# FUNCTIONAL REQUIREMENTS

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Functional Requirements are:

1. User registration and confirmation
2. App Installation
3. Settings geofence
4. Detecting Child location
5. User interface
6. Database
7. Server
8. GPS Tracking
9. API
10. React JS
11. GPS modules
12. Battery life
13. Location history

**USER REGISTRATION AND CONFIRMATION:**

Registration through Gmail and Phone number.Confirmation via Email and OTP.

**APP INSTALLATION:**

Installation through link and playstore.

**SETTINGS GEOFENCE:**

Setting by user to find child location.

**DETECTING CHILD LOCATION:**

Detecting location via app and sms.

**USER INTERFACE:**

User login form and admin login form.

**DATABASE:**

Stored in cloud for seamless connectivity. Parents and kids link with the distance and the location values obtained from the mobile devices are stored here. The values include parent id,kid id,distance,longitude,latitude etc.

**SERVER:**

It connects the database and the front end application. The backend server has been implemented to run as a service and is deployed in an IBM cloud instance. The backend server has been implemented to run as a service and is deployed in an IBM cloud instance.

**GPS TRACKING:**

The system is implemented with a GPS module, which acquires the location information of the user and stores it to the database.

**API:**

The value collected is sent to the database using an API.

**REACT JS:**

We are using react js as front end for our project. Node JS for the back end we are using node js.

**GPS MODULES:**

It receives data directly from satellites.

**BATTERY LIFE:**

If the child or parent forgets to charge the device for a whole day then also the device will work. That's why we aim to make this device last the whole day with one charge. It should be long-lasting.

**LOCATION HISTORY:**

The location history will help to track the child's activity so that the aren't will be updated. Location history will be there for 30 days. For example if the child gets missing with the help of location history the aren't can track down their child's activity and also can find their child.