TECHNOLOGY ARCHITECTURE
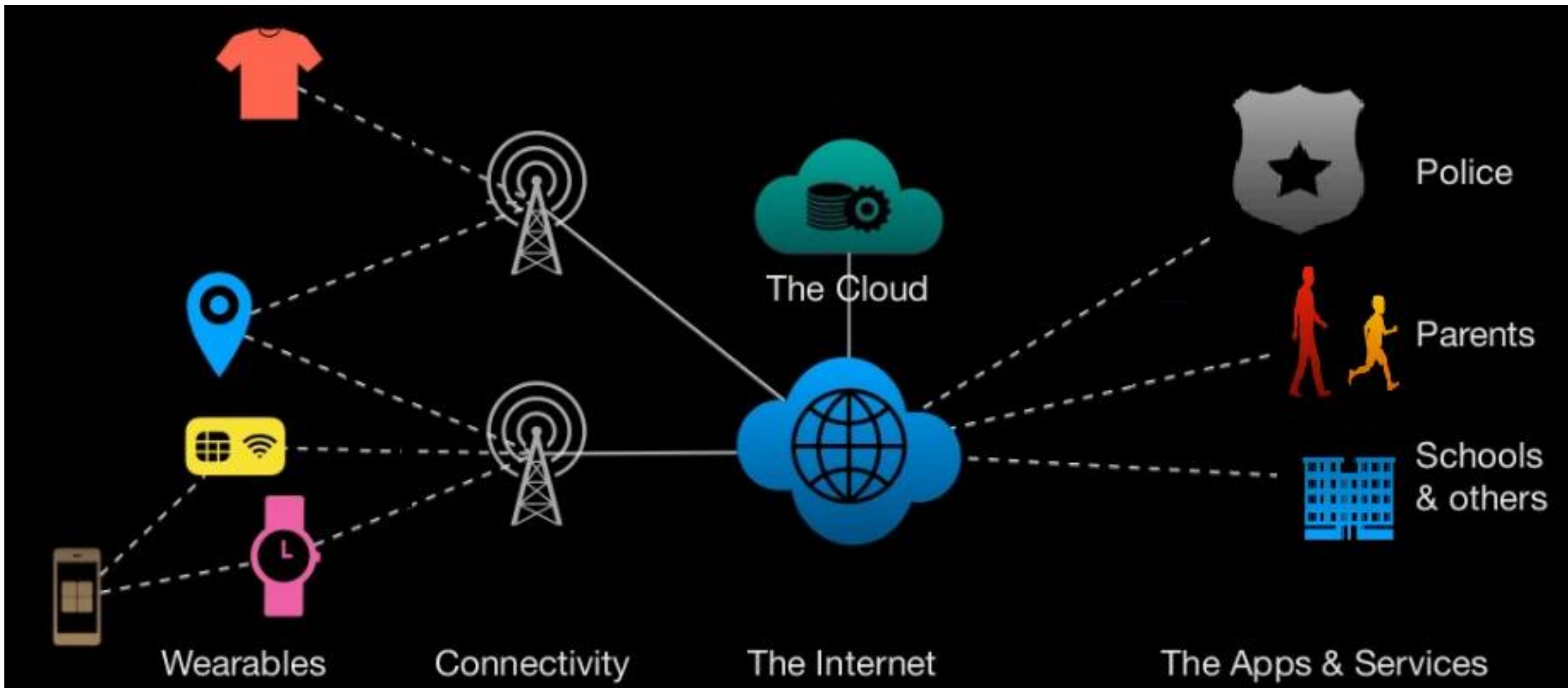
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App.	HTML, CSS, JavaScript
2.	Application Logic-1	Code Development Phase	Python
3.	Application Logic-2	Interfacing purposes	IBM Watson Assistant
4.	Browser-based flow editor	Visual Programming	Node Red
5.	Cloud Database	Database Service on Cloud	IBM Cloud
6.	File Storage	Usage of IBM Cloud Storage	IBM Block Storage
7.	Infrastructure (Server / Cloud)	Application Deployment on Local Server	Cloud Platform

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	A template for software development that is designed by a social network.	IBM Watson Platform, Node Red.
2.	Security Implementations	Each and every parent should take care of their own children, without letting them to fall into the dark world of abuses, which entirely ruin them physically, mentally and emotionally destroying our future. Hence, considering the importance of our	Notifications and Alerts.

S.No	Characteristics	Description	Technology
		future, our project makes it easy for parents to track their children and to visually monitor them on regular basis, which makes them ensure the safety of their children and reduces the rate of incidents of child abuse.	
3.	Scalable Architecture	If any abnormal values are read by the sensor, then an SMS is sent to the parents mobile and an MMS indicating an image captured by the serial camera is also sent. The future scope of the work is to implement the IoT device which ensures the complete solution for child safety problems.	Implementation using Software.
4.	Availability	The solution represented takes advantages of Open-source platforms.	NODE RED, IBM cloud, IBM IoT platform.
5.	Performance	GPS is useful for tracking child and also provides the information where the child is currently located as well as it also informs the parents how long his child is far away from his parents. SMS services used when smart phones do not support internet connectivity in this case child is able to send a text message or exact location in the	GPS

S.No	Characteristics	Description	Technology
		parents. This system is going to help the parents to track the location of their children without informing them because their movement is displayed on the parent's phone.	