



**FINAL YEAR PROJECT REPORT**

# **IOT BASED BABY MONITORING SYSTEM**

**In fulfillment of the requirement  
For degree of  
BS (Computer Engineering)**

**By**

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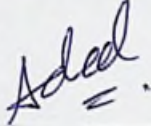
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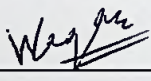
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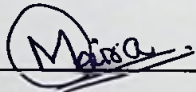
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We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

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## IOT BASED BABY MONITORING SYSTEM

### ABSTRACT

This project is focused on an idea to design a smart cradle system using IOT which will help the parents to monitor their child even if they are far away from their home. A prototype is developed which gives a reliable and efficient baby monitoring system that can play a vital role in providing better infant care the main motive of this idea is to save time and energy of ever busy parents and working people they do not have enough time to properly take care of their babies. Parents can save their time and energy as they don't have to go check their baby until they don't get any information about baby we have decided to come up with a smart cradle which will help a mother, or a father have a track of their child and do some household work simultaneously.

This system monitors vital parameters such as body temperatures, pulse rate, movement of an infant and this information is transferred to their parents. The design of smartness and innovation comes with the use of technologies/methodologies which include internet of things IOT (module like Arduino, Raspberry Pi, Humidity and Temperature Sensing), cry detecting mechanism, live video surveillance, cloud computing (Data storage) and user-friendly android Application in order to detect each and every activity of baby. The idea of this scenario is accomplished by using a sensor and a microcontroller. The sensor will sense what is happening and the microcontroller will operate the devices under the condition. The parents set for these devices this system gives a peace of mind to loved ones when they are infants as they can get an update status of their well-being. IoT is the concept which creates a relationship between user and system remotely. There are three C's on IoT: Communication, Control and Automation and Cost Savings. We have tried to implement IoT so that a user can control, communicate with monitoring with baby at a low budget. This work will apply the techniques of electrical engineering. In each chapter we will be covering details starting from the background of the project, covering its literature review, highlighting hardware and software requirements that are needed to design the system, furthermore, it covers the implementation of the system. Highlight the implementation factor in detail and its testing. Lastly, it gives us the result and future work of IOT based baby monitoring system.

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