

IoT BASED IMMOBILITY PATIENTS MONITERING SYSTEM

MENTORED BY

**T.GOWTHAMRAJ,AP/EEE
KARPAGAM COLLEGE OF ENGINEERING**

PRESENTED BY

**REEMA MANSOORA.S
SURYAVADHANI.D**

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ABSTRACT:

The most common disease that results in immobility is Paralysis. Paralysis is the inability to move muscles on your own and with purpose. It can be temporary or permanent. Even though, there are innovative approaches for curing or treating paralysis patients, but it still can't make the patient to convey their needs and the aim of our project is to help a person to convey their needs by making them as independent as possible.



INTRODUCTION:

Our project main aim is to convey immobility patients need. For that purpose we used accelerometer, MPU6050 and ESP3266 to sense their gesture and convey the gesture as a message to their needs respectively.

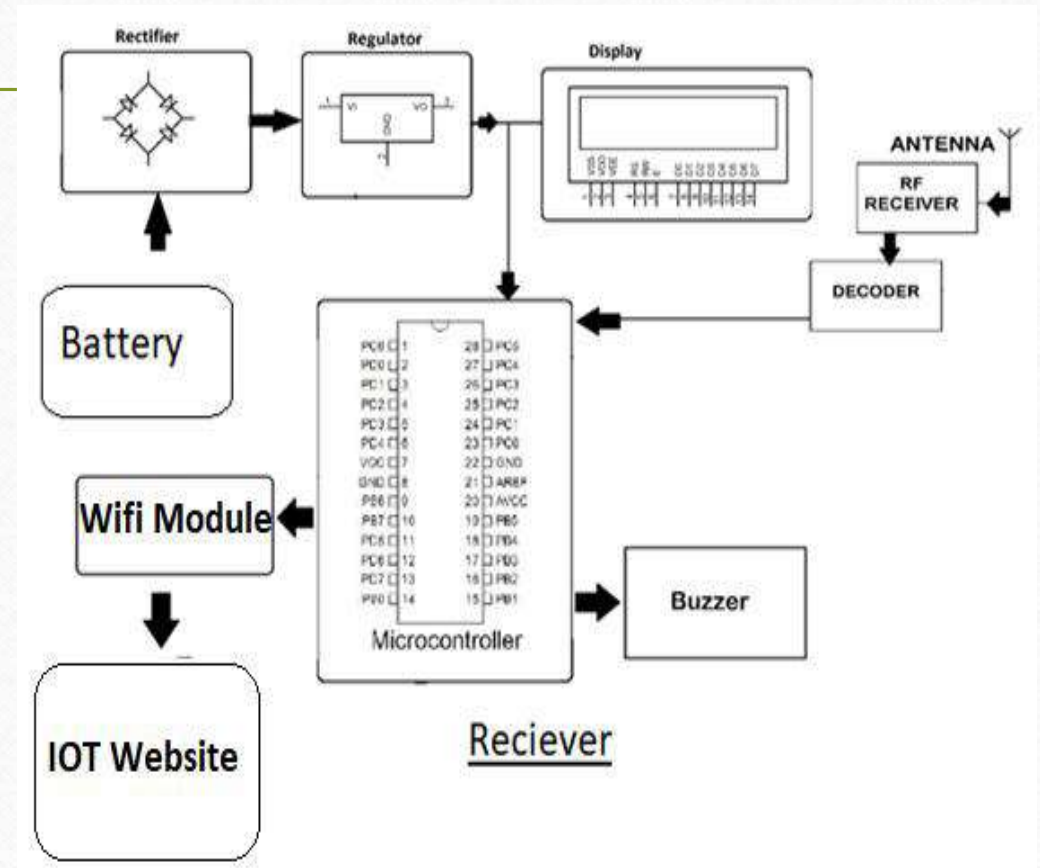
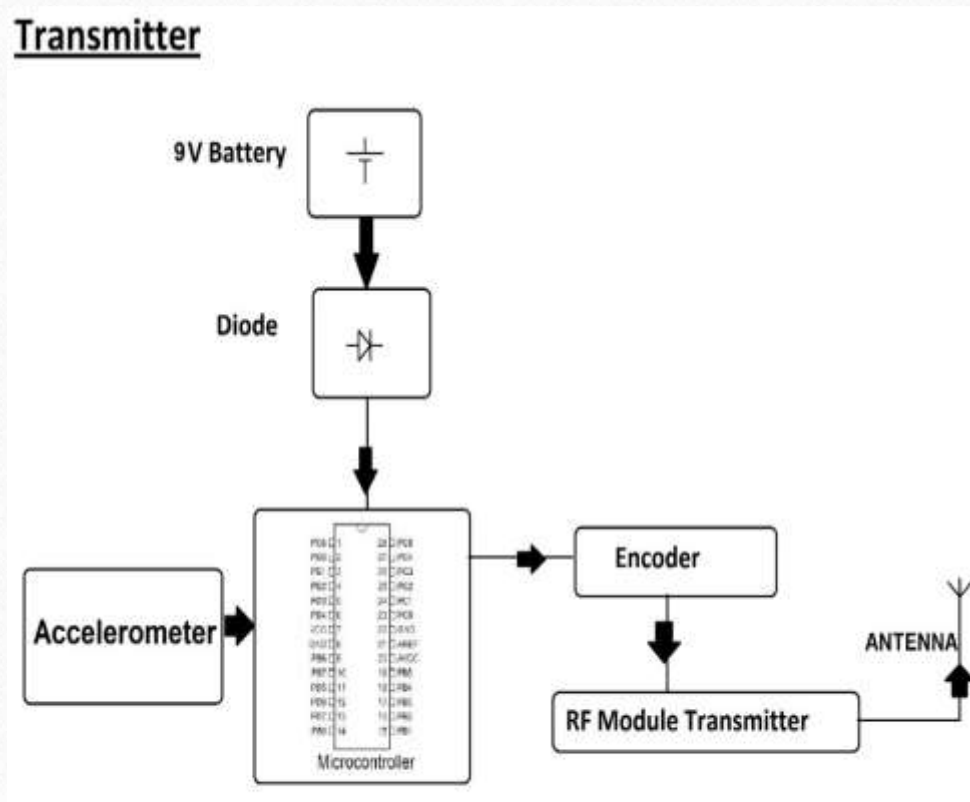
Paralysis patients statistics in india

Total population and the population of disabled person India- census,2011

Population, India 2011			Disabled persons, India 2011		
persons	Males	Females	Persons	Males	Females
121.08 crore	62.32 crore	58.76 crore	2.68 crore	1.50 crore	1.18 crore

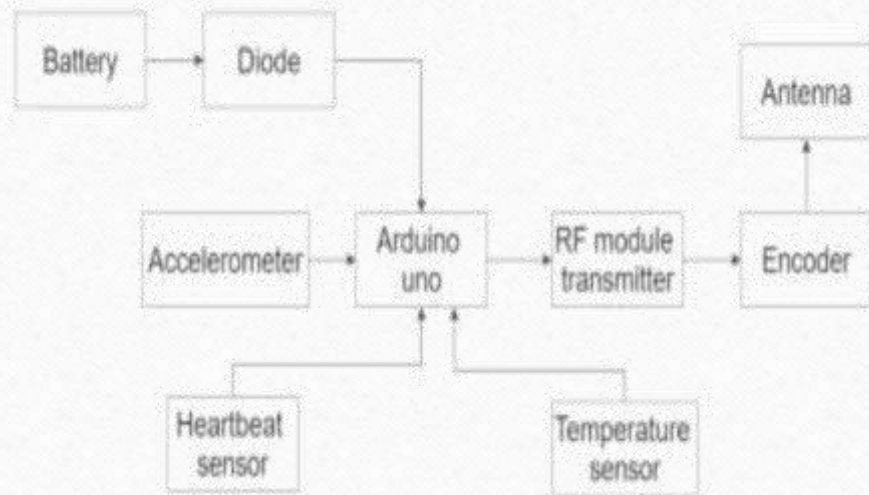
EXISTING METHOD:

Transmitter

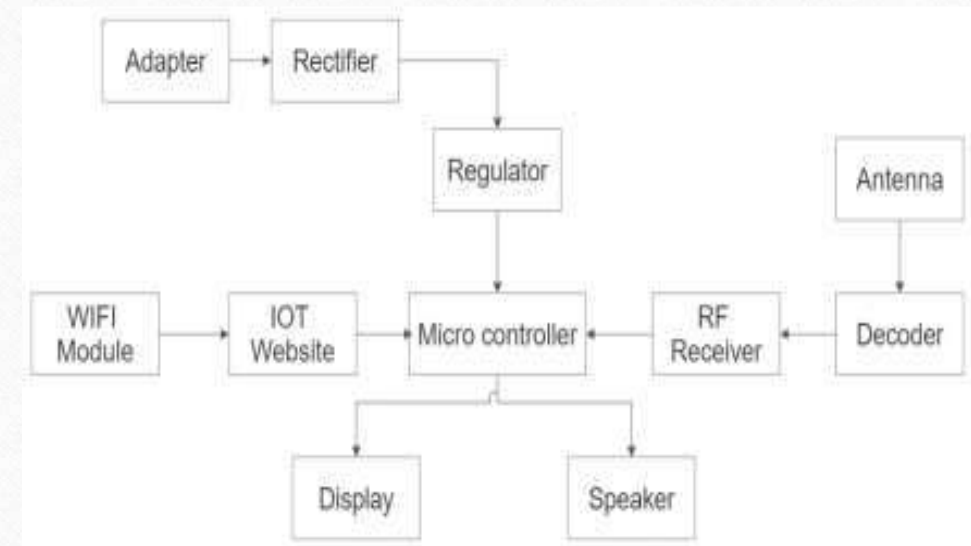


BLOCK DIAGRAM:

TRANSMITTER:



RECEIVER:

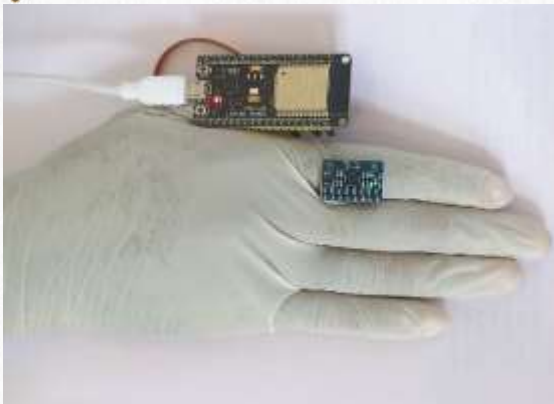


METHODOLOGY:

- MPU6050 is a micro electro mechanical system that consists of a 3-axis Accelerometer and 3-axis Gyroscope inside it. It can detect the gesture of the hand of the immobility patient. ESP3266 has a faster wifi compared to its ancestor ESP8266, which converts digital data from the WiFi and Bluetooth modules and converts them into electromagnetic signals to communicate with your mobile phone or website. Here, we created a website namely, Pavantech. The signals reach the website using ESP3266, and output will be displayed

RESULT:

The work of *IOT BASED IMMOBILITY PATIENTS MONITORING SYSTEM* is the medical based project aiming to treat the paralysis patient as independent as possible. This system helps patient overcome barriers to convey their needs without putting efforts. Moreover this can be modified to be used for several purposes where persons mobility is affected. The practical implementation of the idea has been brought successfully.



S.No	Status	Date_Time
154	Need Water	2022-09-16 21:05:56
153	Emergency	2022-09-16 21:05:49
152	Emergency	2022-09-16 21:05:42
151	Emergency	2022-09-16 21:05:34
150	Need Water	2022-09-16 21:05:27
149	Emergency	2022-09-16 21:05:07
148	Need Water	2022-09-16 21:04:37
147	Need Water	2022-09-16 21:04:27
146	Need Water	2022-09-16 21:04:20
145	Emergency	2022-09-16 21:04:12
144	Need Water	2022-09-16 21:04:05
143	Need Water	2022-09-16 21:03:58
142	Emergency	2022-09-16 21:03:50



ADVANTAGES

- Disable people can easily communicate with other people.
- Disable people can ask for help if they need.
- Secured and reliable communication.

LIMITATIONS

- Proper Internet is required for communicating the people.

APPLICATIONS:

- Hospital for communicating with doctors and nurses.
- Elder people can use in old Age home .
- It can also used to indicate if the coma patient is awake or not.




Future scope:

In future, We will be adding buzzer or speaker to the device ,so that the caretaker can do their work. To that we can add heartbeat sensor and temperature sensor to monitor their health frequently .In addition we planned to make advanced version of this project with eye sensor, it makes the patients more comfort.



REFERENCE:

- 1) Abhijeet Botre et al (2016) " Assistance system for paralyzed" published in International Journal Of Innovative Research In Electrical ,Electronics, Instrumentation And Control Engineering ,Vol 4,Issue 5.
- 2) Gomez-Vilda et al (2016) "~~Vocal-fold paralysis patients treated with stem-cell grafting~~" published in International Conference on Pattern Recognition Systems (ICPRS-16).
- 3) Rolga Roy (2016) "Methodologies to assist paralysed patients" published in International Journal Of Advanced Research In Electrical, Electronics And Instrumentation Engineering, Vol 5, Issue 3.
- 4) Hemakshi Pawar et al (2015) "Assistive Interactive Device using Electro-Oculography " published In International Journal of Advanced Research in Computer Engineering and Technology ,Vol 4,Issue 1.
- 5) Alyson Matheus de Carvalho Souza et al (2012) "Hand copter Game" published in Virtual and Augmented Reality (SVR).



**ANY
QUESTIONS?**

A white rectangular card is pinned to a dark brown wooden surface with a light-colored clothespin. The card features the text "ANY QUESTIONS?" in a bold, dark brown, textured font. A thin white string is visible behind the card, and the entire scene is framed by a white border.

THANK
YOU

