

**Research Article**

**Medical record management for industry employees**

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**Abstract**

The last few years there has been ascend in the quantity of utilization dependent on raspberry pi and RFID (Radio Frequency Identification) cards and has been effectively applied to the Health global positioning framework. This framework works with computerization regarding conglomerating the quantity of head check and is overseen totally by a robotized framework. In this paper, an endeavor is made to tackle the current issue of irregularity, time utilization and furthermore end of desk work. The current framework has different defects like class Health are not secure, tedious and it very well may be inclined to blunders in the event that it is taken verbally or outwardly. The arrangement of the venture will comprise of a Raspberry pi with an appended RFID card and RFID per user. Every Patient will be needed to have their Patient ID card (RFID card) which will guarantee consistency. The Health Tracking framework will depend intensely on PC equipment and its backend information base and a RFID card which does all the preparing assignments when the framework is interconnected and prepared for execution.

**Keywords:** Fingerprint sensors; Raspberry Pi; Radio Frequency Identification; Health Tracking framework.

**Introduction**

Wellbeing is basically used to keep up the record of Patient present in the school or universities which serves as a fundamental prerequisite for the control and for giving quality training in an organization [1]. Traditional strategy utilized for following Health is by calling names or move number of every Patient and then marking present or missing in like manner. There are various defects in the current arrangement of RFID as well [2]. Raspberry Pi is a dynamic microcontroller that is capable of pretty much a PC is, no matter how little the extent of the system might be, it assists saving with timing by performing a mechanized and more exact cycle of taking Health records[3].

The Health Tracking framework will empower instructors and Patient to get down to the matter of learning as rapidly as conceivable without sitting around idly with the manual interaction of taking Health process. We have recently utilized RFID in large numbers of our RFID projects and right now constructed a RFID

based Health System utilizing 8051, here we will assemble RFID Based Health System utilizing Raspberry Pi [6]. In this RFID based Health System project, we will explain you that how can we approve and count Health consequently by utilizing RFID cards. RFID Technology (Radio Frequency Identification and Detection) is normally utilized in schools, colleges, offices and stations for different purposes to automatically monitor individuals. Here we will count the Health of an approved individual by using RFID.

**Proposed work**

The proposed framework gives option in contrast to the current issues. The manual business interaction of taking class Health at a college is the extent of the venture. This conflicting cycle is the territory where the proposed framework will add advantage to an association [2]. The mechanization of this manual interaction will consider more class time to be spent on instructing and less on this obligatory cycle. The chance in this undertaking is the capacity to

begin classes on schedule immediately. The point of the venture is to devote more opportunity for the learning.

The proposed framework will deal with the accompanying sorts of information:

1. Patient data: This will remember explicit data for respects to every Patient Address, for example, Patient id, Name (First, Middle, and Last).

2. Class Enrollment data: This will incorporate the rundown of enlisted Patient for an explicit class.

3. Reports: Reports can be created for the association, educators, just as Patient keen on their own Health; how frequently have they missed class, or been late. RFID Reader and Tags: RFID is a gadgets gadget which has two sections - one is RFID Reader and other is RFID tag or Card. At the point when we put RFID tag close to the RFID per user [1], it peruses label information sequentially. RFID tag has 12-digit character code in a curl. This RFID is working at baud pace of 9600 bps. RFID utilizes electromagnet to move information from Reader to Tag or Tag to Reader mail.

## Hardware used

### RFID

Radio-Frequency-Identification (RFID) utilizes electromagnetic fields to naturally recognize and track labels joined to objects. A RFID framework comprises of a small radio transponder, a radio beneficiary and transmitter (Fig. 1). When set off by an electromagnetic cross examination beat from a close by RFID peruse gadget, the tag communicates computerized information, normally a recognizing stock number, back to the user. This number can be utilized to follow stock merchandise [7]. There are two sorts of RFID labels: Inactive labels are controlled by energy from the RFID per user's grilling radio waves. Dynamic labels are fueled by a battery and hence can be perused at a more noteworthy reach from the RFID per user, up to many meters.



Fig. 1. RFID reader

### LCD display

LCD work by utilizing liquid crystals to create an image [3]. The liquid crystals are installed into the showcase screen, and there's some type of backdrop illumination used to enlighten them. The real fluid gem show is made of a few layers, including a spellbound channel and anodes. The LCD display used in this study is shown in fig. 2.



Fig. 2. LCD display

### Raspberry Pi

The processor has totally changed on the new Raspberry Pi B v1.2 (Fig. 3), rather than an ARM v6 center chip (arm6l) or ARM v7, the BCM2836 has been moved up to a BCM2837 (ARM Cortex-A53) center. In any case, your current Raspberry Pi SD card pictures may not work on the grounds that the firmware and portion should be recompiled/adjusted for the new processor. When overhauled, the card will chip away at both Pi 1 and Pi 2 PCs. On the off chance that you have any pre-arranged parallels that you are downloading, those may require refreshing as well, to exploit the speed increment. Anything where you approach source code can be recompiled and should turn out great.



Fig. 3. Raspberry Pi

## Software used

### Python

Python is a deciphered, significant level, universally useful programming language. Made by Guido van Rossum and first delivered in 1991, Python has a plan reasoning that accentuates code coherence, quite utilizing huge whitespace. It gives builds that empower clear programming on both little and enormous scopes. In July 2018, Van Rossum ventured down as the pioneer in the language local area. Python includes a unique sort framework and programmed memory the executives.

It upholds various programming ideal models, including object-arranged, basic, utilitarian and procedural, and has an enormous and thorough standard library. Python interpreters are open for some functioning structures. C, python, the reference execution of Python, is open source programming and has a neighborhood improvement model, as do for all intents and purposes the total of Python's various executions. Python and C, python is supervised by the non-advantage Python Software Foundation [6].

Python is a multi-perspective programming language. Article orchestrated programming and coordinated composing PC programs are totally maintained, and huge quantities of its features support down to earth programming and viewpoint arranged programming (tallying by meta programming and metaobjects (magic methods)). Many diverse ideal models are maintained through extensions, including plan by understanding and reasoning programming. Python uses dynamic forming, and a blend of reference checking and a cycle-recognizing city worker for memory the board.

### Conclusions

Clinical records outline a huge piece of a patient organization. It is huge for the subject matter expert and clinical establishment to properly keep up the records of the patient for two critical reasons. Introductory one is that helps in genuine appraisal of the patient and to plan treatment show. Second is that the general arrangement of laws relies generally upon account confirmation in occasions of clinical thoughtlessness. As such, clinical records should be fittingly made and

saved to serve the interest of expert comparably the patient.

### Conflicts of interest

Authors declare no conflict of interest.

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