SMART CRADLE

By Abhilash S Kulkarni (1BM15CS002), Ajay S (1BM15CS008), Jahnavi Singh (1BM15CS043)
BMS College of Engineering, Bangalore

ABSTRACT

Smart Cradle is an automatic cradle that reduces the need for constant human monitoring. It is equipped with two PIR sensors and two noise sensors that perform the sensing functions. It detects motion and noise and the servo motor rocks the cradle gently. In the event that the child does not rest a call is sent to the caretaker saying that the infant needs attention.

OBJECTIVE

- To soothe the transition of working women back to work post delivery by facilitating their work from home productivity.
- Helps the caretaker monitor the infant constantly.
- Low cost, user friendly smart cradle.

FEATURES

1. Automatic swing
2. Motion monitoring
3. Noise monitoring
4. Minimised cost

COST ANALYSIS

The cost of the cradle will be around INR 6000 to INR 7000 compared to INR 12000 which is the current cost of smart cradles in the market.

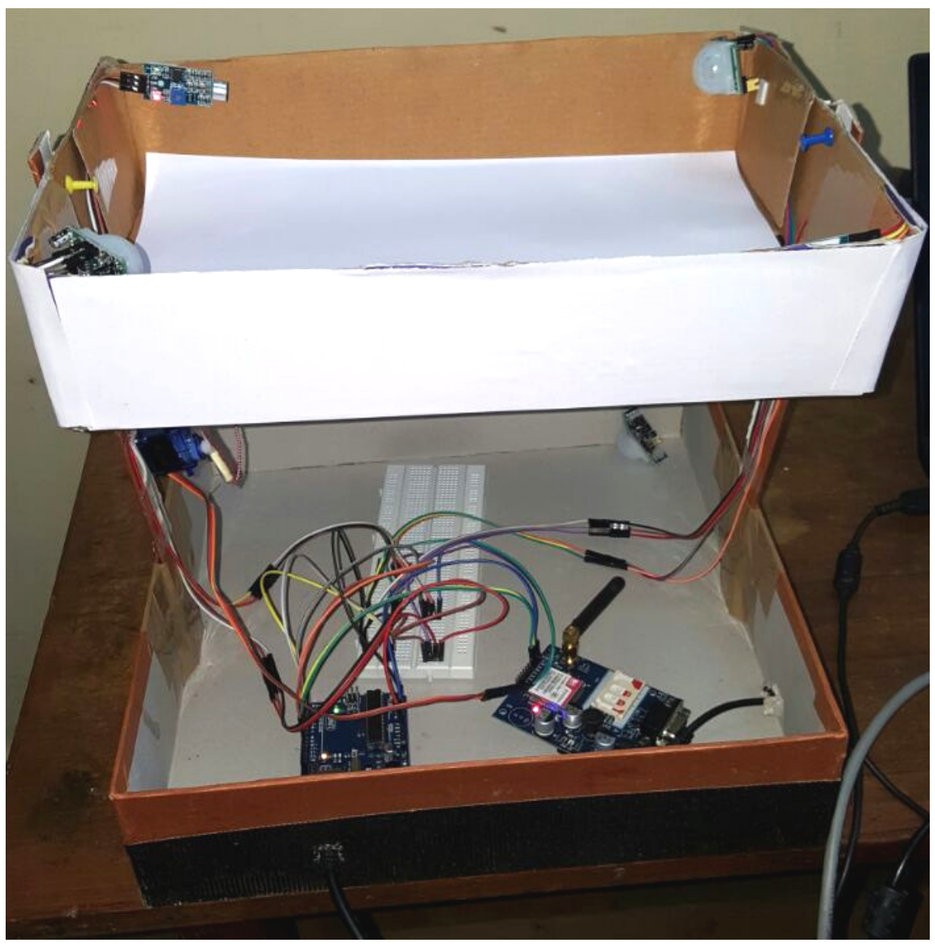
HARDWARE

- Arduino Uno
- GSM 900A
- PIR Sensors
- Noise sensors
- Servo Motor
- Cradle Structure
- Connectors

SOFTWARE

- Arduino IDE

PROTOTYPE



CIRCUIT DIAGRAM