

FINAL YEAR PROJECT

Patient Monitoring Via Wireless Nodes and LAN



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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah, the Beneficent, the Merciful

DEDICATION

This Project is dedicated to our parents, teachers and friends who were always there by our side to guide us and gave us the courage that we can do the best in our life and taught us the difference between the good and the evil, for this be our guide in our life.

CERTIFICATE OF APPROVAL



*It is certified that the project work presented in this project report, entitled
“Patient Monitoring Via Wireless Nodes and LAN” was conducted by
students of Bahria University under the supervision of Mr. Shaftab by Raja
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Acknowledgement

All praises for Allah(The Almighty) who gave us the determination and enlightened us with the requisite knowledge on portion of this subject to complete this project.

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Other people with whom we had the good fortune to collaborate and learn from include Mr. Abid Ali Minhas. These people have served as our teachers and more like our friends and we are grateful to them for their guidance and their support.

We greatly appreciate the generosity of our teachers and friends in devoting their time to help us with this project.

DECLARATION

The work that we did on this project is our own work and effort. It has not been submitted in any form for another degree. The information that we gathered in order to prepare our thesis is from published and unpublished work of others, it has been acknowledged and the list of references is being provided.

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Abstract

The classical patient monitoring system involves measurement of clinical parameters like blood pressure, heart beat and temperature.

The nurse measures all these parameters, writes it and reports it to the respective doctor periodically. Our project takes advantage of telecommunication where information acquisition and logging can be done automatically. This information is available anywhere, any time. It will reduce human effort and this system can be used for patients at home or patients in hospitals.

There has been an exponential increase in health care costs in the last decade. Patients have to make frequent visits to their doctor to get their vital signs measured. There is a huge market for non-invasive methods of measurement of these vital signs. The objective of this project is to design and implement a reliable, cheap, low powered, non-intrusive, and accurate system that can be worn on a regular basis and monitors the vital signs and displaying periodically. This data is also easily accessible by the physician through wireless network on computer system. This project specifically deals with the signal conditioning and data acquisition of three vital signs:

1. Heart Beat
2. Blood pressure
3. Body temperature

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