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IoT Based Patient Caretaker System

Preeyatosh Naik [1], Shankargoud Patil [2]

[1] Dept of Electronics and Communication Engineering S.G. Balekundri Institute of Technology Belagavi Karnataka,India preeyatoshn@gmail.com

[2] Assistant Proferssor Dept of Electronics and Communication Engineering S.G. Balekundri Institute of Technology Belagavi Karnataka, India shankargoudp@sgbit.edu.in

ABSTRACT:

For this project, our goal was to develop a shoe that could quickly inform the user of any patient Information. Although we believe that elderly users will benefit more from this, people of all ages with movement and vision impairments will find use for this device.The shoe will be able to deliver real-time results from the user's walking by utilising the internet of things (IoT) concept to identify and translate physical data from the actual world. The development of technologies for the automatic detection of falls has gained traction in recent years as a modern solution to some of these issues. These devices use technology to determine when a fall occurs and when an alert should sound.

Keywords: IoT, , Monitoring , shoe, Arduino UNO, GSM Module, GPS Module, Tilt Sensor.

INTRODUCTION

The user would be able to see the data for themselves through the application of shoe That could Detect Patient Information. The Patient will be tracked by the shoe, which will then be able to provide the user with various feedback over the course of a few minutes, including the level of Care they require as well as Collecting the Patient daily Data. A daily suggestion would be to Take care of Patient I case of Emergency We Can track him Trough Gsm Module and Gps Location People Like who are Handicap,Elders,Childrens Can be Tracked Through this module these conditions may benefit from wearing these shoes in a variety of ways.

So that the position of the patient may be tracked in real time when he is ill, it is necessary to develop and construct a wearable technology system that isn't large and uses very little power. Such a system is capable of keeping track of sensor data, uploading it to a cloud over the internet, and leveraging the Internet of Things to make some kind of judgement. The difficulty is what kind of technology would be employed to solve the aforementioned issue quickly and properly.

LITERATURE REVIEW

It is currently a significant issue because of the advancement of wireless mobile technologies and medical awareness. Healthcare solutions that are available everywhere and anytime have therefore gained importance. Android smartphone devices have observed and analysed the ECG via the fourth mobile monitoring terminal to meet our needs. We can lessen the difficulties of wired networks and relocate healthcare from one site thanks to the usage of wireless sensor networks in healthcare. The monitoring system is expanded by using the mobile phone as a barcode decoder for medical care. in order to offer medical treatments that are better and more complete. Barcode decoders can be used to verify information and help patients manage their medications.

- Dementia is best described as a dynamic sensory system problem that promotes the development of psychological abnormalities. In the seventeenth century, it was described as the absence of limits and was seen as dynamic and hopeless.
- The World Health Organisation defines dementia as "a cerebral illness, typically an ongoing or dynamic illness, which incorporates clutters of memory, considering, introduction, and understanding and other advanced cortical capacities, computation, and learning," according to Cole (2012). Ability, dialect, and discernment.
- This is before medical professionals and researchers understand that this is caused by brain ageing. It is challenging to identify and pinpoint the precise origin of dementia because it has so many distinct manifestations. The brains of deceased dementia patients must be thoroughly autopsied in order to make a conclusive diagnosis of the disease. The financial impact of dementia is significant.

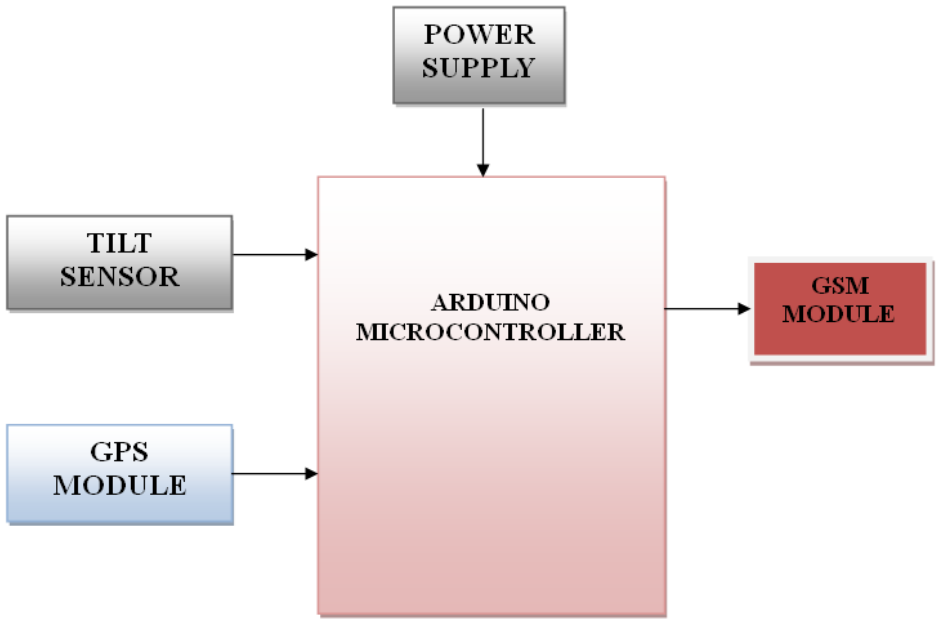
PROBLEM STATEMENT

In the current study, a caretaker must be employed continuously for people who have Loss of Memory In elderly person, which is not practical in real life. While the carer may have fallen asleep or left the room, Loss of Memory patients may have wandered off or fallen and suffered severe head injuries. There may have been significant blood loss from the head by the time the caretaker returned, which might have resulted in the patient's death.

PROPOSED WORK

The suggested technique offers Loss of Memory in Elderly persons sufferers numerous benefits. Loss of Memory patients require additional attention. We are developing a model with a sensor that may be used quickly to recognise Loss of Memory patients with poor Sight or vision problem. It displays the Location of the patient. The suggested system monitors the present location An alert SMS with the patient's Suffering from Loss of Memory patients' falls. A text message alert is delivered to both the doctor and the caretaker if the patient falls .

The wireless sensor network should alert the user if the tag signal stops because the patient has moved to an inaccessible place or the tag's battery has run out. The system should be able to Detect the person Condition across time.



RESULTS

The carer who knows exactly where the patient is. Additionally, the suggested method addresses the issue of Loss of Memory patients' fall. A text message alert is delivered to both the doctor and the caretaker if the patient falls.

The wireless sensor network should alert the user if the tag signal stops because the patient has moved to an inaccessible place or the tag's battery has run out. The system should be able to send Patient information to the Cretaker across time.

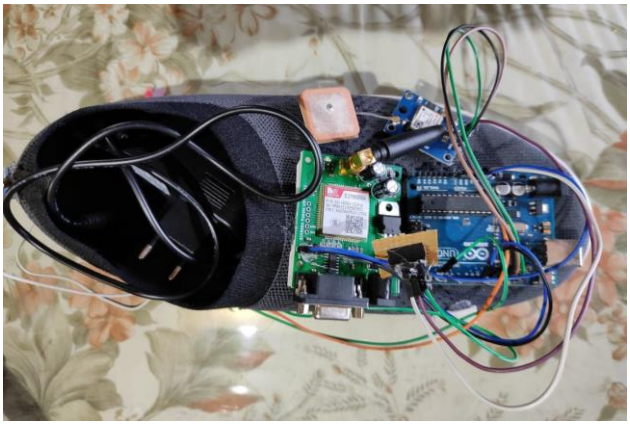


Fig 2. Over All Module

CONCLUSION

Building a shoe device that tracks the patients' present location was the goal of the current project. As was said in the introduction section, Loss of Memory in Elderly Person , thus it's critical to monitor the whereabouts of patients who are experiencing the condition. Additionally, identifying the patient's fall was another goal of the current investigation. When a patient Falls for any cause, the device notices it and alerts the caretaker and doctor through SMS.

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