Scan Med: A Healthcare Application using QR Code: A REVIEW

Unde Gorakh S¹, Ranjeet Kumar², Khan Abdullah³, Asst Prof Pooja Dagadkhair⁴

¹ UG Student, Computer Engineering, G.H.Raisoni COEM, Ahmednagar, Maharashtra, India
² UG Student, Computer Engineering, G.H.Raisoni COEM, Ahmednagar, Maharashtra, India
³ UG Student, Computer Engineering, G.H.Raisoni COEM, Ahmednagar, Maharashtra, India
⁴ Asst Professors, Computer Engineering, G.H.Raisoni COEM, Ahmednagar, Maharashtra, India

ABSTRACT

Medication adherence refers both to whether a patient correctly follows their prescribed schedule for a medication and to whether a patient finishes the course of their medication. There is a growing concern in the medical field, both on the side of physicians and other care providers as well as on the insurance and payer side about the impact medication non-adherence has on health care outcomes and costs. The widespread uses of smartphones at an unprecedented rate have revolutionized the way people access information particularly in the healthcare sector. The use of mobile healthcare applications is a dynamic field and has received great attention lately. This development provides mobile technology more attractive for mobile health (m-health) applications. The m-health is defined as a wireless telemedicine involving the use of mobile telecommunications and multimedia technologies and their integration with mobile healthcare delivery systems. M-health proposes the delivery of healthcare anytime and anywhere which surpasses geographical, temporal and organizational barriers. In this project, the m-health application is an Android-based reminder application developed for the usage on Smartphone. It addresses the common healthcare issue such as attending appointment and taking medication on a proper schedule as prescribed.

The m-health application also has an option of entering data in a quick and easy manner by using the chosen automated data-entry technology, the Quick Response (QR) code.

Keyword: - physicians, revolutionized

1. INTRODUCTION

The basic need of this project is to help people as soon as possible. There are lots of old peoples who cannot wait for treatment so for that people this system will prove beneficial to them. As lots of people will lose their prescription so that will prove dangerous for their health so to hide all the details of patient we are providing QR Code which will prove beneficial for patients. Failure to take medication as prescribed is a complicated and common problem. People have minor awareness and do not realize the damage and the consequence of non-adherence. There are numerous explicit and implicit factors contributing to poor medication adherence. Some notable explicit issues involve the discontinuing of medication, lapses in medication intake due to forgetting to take medication and inability to understand the instructions for medications involving inhalers or injections. To overcome this issue we implement system which will prove beneficial to peoples.

2. LITERATURE REVIEW

1] The importance of cryptography applied to security in electronic data transactions has acquired an essential relevance during the last few years. A proposed FPGA-based implementation of the Advanced Encryption Standard (AES) algorithm is presented in this paper. The design has been coded by Very high speed integrated circuit Hardware Descriptive Language. All the results are synthesized and simulated using Xilinx ISE and ModelSim software respectively. This implementation is compared with other works to show the efficiency. The design uses an iterative looping approach with block and key size of 128 bits, lookup table implementation of S-box. This gives
low complexity architecture and easily achieves low latency as well as high throughput. Simulation results, performance results are presented and compared with previous reported designs.

2] To study knee acoustical emission patterns in subjects with acute knee injury immediately follow wing injury and several months after surgery and rehabilitation. Methods: We employed an unsupervised graph mining algorithm to visualize heterogeneity of the high-dimension acoustical emission data, and to then derive a quantitative metric capturing this heterogeneity – the graph co-munity factor (GCF). A total of 42 subjects participated in the studies. Measurements were taken once each from 33 healthy subjects with no known previous knee injury, and twice each from 9 subjects with unilateral knee injury: first, within seven days of the injury, and second, 4-6 months after surgery when the subjects were determined ready to start functional activity. Acoustical signals were processed to extract time and frequency domain features from little time windows of the recordings from both knees, and k-Nearest Neighbor graphs were then constructed based on these features. Results: The GCF calculated from these graphs was found to be 18.5 ± 3.5 for healthy subjects, 24.8 ± 4.4 (p=0.01) for recently injured and 16.5 ± 4.7 (p=0.01) at 4-6 months recovery from surgery.

3] Simultaneous localization and mapping (SLAM) has a wide range of applications, such as mobile robots, intelligent vehicle localization, and intelligent transportation system. However, loop closure detection is a challenge task for SLAM. This task concerns the difficulty of recognizing already mapped areas. To this end, this paper proposes a novel loop closure detection method called image sequence matching (ISM), which only uses a low-cost monocular camera. This method rest divides the already mapped areas into some “feature-zones.” One feature-zone is selected by a novel topological detection model. Then, we adopt two different feature spaces to make sequence matching between query image and feature-zone. Last but not least, we propose a novel clustering method called voting K-nearest neighbor to fuse candidates. As a result, the ISM method has been validated by using collection data sets and public data sets, which were collected along different routes, covering different times and weather conditions. The total lengths of these routes are more than 10 km. Experimental results show that the ISM method can adapt to different times with good detection stability in varying scenarios. The mean of detection errors is all less than 1 frame and the detection accuracies are all more than 90% in these scenarios. Compared with other methods, the proposed method has high accuracy and great robustness.

4] Simultaneous localization and mapping (SLAM) has a wide range of applications, such as mobile robots, intelligent vehicle localization, and intelligent transportation system. However, loop closure detection is a challenge task for SLAM. This task concerns the difficulty of recognizing already mapped areas. To this end, this paper proposes a novel loop closure detection method called image sequence matching (ISM), which only uses a low-cost monocular camera. This method rest divides the already mapped areas into some “feature-zones.” One feature-zone is selected by a novel topological detection model. Then, we adopt two different feature spaces to make sequence matching between query image and feature-zone. Last but not least, we propose a novel clustering method called voting K-nearest neighbor to fuse candidates. As a result, the ISM method has been validated by using collection data sets and public data sets, which were collected along different routes, covering different times and weather conditions. The total lengths of these routes are more than 10 km. Experimental results show that the ISM method can adapt to different times with good detection stability in varying scenarios. The mean of detection errors is all less than 1 frame and the detection accuracies are all more than 90% in these scenarios. Compared with other methods, the proposed method has high accuracy and great robustness.

3. ACTUAL System Architecture:

In this system patient will add all his/her personal details and symptoms in system, after adding details system will generate QR Code of patient and recommend nearest hospitals and doctors to patient and go for treatment, after treatment doctor will give prescription about medicines and store it in patient’s ID and update it. After treatment patient will go to chemist for medicines chemist will scan his/her QR Code and give medicine of respected disease.
4. SUMMARY

Adhere is designed to be both user-friendly and cost-effective. Specifically, Adhere consists of a backend database, a patient-facing mobile application, and a doctor-facing web portal. The medical application alerts patients to take their medication, allows patients to scan QR codes for their medication, and allows patients to report any side effects. In summary, this research focuses on the development of an m-health application integrated with an automated data-entry technology to:

1. Encourage people to use m-health application Notification for health-related matter.
2. Increase patient adherences for doctor appointment.
3. Encourage patient to follow or obey medication Instruction.
4. Allow patient to obtain accurate information needed.

REFERENCES


