Sprint-1

Assignment Date	10-Nov-2020
Team ID	PNT2022TMID04763
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification

Live Location Tracking:

Through the android app and SMS requests made from the safety device to the parent's phone, we can track the current location thanks to the GPS integrated in the device. Parents may locate the child's exact location using the wearable device, which uses the Global Positioning System to track whereabouts in real time. The programme not only enables you to track down your children when they are within Bluetooth range, but it also functions when they venture further from home. If you reside in densely populated areas, such as cities, its skill as a tracker is outstanding.

Panic Alert Systems:

When there is an emergency, the panic alert mechanism on the device activates, and the system software unintentionally alerts the parent or guardian by rerouting a text message when quick inspection is crucial for the child in an emergency. The alert is also updated to the cloud with the intention of monitoring apps.

Ceaseless Surveillance:

The device guarantees the highest level of security and provides live tracking for their kids. Through smart phones that can track their children's locations and provide the precise coordinates of the child's location in real-time anywhere, the device promotes child safety. The security status of the child is assessed by watching their activities.

Cloud Database:

The safety device has GSM and GPS modules for making and receiving phone calls as well as SMS messages to and from the parental phones. A Wi-Fi/cellular data module is also part of the system, which is utilised to integrate IoT and send all the observed parameters to the cloud for parental phones to monitor. When a panic attack occurs, the panic alert system is used sent to the parent's phone, asking for assistance and updating the alert parameters in the cloud. The cloud can be used to store the location history. The child's precise positions should be displayed on the wearable devices, which should also be updated continually without being translated in the cloud database.

Security Implementations:

Every time the emergency button is hit, to sound the alarm and enable video recording. The cloud can be used to store the children's surveillance data. The user will receive an update if any faults are discovered, which is necessary for the device to operate properly. The wifi modules help in sending the monitoring information.

Extensive range monitoring system:

The software works when your kids are farther away from you in addition to allowing you to locate them while they are within Bluetooth range. If you reside in densely populated places like cities or large towns, its tracking abilities are exceptional. You will be able to identify the participating devices thanks to this, which lessens their vulnerability in perilous circumstances and also safeguards kids in emergency situations.