

# FINAL YEAR PROJECT REPORT

# IOT BASED SMART HEALTH MONITORING SYSTEM

In fulfillment of the requirement For degree of BEE (Electrical Engineering)

### By

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#### DECLARATION

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 SMART HEALTH MONITORING SYSTEM

#### ABSTRACT

Over the past ten years, "IOT Based Smart Health Monitoring Systems" have grown in importance and have become more technologically focused. People are having trouble with unexpected mortality caused by various diseases because they are not receiving suitable care at the appropriate moment. The major objective of this project is to develop a low-cost, accessible health monitoring system for individuals so that medical professionals may keep an eye on their patients, whether they are in a hospital or at home, using a smart healthcare system for their benefit. This system is readily used by anyone with little to no technical experience and is portable and inexpensive. A wireless health monitoring system for mobile phones has been developed that can offer online real-time information about a patient's physical status. The system's primary components are sensors, a microcontroller (such as the Raspberry Pi), and software for programming them (i.e. python IDLE). The doctor receives data on the patient's temperature, pulse rate, humidity, and SpO2 that is tracked, presented, and stored in the cloud as well as sent to their mobile device with the application. As a result, an IoT-based smart health monitoring system efficiently tracks the health state of patients in real time and promptly saves lives.

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