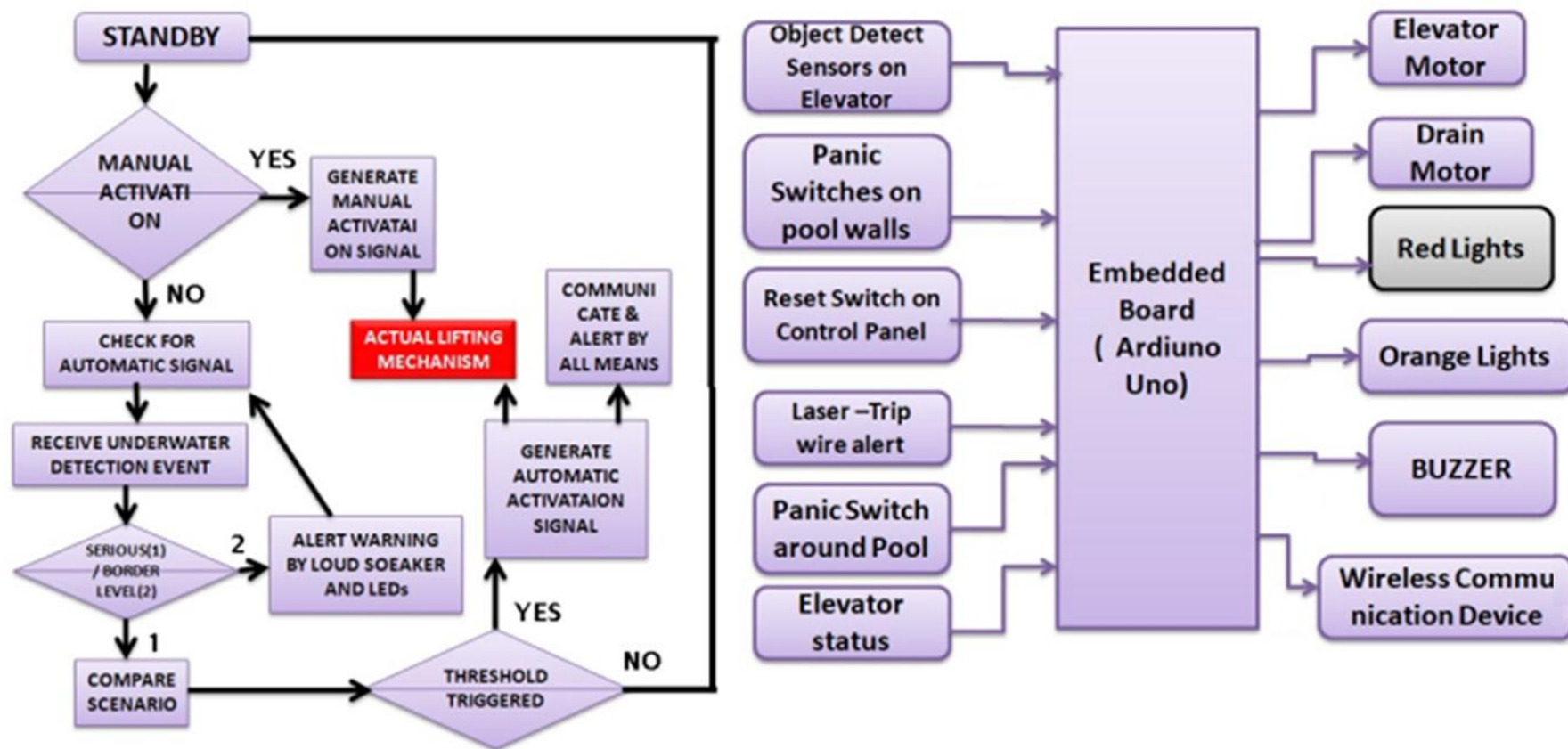


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	13 November 2022
Team ID	PNT2022TMID43216
Project Name	Virtual Eye - Life Guard for Swimming Pools to Detect Active Drowning
Maximum Marks	4 Marks

### Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	GUI	Gadgets and apps remotely access with the interface	Wireless Sensor Network Technology
2.	Raspberry Pi 2	Detection logic of mobile application	Java / Python
3.	Real time application system	Applications of real time	Access point and cloud network technology
4.	Integrates with all modules	Application function and design	Google or any other mobile Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	API-1	Connected with outer product	To monitoring weather and water level, etc.
9.	API-2	To link persons information with application	Aadhar API, etc.
10.	Machine Learning Model	To perform physically in swimming pool platform	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Application development	All low budget apparatus were used in system	Technology of all embedded development system
2.	Security Implementations	Voice alert and LED blinking alert and etc.	Sound horn and external LED and mobile blinking LED is also used.
3.	Scalable Architecture	It has all functional requirements	Wireless and sensor network technology were used

S.No	Characteristics	Description	Technology
4.	Availability	The application available in all android and Microsoft system.	Java/python technology used
5.	Performance	Our application and design requirements were used in nearly 70%	WSN technology and Embedded real time system technology were used.