# IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING & NOTIFICATION

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## PROJECT OBJECTIVES

### By the end of this project you will:

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