

Audio Guide for Patient Regarding Doctor's Prescription

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Abstract – A case history card holds information of the patient's anamnesis, pre-existing allergies, medical health conditions, given medication the patient is currently taking. Recording such patient information on a medical health card renders it prone to tempering, loss and misapprehension further confidentiality. We propose the application of Quick Response (QR) codes and doctors recorded audio to secure and transmit this sensitive patient information from one level of the health care to a different. Other security methods like steganography could be used, but during project we propose the utilization of QR codes as a result of the high proliferation of mobile phones within the nation, high storage capacity, flexibility, ease in use and their capability to take care of data integrity further as well as information in any format. Providing patients with recordings of their clinic visits enhances patient and family engagement, yet few organizations routinely offer recordings but not with quick response. Challenges exist for organizations and patients, counting data safety and navigating lengthy recordings. A secure system that permits patients to effortlessly navigate recordings and patients information intimately may be an answer.

Key Words: QR code, QR code generation, web interface, recordings, mic, xampp

1. INTRODUCTION

We are going to work on a Medical Application which will provide the patient to access the prescription provided by the doctor during a voice-to-listen format. Adding thereto we are engaged on the QR code for the prescription provided by the doctor.

The QR code will help the patient to scan it and to know about the details provided by the doctor, which incorporates each and each detail about the dosages, diet-plan and lifestyle. All this can be in Scan-To-Audio format which will help the patient to hear the details whenever needed.



Fig.- 1: Home Page



Fig- 2: Admin update page



Fig- 5: Contact us page

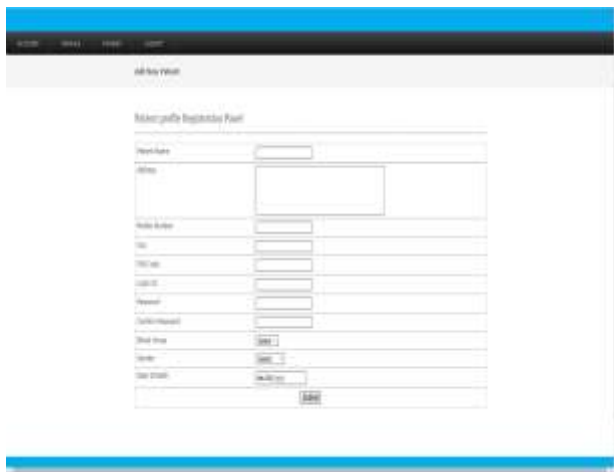


Fig.- 3: Patient registration page



Fig- 6: Admin login panel



Fig.- 4: Search patient page

- Fig.1 is homepage which encompasses the introduction to our website where one could examine us, or if needed can contact us and also login to our application.
- Fig.2 shows admin update page where the admin can login to their account through admin name and login id. This also shows where the admin is active or inactive.
- Fig.3 shows how the patient's registration is finished by filling up the form and their profile is created.
- Fig.4 Here one could search the patient profile which is able to show the small prints like patient name, admission details, address.

Implementation:

(a) Implementation Method:-

1. QR Code

- QR codes, urbanized by a Japanese company, are around for over fifteen years.
- With the approaching of smart and Web capable mobile devices, we observe a gradual growth of appealing commercial applications using QR codes.
- The main objective of our project is to present people with a technology which will enable them to get information about anything by simply scanning the QR code.
- The scanning end in obtaining the text information of a selected example and this information is further converted into speech using specialized software.

(a) 2. QR Code generation

- QR codes may be formed for free using any number of web-based forms.
- It is as easy as copying and pasting the chosen link URL into a text box and hitting "enter." You will have noticed that goo.gl even generates QR codes on the display page; this picture may be saved to your computer and used.
- However, goog.gl only generates very small codes that are inappropriate for many printed materials. For that cause we used the QR code generator located on the Kaywa website, a site which provides services for the mobile web.
- It is situated at <http://qrcode.kaywa.com/>. Following steps were permitted for generation of the QR code in Kaywa website:
 1. Copy the short code for the contented that you just generated with goo.gl
 2. Open <http://qrcode.kaywa.com/> and paste the address within the field labeled URL.
 3. Select the favored size of the Qr code that you just want to come up with and click on "generate" option. The QR code will show within in the hand side of the screen.

4. The generated code is saved by doing a right click on that using the mouse and saving it on the pc.

3. Algorithm for QR Code generation. [5]

```
import qrcode
qr=qrcode.QRCode(
version=1,
box_size=10,
border=5)
data="Patient profile"
qr.add_data(data)
qr.make(fit=True)
```

```
img=qr.make_image(fill="black",back_color="white")
```

```
img.save("1.png")
```



Fig.- 8:Sample QR Code

3. CONCLUSIONS

- Conveying useful information regarding any event in an exceedingly medical institute.
- Displaying a QR code on a prescription in files of patients can help in directing patients to the access proper information and healthcare.
- QR codes will encrypt the tremendous amount of knowledge in an exceedingly small format.
- Other specialist similarly as other doctor's needn't to ask patients to refill there details again and again.

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