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HEALTH MONITORING SYSTEM USING ANDROID APP

¹L.Bharath Simha Reddy, ²Dr.M.Saravanamuthu

¹Student, ²Assistant Professor ¹Master of Computer Applications, Madanapalle Institute of Technology and Science, Madanapalle, India

Abstract: Generally in crucial case Patients area unit speculated to be monitored unendingly for his or her SP02, rate similarly as temperature. Within the earlier ways, the doctors got to be gift physically or in many cases SMS are sent exploitation GSM. Within the earlier case the history of the patient cannot be displayed, solely current knowledge is displayed. Within the current paper, we have a tendency to area unit employing a novel plan for continuous observation patient's health conditions. The health care theme is concentrate on the measuring and observation numerous biological parameters of patient's body like rate, O saturation level in blood and temperature employing a net server and automaton application, wherever doctor will unendingly monitor the patient's condition on his good phone exploitation Associate in Nursing automaton application. And additionally the patient history are hold on the online server and doctor will access the knowledge whenever required from anyplace and wish not physically gift.

IndexTerms - Body temperature, pulse rate, ECG, GPRS Modem, Android smartphone.

I. INTRODUCTION

This app focuses on developing an application with major core features to tackle issues from a different approach. The health care scheme is focus on the measurement and Monitoring various biological parameters of patient's body like pulse rate, gas saturation level in blood and temperature employing a net server and robot application, wherever doctor will incessantly monitor the patient's condition on his sensible phone victimization Associate in Nursing robot application. And additionally the patient history are going to be keep on the online server and doctor will access the knowledge whenever required from any place and wish not physically gift.

Mobile Application for locating, Managing and Commercialize Pharmacy is generated from this application additionally provides Pharmacy a platform to commercialize their store and promoting their Product. As for public users, they will to boot manage their pill consumption intake by setting academic degree alarm which will invariably prompt them once to consume the tablets. The analysis had been done and necessities area unit being documented properly. To confirm the potency of the top product, the literature review on existing system and technology also are vital. Additionally, the selection on the chosen code style plays an important role in organizing requirements, maintaining the quality and facilitate supporting this application development.

II. EXISTING SYSTEM

Normally the patient need to move to the hospital to know about his health conditions and to find the condition of the patient they have to analysis the reports with the conventional reports then will predict whether or not the patient is in normal condition or Abnormal. This approach is time taken and for each and every time to knowing his health condition patient need to move to the hospital for each and every time although he had the Reports . To minimize all this in the proposed system of health monitoring system using android we can predict the health condition of the patient.

III. PROPOSED SYSTEM

In this by using the software the patient can easily find whether he is in normal condition or in abnormal condition. When the patient enters the reports in that Particular fields the system compare them with the values of a healthy person which is preloaded in the system. By analyzing them the system can predict whether or not the person is traditional or in abnormalcy. If he is abnormal then by using the GPS the patient will rush to the nearest hospital shown in the system.

IV. IMPLEMENTATION

The following Android Architecture shows that the applications which are used and also the application framework and libraries which are used in the project as shown in the figure 1.

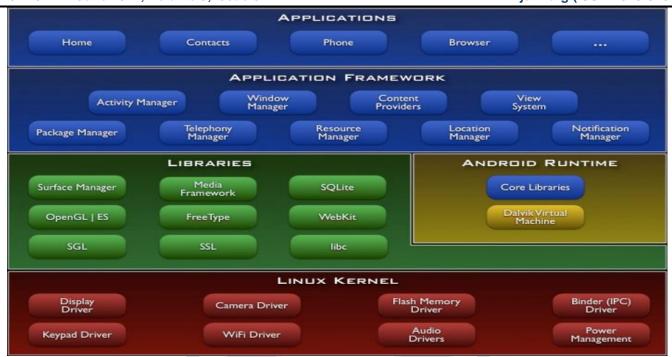


Fig 1: Android Architecture

4.1Android Runtime

Android includes a set of core libraries that provides most of the functionality available in the core libraries of the Java Programming language. Every automaton application runs in its own method, with its own instance of the Dalvik virtual machine. Dalvik has been written in order that a tool will run multiple VMs expeditiously [6]. The Dalvik VM executes files within the Dalvik feasible (.dex) format that is optimized for lowest memory footprint. The VM is register-based, and runs categories compiled by a Java language compiler that are remodeled into the .dex format by the enclosed "dx" tool. The Dalvik VM depends on the Linux kernel for underlying practicality like threading and low-level memory management.

4.2 Linux Kernel

Android depends on Linux version two.6 for core system services like security, memory management, method management, network stack, and driver model. The kernel additionally acts as associate degree abstraction layer between the hardware and also the remainder of the code stack.

The UNIX system system} kernel is Associate in Nursing software kernel employed by the UNIX system family of Unix-like operating systems [5]. it's one in all the foremost outstanding samples of free and open supply computer code. The Linux kernel is released under the GNU General Public License version 2 (GPLv2), (plus some firmware images with various licenses), and is developed by Contributors Worldwide. Day-to-day development takes place on the UNIX kernel listing.

4.3 Libraries

Android includes a collection of C/C++ libraries employed by numerous parts of the robot system. These capabilities square measure exposed to developers through the robot application framework. a number of the core libraries square measure listed below:

- **Media Libraries** based on Packet Video's Open CORE; the libraries support playback and recording of many popular audio and video formats, as well as static image files, including MPEG4, H.264, MP3, AAC, AMR, JPG, and PNG
- Surface Manager manages access to the display subsystem and seamlessly composites 2D and 3D graphic layers from multiple applications
- Lib Web Core a modern web browser engine which powers both the Android browser and an embeddable web view
- **SGL** the underlying 2D graphics engine
- **3D libraries** an implementation based on OpenGL ES 1.0 APIs; the libraries use either hardware 3D acceleration (where available) or the included, highly optimized 3D software rasterizer
- Free Type bitmap and vector font rendering
- SQLite a powerful and lightweight relational database engine available to all applications.

4.4 Hardware Running Android

The main supported platform for Android is the ARM architecture. The Android OS can be used as an operating system for cell phones, netbooks and tablets, including the Dell Streak, Samsung Galaxy Tab, TV and other devices. The first commercially available phone to run the Android operating system was the HTC Dream, released on 22 October 2008. In early 2010 Google collaborated with HTC to launch its flagship Android device, the Nexus One.

V. RESULTS AND DISCUSSION

This is the homepage of health monitoring system using android app. In this home page there are health monitoring, Diagnosis, nearby hospitals, water level intensity, foot step monitoring, position estimation as shown in the figure 2.

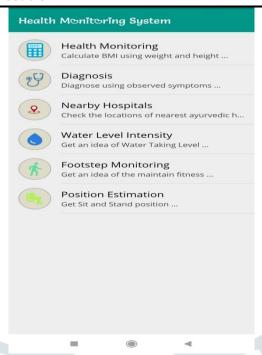


Fig 2: Home page

To Access all the features of the health monitoring system as shown in the figure 2.We need to login using user name and password as shown in the Figure 3.



Fig 3: Login page

This app is used to Diagnosis the health condition by updating the symptoms and click on submit then it will shows the health condition as shown in the figures 4 and 5.

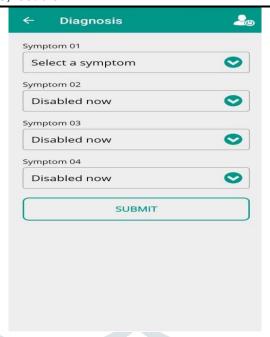


Fig 4: Symptoms page

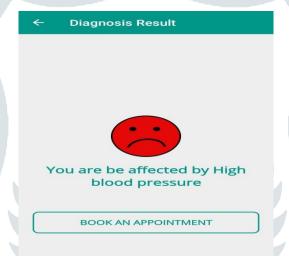


Fig 5: Disease page

After knowing the health condition if you need to have a treatment then you should book an appointment as shown in the Figure 6.



Fig 6: Appointment page

VI. CONCLUSION

The purpose of the review is to look at the prevailing technology in location based mostly services for health care and create use of the current technology for development within the future findings. conjointly the study helped U.S. to grasp the assorted existing and blooming technologies within the tending like graphical record ,EMG observation through automaton apps, usage completely different protocols for transferring data's like MQTT,TCP/UDP, OCN documented mode ,WLAN technologies etc.

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