Project Design Phase-II Technology Stack (Architecture & Stack)

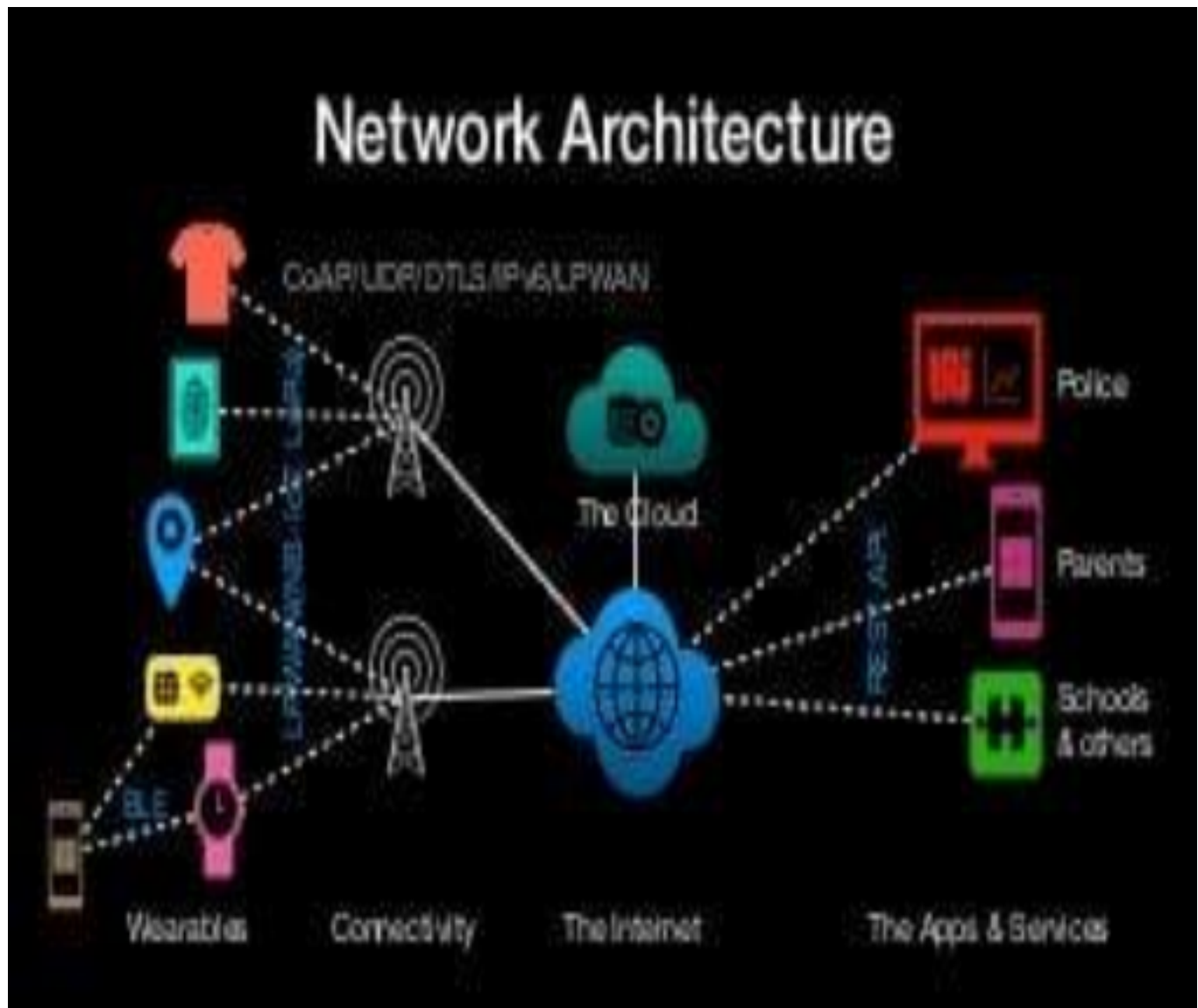| Date	15 October 2022
Team ID	PNT2022TMID33862
Project Name	IoT based safety gadgets for child safety
Maximum Marks	4 Marks

Technical Architecture:

Table1:Components and Technologies

S.No	Components	Description	Technology
•	User Interface	How user interacts with application e.g. Mobile App ,etc.	GPS ,GSM
•	Application Logic-1	Logic for a process in the application	Python –Raspberry pi
•	Application Logic-2	Logic for a process in the application	IBM child safety kit
•	Application Logic-3	Logic for a process in the application	IBM kid security
•	Database	Data Type, Configurations etc.	CrateDB
•	Cloud Database	Database Service on Cloud	IBM Cloudant DB
•	File Storage	File storage requirements	IBM Watson Studio ,IBM Cloud
•	External API-1	Purpose of External API used in the application	IBM Weather API etc.
•	External API-2	Purpose of External API used in the application	IBM Cloud etc.
•	Infrastructure(server or cloud)	Application deployment for local system or cloud	Cloud database server

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
•	Open source architecture	Framework is presented for Smart child safety using Sensor network and IOT.The Key feature of the system are Deployment of smart sensor For the collection of Data,cloud based analysis And decision based on Monitoring for children Safety.	Technology used is Big data,cloud,IOT,AI.
•	Scalable Architecture	The collected values from every sensor like temperature sensor, pulse rate detection sensor, metal detection sensor, and the location value from GPS are used to detect the status of the child and alerts the respective guardians using GSM accordingly.	Technology used is sensors and GPS technology,for monitoring children activities.

•	Availability	The availability of sensors and their working progress will happen always even in the absence of parents controlling.	Technology used is effective through recording.

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