

Doctor Patient Portal for Healthcare

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ABSTRACT: Today's life has become so diligent, no one has time to waste it on diminutive things and for that technology has become the puissance. Android Apps are very easy to operate in today's world, even diminutive kids can operate mobile contrivances and hence we have developed an android and web-predicated portal for medicos and patients. This portal will avail patients to directly communicate with the medicos registered on this portal and take exhortation, book appointment, contact to specialist, etc. The portal is divided into 2 modules. The first one is a web application for the doctors and an android application for users or patients. Both the modules have their own specialization and features.

KEYWORDS: doctors, patients, web-portal, android app, server, appointment, payment gateway, health care.

I. INTRODUCTION

Medico-Patient Portal is an Android app that establishes online communication between a medico and a patient. This app is subsidiary to patients to ask questions and verbalize their concerns to medicos regarding their health condition. This app will facilitate the patients to interact with medicos without making any physical appointments. In addition, utilizing this app, the patient can make an appointment to meet the medic in the clinic/hospital.

Medico-Patient Portal has unique features such as issuing an online prescription to patients,

referring patients to a specialist, sending health tips to patients, and efficiently, truncating the cost of customer accommodation, and providing a vital communication link between medicos and patients.

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II. LITERATURE REVIEW

1. The system is predicated on hospitality and healthcare. Paper proposed by Imteaj Zafar et al. proposes an android application system for both medicos and patients for the hospitality management.
2. Smartphone-predicated patient monitoring system for healthcare proposed by Meena Joseph denominated "DPP", which manages all the records regarding patient's history and their prescriptions.
3. "Health Plus" is a web-predicated portal developed by Harish Chabadiya it has three modules that can be operated discreetly. It is for booking appointments, maintaining records, etc.
4. "WE-Care" is an android and web-predicated system which has facilities of organs, blood, mazuma donation, and consult medico's system proposed by Mayur Arya.

III. METHODOLOGY



We came up with this concept to facilitate the workload of medicos and patients. Our system is both web-predicated and android predicated which is very easy to operate and it has many features so that one can get all the facilities in one app. This project is divided into two modules. The first one is the Admin Module that is web-predicated and the second one is the Utilizer Module that is an android predicated application.

Admin Module:

Admin Module has six features explained below.

1. View Appointments
2. Patient History
3. Health Tips
4. First Aid
5. Medicine Guide
6. Other Specialist

As shown above, admin or doctor has authority to view appointments, patient history that he or she has treated before for proper medication, give health tips to patient to keep them mentally and physically fit, suggest first aid if the patient is far away from the hospital or doctor, give medication guide for small health issues like headache, stomach ache, body pain, etc., and if the patient need any special treatment the doctor can suggest another doctor for treatment of the patient. The admin module is a web-based application which can be handled on PC, laptops and can be implemented easily in clinics and home. It is

developed by using technologies like HTML, CSS, jQuery, bootstrap, PHP & MySQL.

User Module:

The second module is android app for patient or a user, which includes features like:

1. Book Appointment
2. Doctors' Information
3. Ask Doctors
4. Organ/Blood Donation
5. Health Tips
6. My Profile
7. Appointment Fees
8. Contact Us

As shown above, user has also similar features like he or she can book appointment with the doctor by selecting time and date on the android application they are using, user can see doctors' information and ask for help to doctors anytime, they can search for organ donation, blood donation, they will get health tips, can change their profile, pay appointment fees directly to the doctor via online methods, contact hospitals or doctors for emergency purpose. The user module is an android application which can be run on any android device with the above-mentioned features. This app is developed using android studio.

IV. RESULT

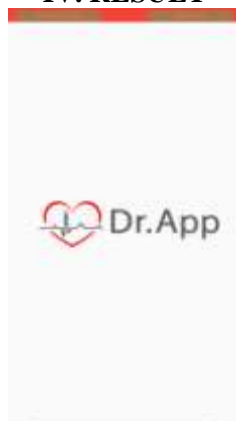


Fig. 1 Intro Screen



Fig. 2 Admin Login Portal

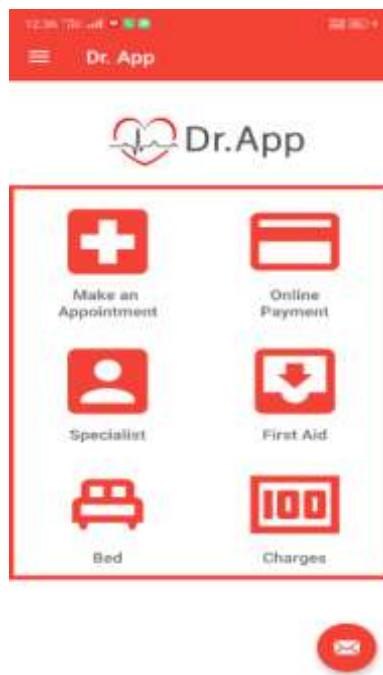


Fig. 3 Home Screen

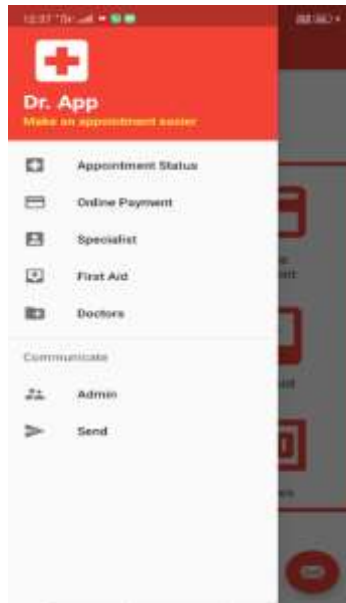


Fig. 4 Side Menu Bar



Fig. 5 Appointment Booking



Fig. 6 User info update

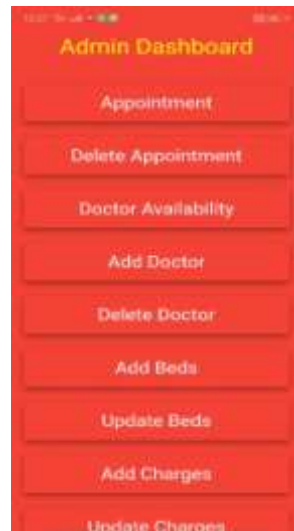


Fig. 7 Admin Dashboard



Fig. 8 First Aid suggestion

Available Beds		
Padole Hospital		
ICU 25	General 20	Covid 5
Armeja Hospital		
ICU 15	General 10	Covid 10
Sadar Hospital		
ICU 15	General 15	Covid 5
Keshav hospital		
ICU 25	General 15	Covid 10

Fig. 9 Bed Booking Option

Edit Charges		
Padole Hospital		
BP 250	Sugar 400	Covid 1500
Keshav hospital		
BP 300	Sugar 350	Covid 1500

Fig. 10 Charges Maintenance

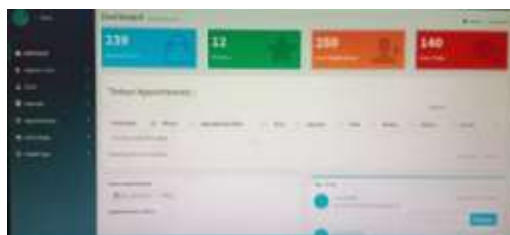


Fig. 11 Admin Panel

V. CONCLUSION

This Medico Patient Portal will avail the medicos and patients to facilely communicate via the cyber world and this will preserve the time of both. This system has all the features that a medico and a patient need. From booking an appointment to probe for organ and blood donation and consult specialist, pay fees directly to medicos account, etc. This portal is plenary safe and facile to utilize, specially designed to facilitate the work and preserve time. This will avail the healthcare system to grow more expeditious and ameliorate functionality with the avail of technologies. In the future, we will endeavour to integrate more features like send pictures of the affected area by disease and get donation avail for needy people so that they can be treated easily.

REFERENCES

- [1]. Arthur Hylton III and Suresh Sankaran Narayanan “Application of smart Agents in Hospital Appointment planning System”, International Journal of laptop Theory and Engineering, Vol. 4, August 2018, pp. 625-630.
- [2]. Deepti Ameta, Kalpana Mudaliar, and Palak Patel “Medication Reminder associate degreed care – A humanoid Application”, International Journal of Managing Public Sector data and Communication Technologies (IJMP ICT) Vol. 6, June 2019, pp. 39-48.
- [3]. Yeo Symey, Suresh Sankaran Narayanan, Siti Nurafifah Binti Sait “Application of Perspicacious Technologies for Mobile Patient Appointment System”, International Journal of Advanced Trends in technology and Engineering, August 2018.
- [4]. Jagannath Aghav, Smita Sonawane, and Himanshu Bhambhlani “Health Track: Health Monitoring and Prognosis System utilizing Wearable Sensors”, IEEE International Conference on Advances in Engineering & Technology Research 2020, pp. 1-5.
- [5]. YoeSyMey and Suresh Sankaranarayanan “Near Field Communication predicated Patient Appointment”, International Conference on Cloud and Ubiquitous Computing and Emerging Technologies, 2018, pp.98-103.
- [6]. Rashmi.Nimbalkar and R.A. Fadnavis “Domain-Categorical Search of Most proximate Hospital and Healthcare Management System”, Recent Advances in Engineering and Computational Sciences (RAECS), 2019, pp.1-5.