

PROJECT OBJECTIVES

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Team ID	PNT2022TMID33996
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring and Notification

PROJECT OBJECTIVES

The Objectives as,

- Enable tracking of the child's location and capturing of data remotely such as where the child location , distance etc,
- To show the child's actual data with reference values.
- Enable sending of notification if the child is out of location or when the device realizes abnormal conditions.
- Develop a prototype of IOT wearable smart band connected to parent's mobile apps so that they can monitor the actual of children at anytime and anyplace.

By the end of this project :

- Gain knowledge of Watson IoT Platform.
- Connecting IoT devices to the Watson IoT platform and exchanging the sensor data.
- Gain knowledge on Cloudant DB
- Gain Knowledge of geofence
- Creating a Web Application through which the user interacts with the device.

Project Flow:

- The GPS coordinates of the child will be sent to the IBM IoT platform
- Location can be viewed in the Web Application
- A parent can create a geofence in the web application
- The web application will check if the child is inside or outside the geofence
- Notifies the parents if the child goes out of the geofence

To accomplish this, we have to complete all the activities and tasks listed below:

- Create and configure IBM Cloud Services
 - Create IBM Watson IoT Platform
 - Create a device & configure the IBM IoT Platform
 - Create Node-RED service
 - Create a database in Cloudant DB to store location data
- Develop a web Application using Node-RED Service.
 - Develop the web application using Node-RED
 - Integrate the geofence & google map
- Develop a python script to publish the location details to the IBM IoT platform