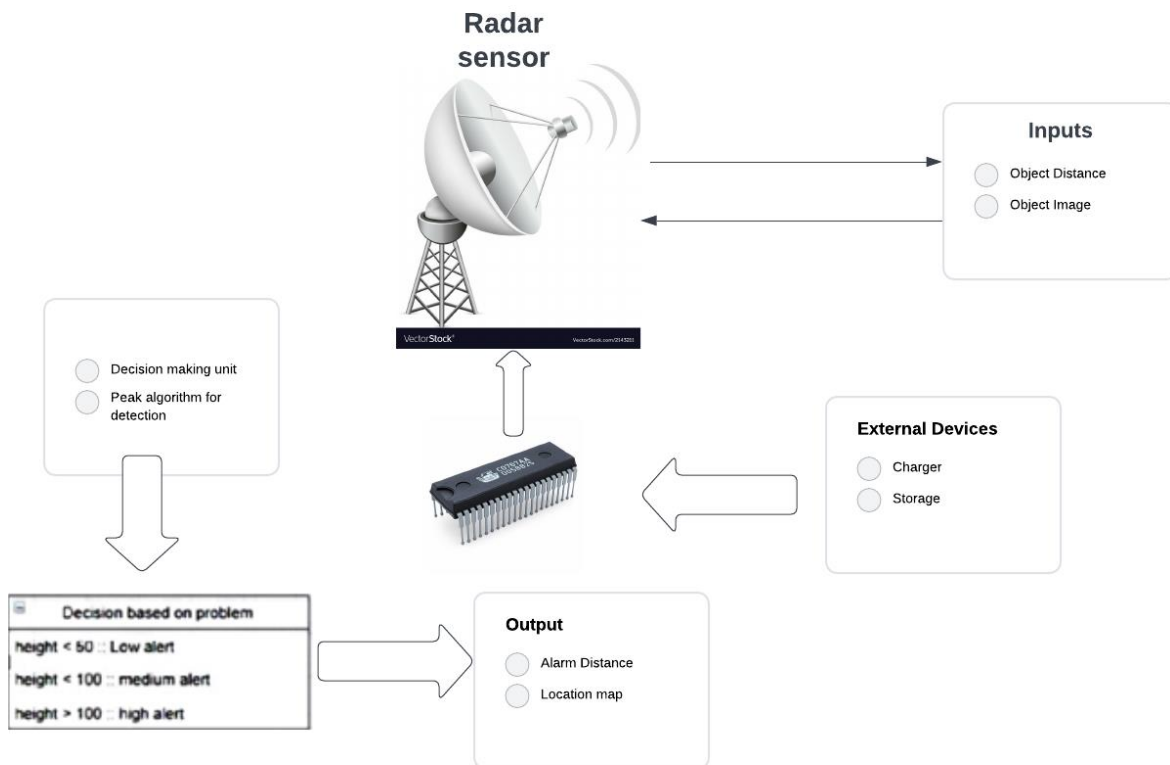


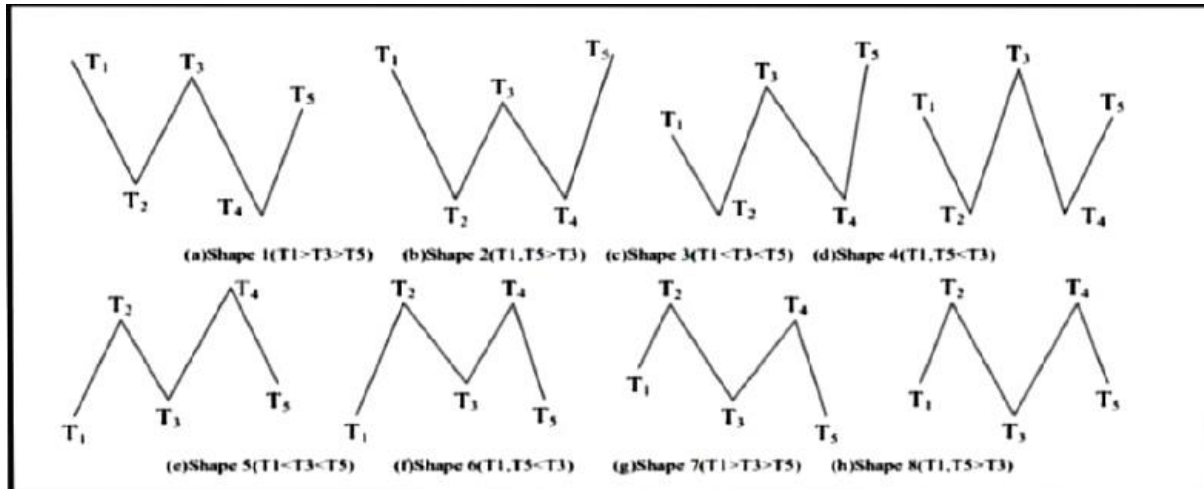
Project Design Phase-I Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID15065
Project Name	IoT Based Safety Gadgets for Child Safety Monitoring and Notification
Maximum Marks	4 Marks



This architecture demonstrates how the system functions. When the infant reaches its full height, the radar measures the distance between it and the item before making a decision. When the depth is 50 feet or lower. For the purpose of alerting the caregiver via a display device such a cell phone, tablet, etc., a low alert will be delivered when the height is less than 50 and a high alert when the height is greater than 50.

METHODS



Algorithm:

Step 1: Divide signal curves $\{X_i\}$ and collect maximum value into set $\{T_i\}$.

Step 2: Remove all coincident points in set $\{T_i\}$.

Step 3: Search in $\{T_i\}$ to find shapes of classes 1-5 and process all matched shapes until all shapes of classes 1,2 are removed and all shapes of classes 3,4,5 satisfy the following conditions

- I. $\text{Dis}(T1, T3) \geq \beta$
- II. $\text{Dis}(T2, T4) \geq \beta$
- III. $\text{Dis}(T3, T5) \geq \beta$

Step 4: After processing the previous step the rest maximum points of $\{T_i\}$ are exactly the target peak send the rest minimum points of $\{T_i\}$ is exactly the target troughs. The results of calculating the distribution of numbers. The height distance of maximum/ minimum points is the requested number, height, and width of peaks /troughs of target signals.

Future scope and conclusion

Implementing an automated system for baby monitoring is a novel solution to allay parent anxiety. In order to assist the guardian/parent in finding and keeping an eye on the child, this project suggests a Smart IoT gadget for child safety and tracking. A text message is sent to the parent's or guardian's mobile phone if the sensor detects any abnormal values.