BABY MONITORING SYSTEM

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TECH CHALLENGERS

MEMBERS:

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INTRODUCTION

❏ In today's situation, parents are busy in their career. As we have seen in India that both the parents need to work and look after their babies so more workload and stress is there on such families especially on female counterparts.

❏ In our project we are using baby monitoring system to monitoring babies. It is inexpensive and simple to use.

❏ This system can detect the babies motion and especially when babies crying it can detect the sound of the baby and make a call to the parents by using GSM module.

DOMAIN
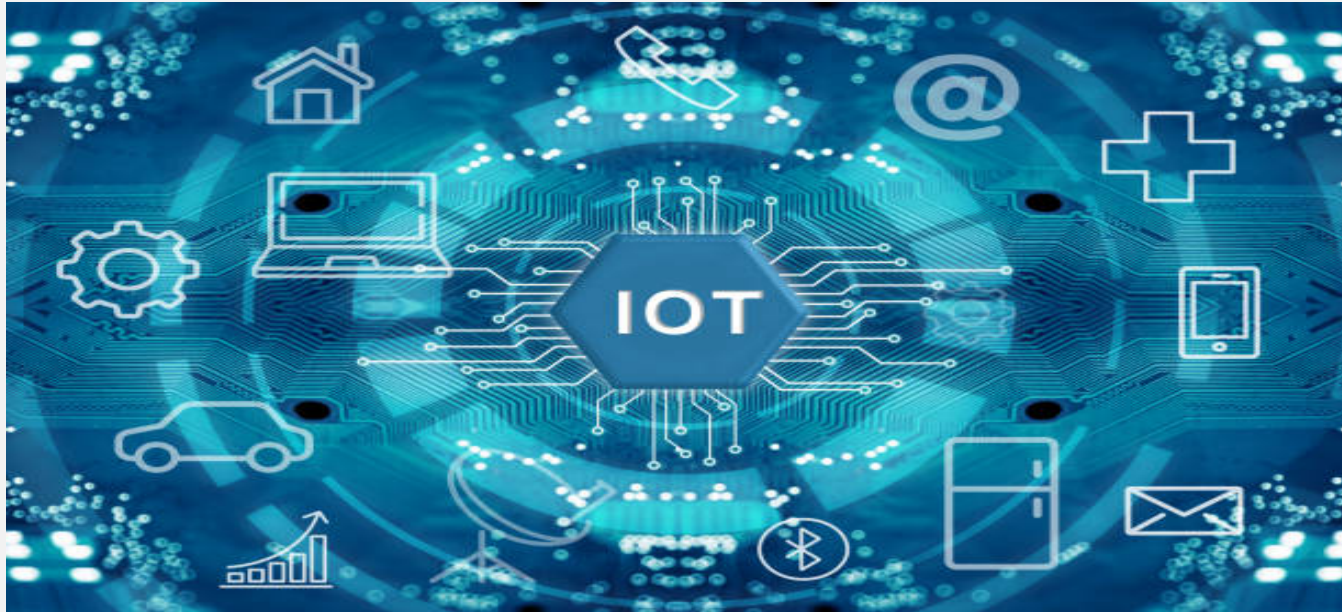
OUR IDEA

❏ The ultimate goal of this system is to assist mother in doing their daily basic work even when there are far from their babies.

❏ It can be used by mothers personally to take care of the baby in their residence .The system will alert the mother through GSM module via Call.

❏ After, mother receive the Call, she can do further activities for babies.

COMPONENTS REQUIREMENTS

❏ **Software component:** Arduino IDE

❏ **Hardware components**

❏ Arduino nano

❏ PIR sensor

❏ Arduino sound module

❏ Moisture Sensor

❏ DHT 11 sensor for temperature

❏ GSM module (sim 900A)

ALGORITHM

STEP 1: Starting the program(POWER ON THE ARDUINO NANO)

STEP 2: Setup all the sensor pins based on digital and analog reading**.**

STEP 3: Read data from temperature sensor : if temp>=40'c
        Make call to the parents
      else
         Pass to the step 4

STEP 4: Read data from moisture sensor: if moisture>=180
        Make call to the parents
      else
         Pass to the step 5

STEP 5: Read data from cry detect: if cry detect>=30 sec
        Make a call to the parents
    else
        Pass to the step 6

STEP 6: Read data from motion sensor: if motion detect>=30 sec
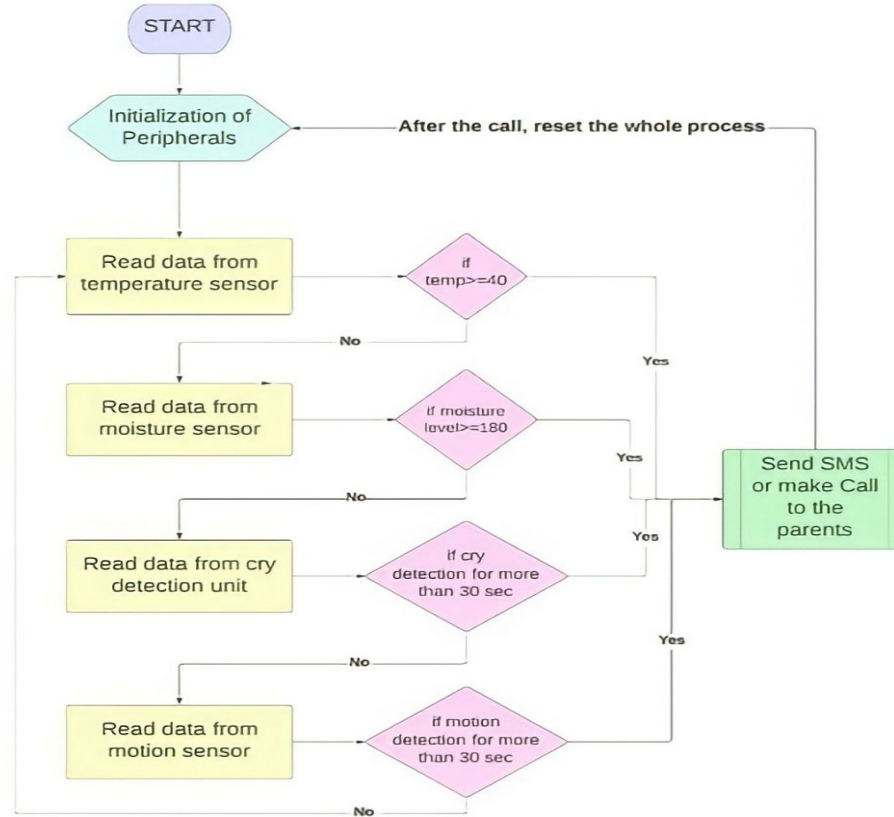   Make a call to the parents
    else
        Go to the step 3

STEP 7: Exit the program(POWER OFF THE ARDUINO NANO)

FLOW CHART

FUTURE ENHANCEMENT

❏ By storing the daily data from sensors in Cloud, we can predict the baby activities based on Machine Learning.

❏ It can control Automatic Air conditioning depends on temperature and humidity reading from sensor.

❏ Set up a LCD/OLED display to interact with the baby via video call.

❏ Monitor the baby via live streaming whenever we want.

❏ Baby entertainment and automatic feeding depending on crying and movement of the baby.

ADVANTAGES

❑ For babies with health issues, a visual baby monitor can help parents monitor illness signs and symptoms.

❑ No more sneaking into the nursery to check on the baby and inadvertently waking them up Extended monitor range so you can check on the child from anywhere in your house.

❑ Baby movement monitors, such as the Owlet or the   Angel care, use special sensors to track a baby's movement while they're sleeping and alert you to any stillness that may signal a problem.

CONCLUSION

❑ Babies are society future. This system will emphasize the importance of baby care.

❑ This "Baby Monitoring System" will be an economical and user friendly   and very useful for the working parent and also for nurses/nanny. They will be able to manage their work efficiently.

❑ The integration of various sensors with arduino nano will provide a better way for the monitoring of the baby.

❑ The concept of camera interfacing to arduino and which is controlled by arduino nano itself helps in monitoring of babies lively.

Thank you !