**HEALTH MONITORING SYSTEM BASED ON ANDROID**

**AIM:**

Themainaimoftheprojectistodesign a system which is used to monitor the patient condition using Bluetooth technology **“Remote Health monitoring of elderly persons by using android based mobile data acquisition (DAQ)”.**

**EXISTING METHOD**:

In the previous existing method PC devices used as data acquisition (DAQ) systems we are able to collect vital information about the elderly patients remotely. Existed system which monitors temperature & pulse rate of different patients and immediate action is taken using Bluetooth technology.

**PROPOSED METHOD:**

The Mobile Hub has many attractive features cheaper price, portable, location awareness, inbuilt touch screen , however on the other side it has also significant limitations compared to a full PC hardware like limited CPU power, memory, storage size and external interface connection support, The Mobile Hub is targeting different functionalities compared to the Home Hub solution due to the smaller screen size and fewer hardware interfaces, and it can extend the usability with additional special features, such as mobility, location awareness and small size. Mobile Hub software is capable to run almost all Bluetooth enabled and Android based Smartphone. In a sudden panic situation an alarm can be activated manually (by the patient) or automatically (by e.g. the accelerometer) with the mobile device.

**BLOCK DIAGRAM:**

**MICRO CONTROLLER (AT89S52)**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**BUZZER**

**SENSORS**

**(TEMPERATURE, PULSE, MEMS)**

**BLUETOOTH MODULE**

**BLUETOOTH TECHNOLOGY:**

Bluetooth was selected as our way of communicating PDA/Mobile with a central system. The reason Bluetooth was selected over Bluetooth for various reasons. First of all, Bluetooth security is less complex and more stable than that of Wi-Fi. Bluetooth manages a security measure of only permitting certain selected devices to interact with them; Wi-Fi in the other hand establishes a WEP key that has been known to be cracked. Another reason that Bluetooth was selected over Wi-Fi is that Bluetooth has a shorter range of signal emission than Wi-Fi. This is a pro because the shorter the range the less the amount intruders that will try to infiltrate your home system.

**ANDROID:**

Android is a software stack for mobile devices that includes an operating system, middleware and key applications. The [Android SDK](http://developer.android.com/sdk/index.html) provides the tools and APIs necessary to begin developing applications on the Android platform using the Java programming language.

**SOFTWARE :** Embedded ‘C’

**TOOLS :** Keil uVision, ISP, android .apk file.

**TARGET DEVICE :** 8051, Smart Mobile.

**APPLICATIONS :** Medical application.