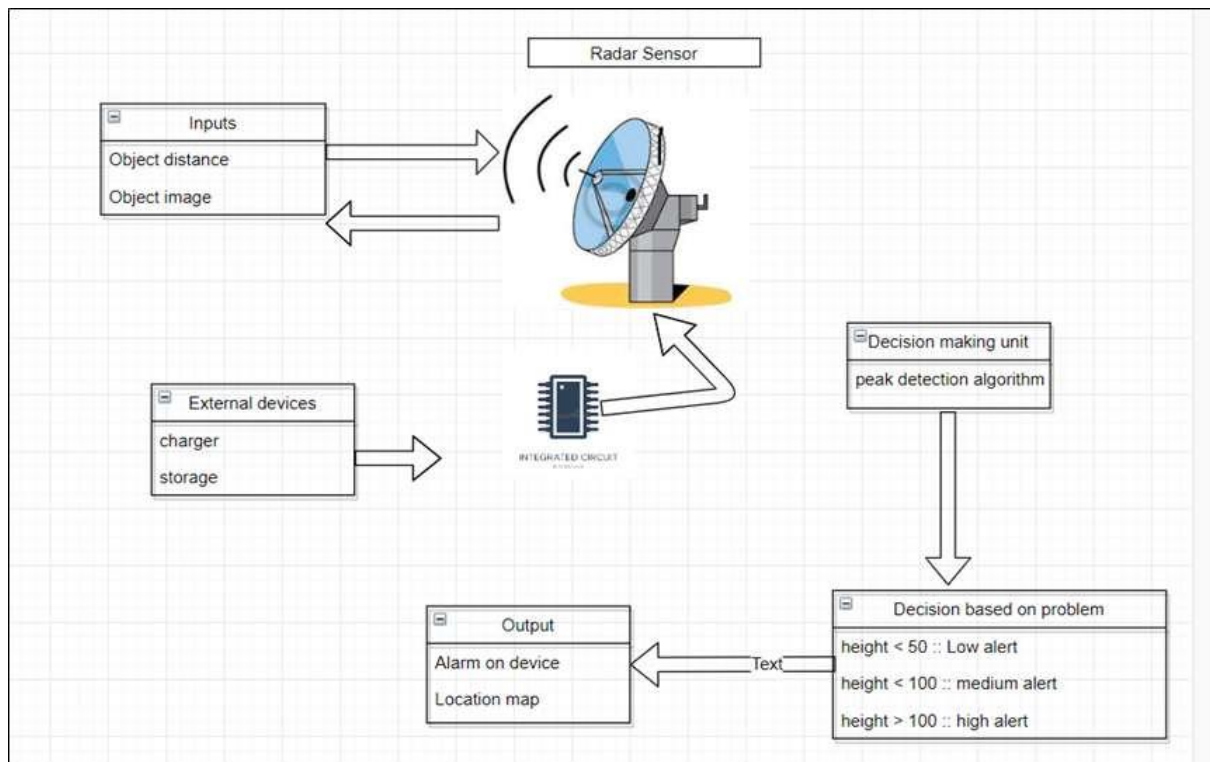
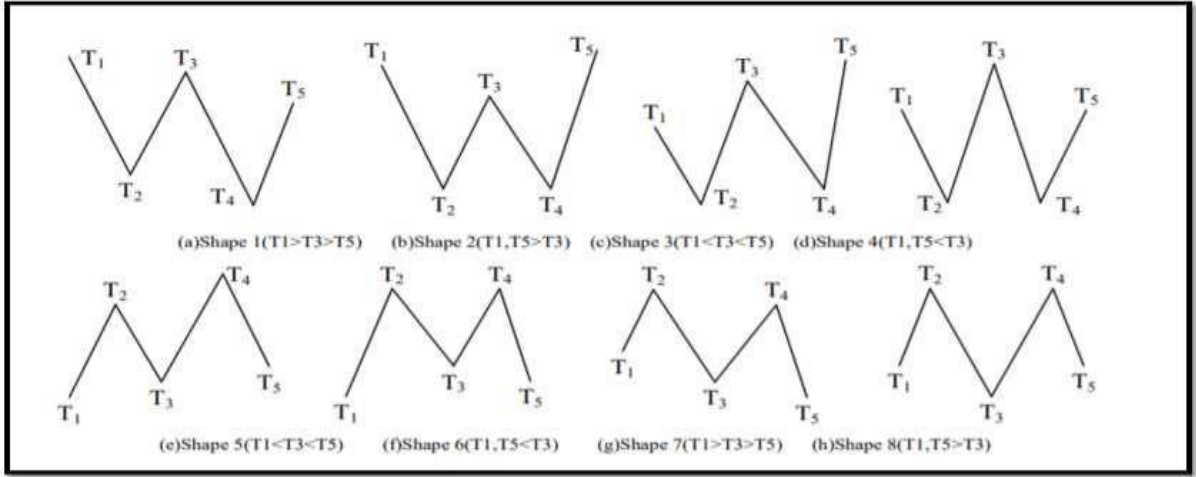


# SOLUTION ARCHITECTURE



**Figure 1 – System Architecture**

This design displays the system's operational flow. Radar sensors measure the distance between the infant and the item while the baby is standing. decision-making will then occur. For alarm purposes, a display device such as a mobile phone, tablet, etc. will be used to provide the caregiver with low alert when the depth is below 50 and high alert when the height is greater than 50.



**Figure 2 – Signal Curves**

## ALGORITHM:

Step 1: Divide signals curves  $\{X_i\}$  and collect maximum and minimum 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 class 1-5, and process all matched shapes until all shapes of class 1,2 are removed and all shapes of class 3,4,5 satisfy the following conditions:  $\text{Dis}(T_1, T_3) \geq \beta$  and  $\text{Dis}(T_2, T_4) \geq \beta$  and  $\text{Dis}(T_3, T_5) \geq \beta$

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

## **FUTURE SCOPE AND CONCLUSION :**

For deploying IOT devices that guarantee a comprehensive answer to issues with baby safety. A fresh concept is to install an automatic infant monitoring system to ease parents' concerns. The smart IOT devices proposed in this concept assist parents and guardians find and keep an eye on their children. A text message is sent to the parent or guardian's mobile device if the sensors detect any abnormal data.