F I N A L Y E A R P R O J E C T

Patient Monitoring Via Wireless Nodes and LAN

Bahria University, Islamabad

Submitted By

Faizan Naseem

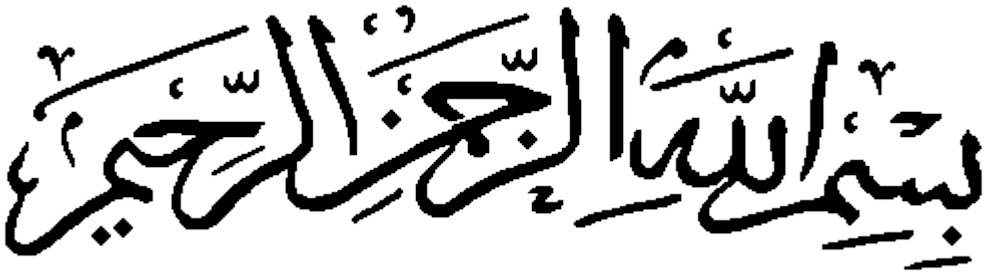
(01-113071-003)

Raja Zeeshan Manzoor

(01-113071-011)

B.S Electronic and Telecom Management

Project Advisor/Coordinator: Mr. Shaftab



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. S*haftab by *Raja Zeeshan Manzoor and Faizan Naseem*

_____	_____
Sir Shaftab	Sir Abid Ali Minhas
Advisor	H.O.D
Faculty of Electronic Engg.	Faculty of Electronic Engg.
Dated:_____	Dated:_____

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.

Several people have had a significant impact, both directly and indirectly, on the material presented in this report. Our biggest debt of gratitude goes to our project supervisor Mr. Shaftab and Project Co-ordinator, Mr. Junaid Imtiaz from Bahria University ISLAMABAD. They have had the dual roles of supervisor and mentor for us. They have provided us with a model both for how to work on this project and how to report on it in a meaningful way. Their impact on both this project report, and our respective careers, has been profound.

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.

Faizan Naseem

Raja Zeeshan Manzoor

April 2011

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 b 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

Contents