

A silhouette of a child reaching up to hold an adult's hand against a bright sunset sky with a faint rainbow.

**CHILD**

**SAFETY**

# BASE X

## TEAM MEMBERS:

1. Suraksha Mandhan
2. Satvik Shrivastava
3. Chahat Tekwani
4. Ayushi Singh
5. Devesh Chawda

# Outline:

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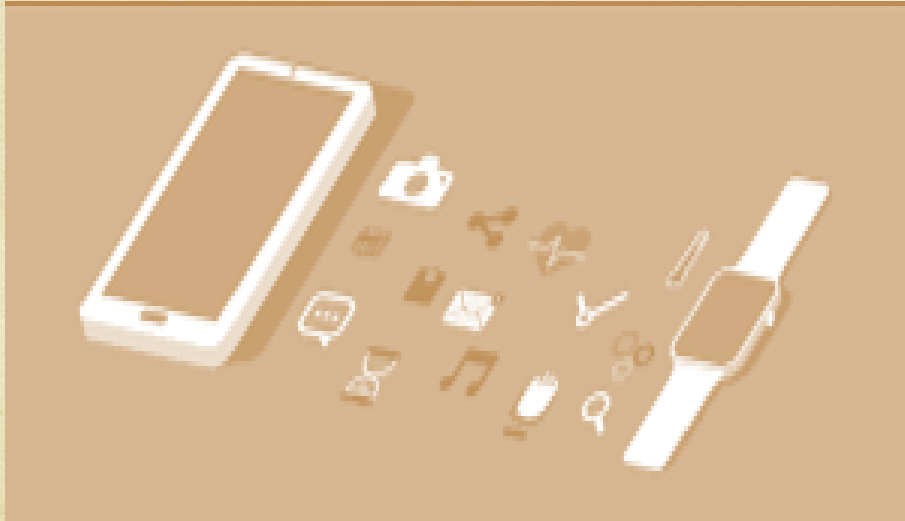


# Introduction

- The objective of this project is to safeguard the child from threats. We are taking small step towards violence against the kids. Our project mainly focuses on monitoring the activities of the child and notify about its current status.
- If child reaches the critical state then the particular location is sent as an alert message to the parents. A MEMS sensor is used to detect the abnormal vibration and controlled by NodeMCU micro controller.



- The child safety device is capable of acting as a IOT device it provides parents with the real time location and the ability to locate and rescue the child.



- The smart child safety wearable can be enhanced much more in future by using highly compact arduino modules such as the lily pad arduino which can be sewed into fabrics.

# Pre developed devices:

## 1. Trakbond GPS trackers for kids:

Live tracking - keep your little ones close when they are away from you, from any corner of the world. The GPS locator will show the exact position of your kids on live maps on your smartphones.





## 2. Marock GPS trackers :



Anti-lost alarm, remote control function, protect your valuables, kids, pets from theft or loss.

It can also provide a last seen pin-drop on map via app to help you recover your items and search your cars in parking site.

# Problem Statement

- Child safety is a very big and unsolved issue in our society. Many of the crimes are left without reported.
- Each and every day young children are being assaulted, molested and violated.
- The crime rate is growing steadily since last few decade. Hence this device makes a step forward and safes victims from such situations.



## Downside of prior implementation:

- One of the biggest disadvantage faced by users was that while using this device in any place there must be efficient flow of internet connections otherwise it take time for the result.

# Solution

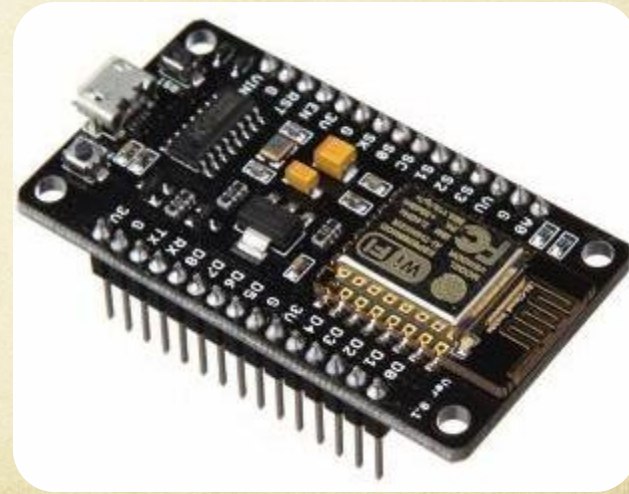
- Our efforts would include creating a device that will notify the parent when the child will be in danger with the help of a SMS alert that uses GSM technology which doesn't requires internet connectivity.
- The machine learning algorithms used make the device intelligent and the accuracy of which increases with continued use. A device like this improves the level of safety of child.
- Accurate recognition of a dangerous situation is a complex matter, however, the scope for improved accuracy is promising.



# Tech Support

## 1. NodeMCU:

NodeMCU is an open source IoT platform. It includes firmware which runs on the ESP8266 Wi-Fi SoC from Espressif Systems and hardware which is based on the ESP-12 module. The type of NodeMCU is Single-board microcontroller.





## 2. GPS:



Global Positioning System is a satellite based navigation system, provides real time and location based information to a GPS receiver, located anywhere on or near earth surface.

In this project we are going to interface a GPS module with NodeMCU.

NodeMCU starts web server and waits for a client to get connected to the web server. Once client is connected to the web server, NodeMCU sends location details to connected client.

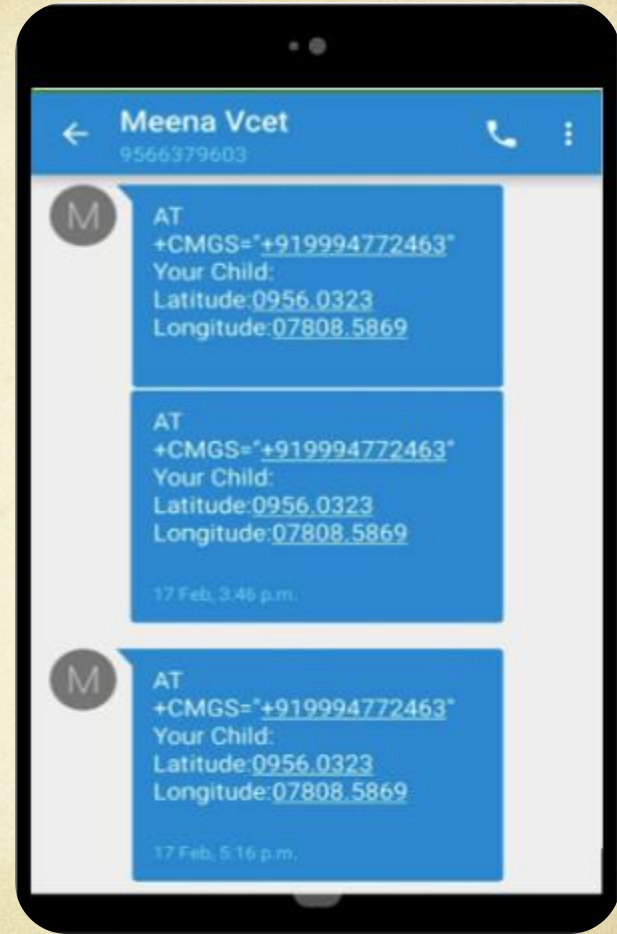
### 3. GSM:

- Global System for Mobile Communication is an open and digital cellular technology used for transmitting mobile voice and data services.





This is how you will  
be notified .





# Conclusion

The first step one is that the user gets a alert message (SMS) for the registered phone number. The next one is they receive a graphical representation which shows the Latitude ,Longitude, MEMS Sensor and Vibration sensor of the child's activities through "ThingSpeak".

From these notifications the parents can find their child in critical state. By this device we can avoid violence against children. This is our step to enhance child safety in our nation.



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*THERE IS NOTHING MORE PRECIOUS TO A  
PARENT THAN A CHILD, NOTHING MORE  
IMPORTANT TO OUR FUTURE THAN THE SAFETY  
OF ALL OUR CHILDREN.*



# THANK YOU

○ PRESENTED BY

SURAKSHA MANDHAN & SATVIK SHRIVAS