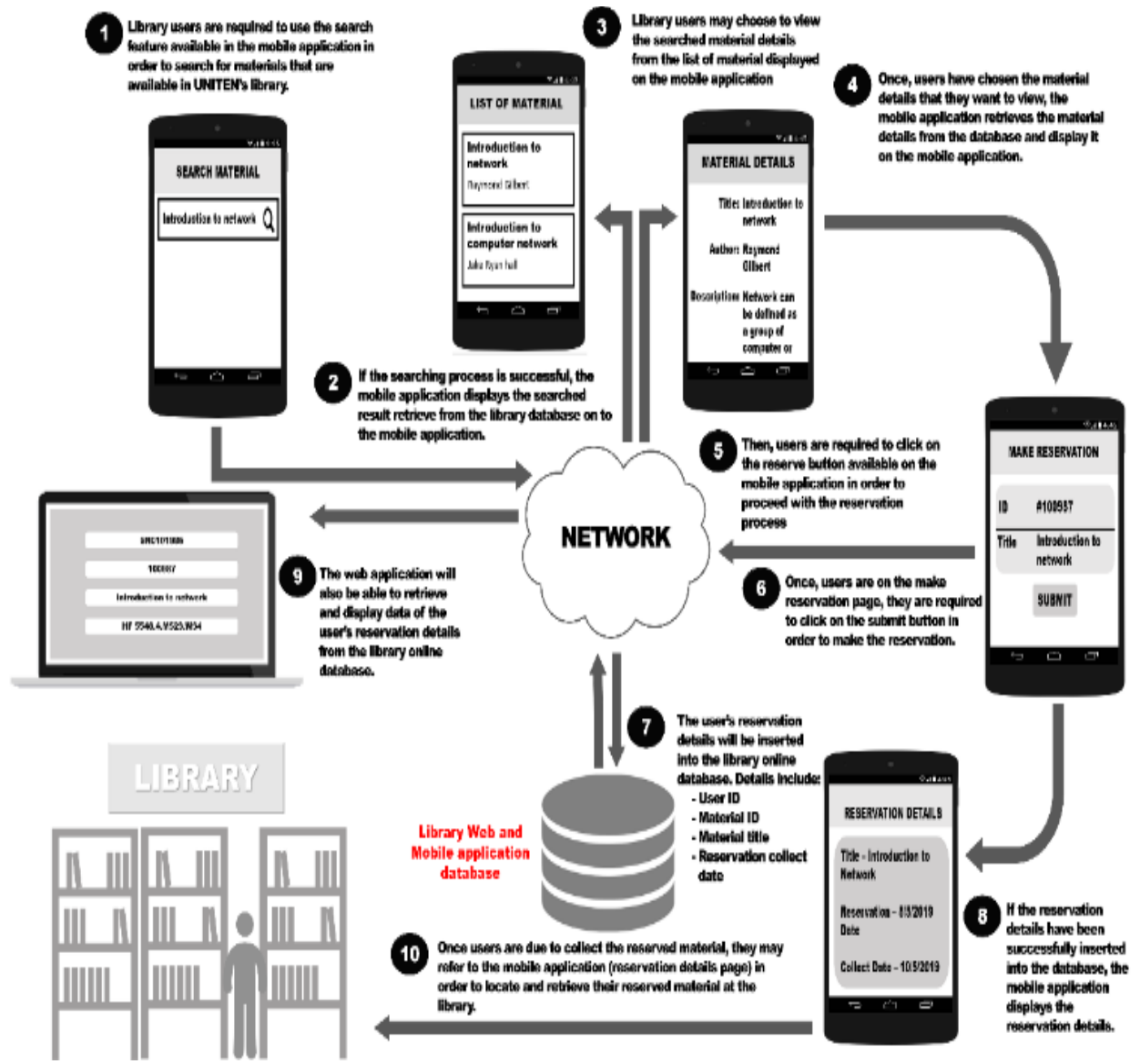
they intended to borrow from the library manager available at the library information and services before leaving the library. That being said, with this project, the proposed application is being developed to upgrade both resources by introducing a multi-application process integrated with QR code technology. The procedure is performed in two ways; web-based and mobile application.

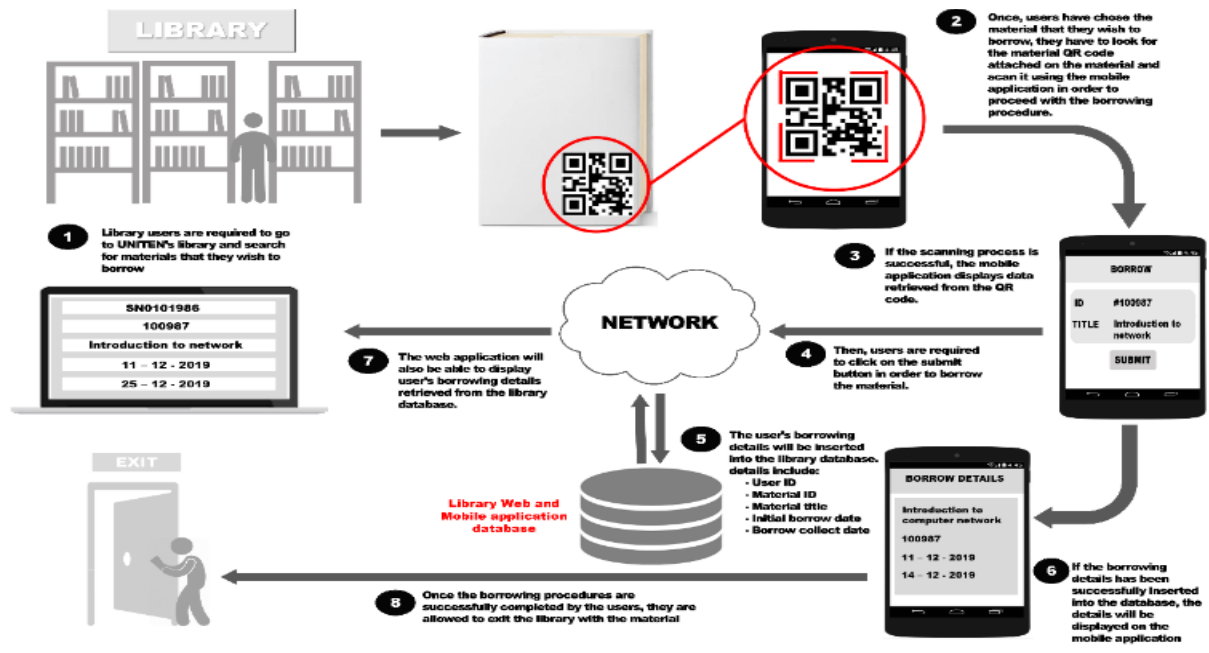


2. Current asset tagging implementation

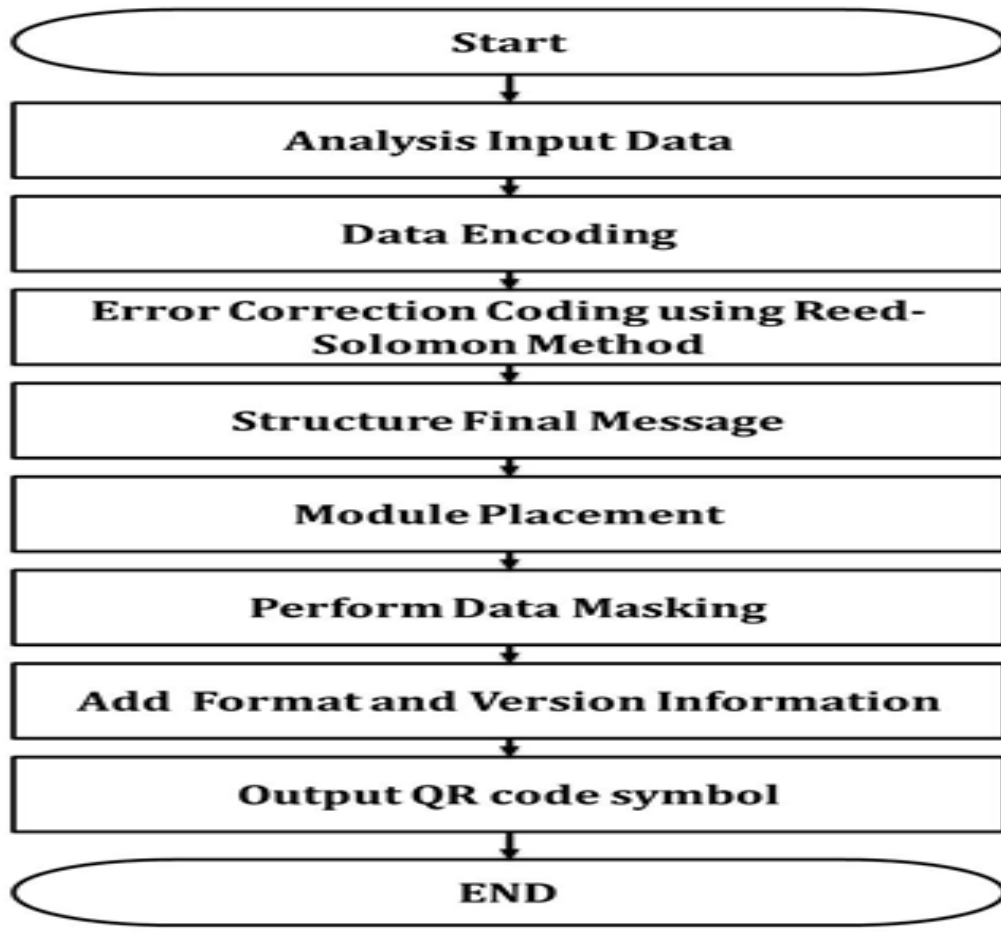
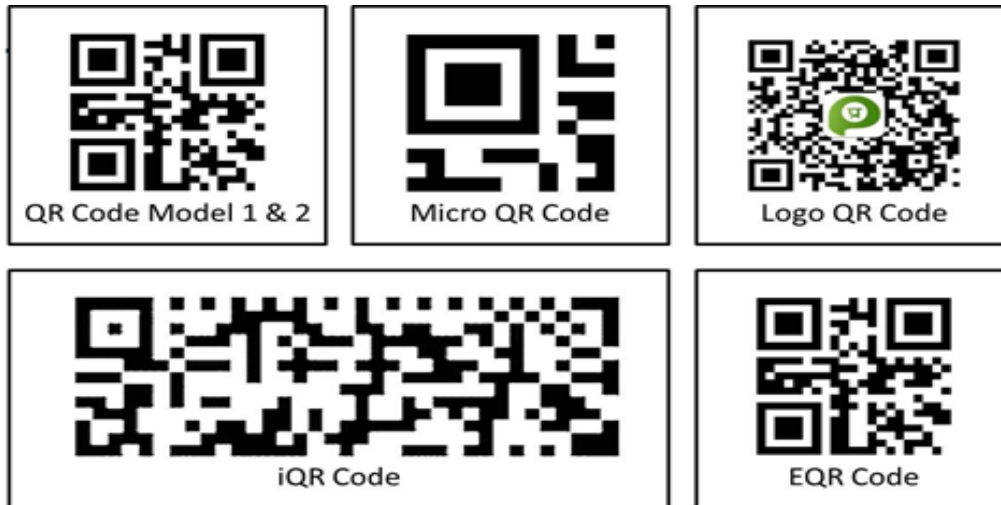








Types of QR Code



List of Website Generate the QR Code

- ✚ Visualead.
- ✚ QR-Code Generator.
- ✚ QR-Code Monkey.
- ✚ QRStuff.
- ✚ Scanova.
- ✚ QRickit.
- ✚ QRTiger.
- ✚ QR Code API.

Benefits of QR Code Applications to Library

- ✚ Library User Friendly
- ✚ Personalized Service
- ✚ Ability to Access
- ✚ Information Time Saving
- ✚ User Participation
- ✚ Location
- ✚ Awareness
- ✚ Limitless
- ✚ Access

Use for QR code Generate

- ✚ You tube Video
- ✚ Images
- ✚ Pdf files

- ✚ Social media
- ✚ Library marketing
- ✚ OPAC searching the books
- ✚ Library website
- ✚ Word Processing

QR codes Application in Libraries and Information Centre

- ❖ Library Audio Tour
- ❖ Group study room scheduler
- ❖ Marketing/ Promotional materials
- ❖ Linking from print to electronic Journal Holdings
- ❖ Providing an electronic alternative to physical books
- ❖ Promoting online audio-visual materials
- ❖ Embedding video help
- ❖ Bringing external resources into the library
- ❖ Finding appropriate help
- ❖ Taking the catalogue record with you
- ❖ Seat Reservation
- ❖ Wi-Fi proper utilization
- ❖ Library section
- ❖ Library services, Function, Section

Conclusion:-

QR code technology QR code technology, its benefits, application properties, and their impact on Digital Library. Initially, QR code was developed and used to track innovation but, nowadays, they have found applications in many new areas such as marketing, advertising, secure payment systems, education industries, etc.

The adoption of QR codes is growing rapidly over the years and the number of users is growing rapidly, due to its features such as large data storage capacity, fast scanning, debugging, direct marking and ease of use. Many libraries use QR code for most library services and automation.

References

1. Madhusudhan, M and Saleeq Ahmad Dar (2017). Mobile Information Services and initiatives in university libraries: A new way of delivering information. DESIDOC Journal of Library and Information Technology. 109-118.
2. Narayanan, A S (2012). QR codes and security solutions. International journal of Computer Science and Telecommunications, 3(7), 69-71.
3. Saleeq Ahmed Dar and Madhusudhan, M (2016). Quick Response codes in University libraries : User Expectations for fast retrieval of information at the University of Delhi. Journal of Knowledge and Communication Management. 114-127.
4. Schultz, M.K., (2013). A case study on the appropriateness of using quick response (QR) codes in libraries and museums, Library & Information Science Research (2013), <http://dx.doi.org/10.1016 /j.lisr>
5. Singh, A and Parminder Singh (2016). Evaluating quick response code and its scanning process using USB device. International Journal of new innovations in Engineering and technology,5(4), 45-54.

6. <http://www.qrcode.com/en/history/>
7. <http://www.qrcode.com/en/about/standards.html>
8. <https://crln.acrl.org/index.php/crlnews/article>
9. <http://coins.com/images/docs/QR-code.pdf>
10. <http://www.denso-wave.com>