IoT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING & NOTIFICATION.
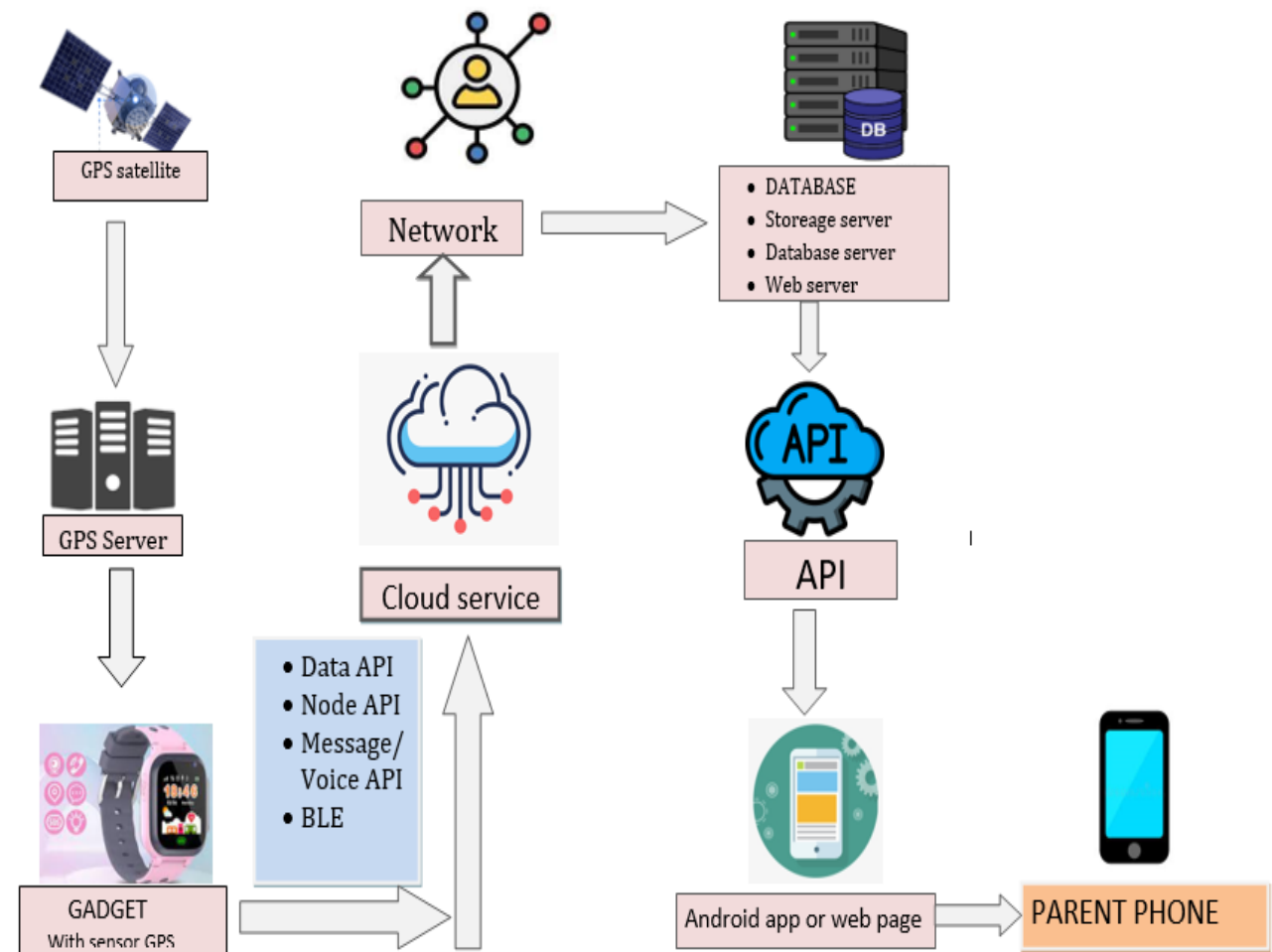
PROJECT DESIGN PHASE-1

SOLUTION ARCHITECTURE

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SOLUTION ARCHITECTURE:

Overview of Architecture:

An IoT system is interconnected with sensors, computing devices, and machines that are connected through a network to form one complete operation. Therefore, an IoT solution architecture is a design of the step-by-step data flow from collecting raw data to obtaining predictions or results. There is no universal standard for an IoT solution architecture, but typically this technology requires four major components, consisting of,

- ✓ Sensors,
- ✓ Gateways and Network,
- ✓ Cloud or Data Server,
- ✓ Applications Layer.
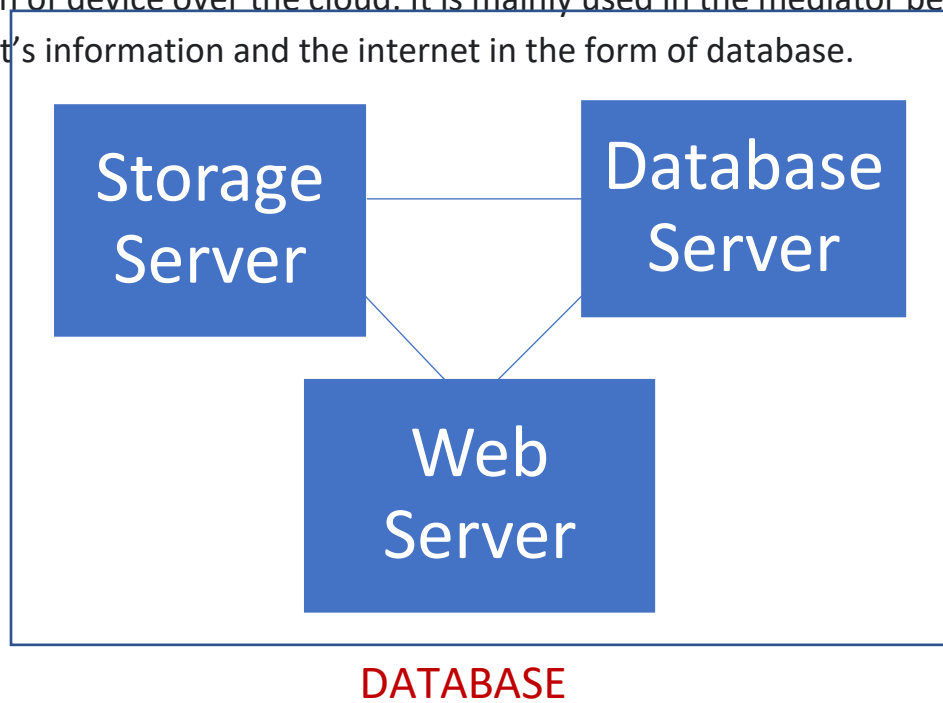
GPS Satellite:

When a device uses GPS, it finds an exact location through what's called triangulation. That's how your smartwatch can know where you are at all times. Triangulation determines the difference between two signals. One is the signal that watch receives, and the other is the signal that was sent to your watch.

Application Programming Interface:

The most important in IoT devices is to connect the API application. Application Programming Interface (API) is an interfacing software platform that allows the exchange of any information or data and supports the interaction among different applications or any such intermediaries. There are such API's are used in this application is node API, data API and msg/voice API.
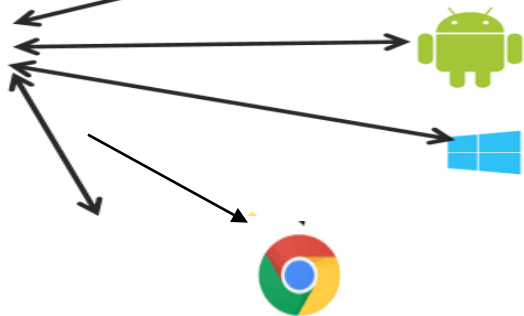
An IoT cloud is a massive network that supports IoT devices and applications. This includes the underlying infrastructure, servers and storage, needed for real time operations and processing. The IBM cloud services are mainly used in the connection of device over the cloud. It is mainly used in the mediator between the gadget's information and the internet in the form of database.

Storage Server	Database Server
Web Server	

DATABASE

End user:

The database is stored for the future use and the web application is for fetching the information, the user want in the client side. It acts as a server client configuration through the API.

API

Database   API   End user