**Community Clinic Management System (CCMS)**

[ECG Data Processing, Analysis, Heart Condition Predefine, Solution]

A Project Report

Submitted to the department of Computer Science and Engineering

In partial fulfillment of the requirements for the

Bachelor of Science in Computer Science and Engineering (CSE)

**Submitted By**

|  |  |
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**Supervised** **By**

**Mr. Obaidur Rahman**

Chairman

Department of Computer Science and Engineering

European University of Bangladesh Gabtoli, Dhaka 1216

# Letter of Transmittal

4 August 2020

To,

Mr. Obaidur Rahman,

Chairman

Department of Computer Science & Engineering,

European University of Bangladesh,

2/4 Gabtoli, Mirpur,Dhaka – 1216.

Subject: Submission of Project Report on “**Community Clinic Management System**”.

Dear Sir,

It is our great pleasure to submit the project on “**Community Clinic Management System”** which has been assigned as a mandatory requirement for the completion of the BSC program. We have tried our best to give this report a presentable shape and make appropriate and informative to accomplish the objectives of the study.

We would like to convey our gratitude to you for giving me the opportunity to work on such a topic which is very much relevant to our study. We sincerely believe that the practical knowledge and experience gathered from the study will be very much helpful in our future life for doing this type of project report.

Sincerely,

|  |  |
| --- | --- |
| Md. Golam Habib | ID#160221001 |
| Md. Ashikur Rahman | ID# 160221005 |
| Md. Nazrul Islam | ID# 160221006 |
| Md. Elias Hossain | ID# 160221007 |
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Department of Computer Science & Engineering,

European University of Bangladesh.

# Declaration of Student’s

Declaration of Student's We are, hereby declared that the presented report of Project named "**Community Clinic Management System**" is prepared by us.

We also confirm that the report is only prepared to meet my academic requirement not for any other purpose. This Project work has not been previously submitted for any degree at this university. I have quoted from the work of others; the source is always given. With the exception of such quotations, this project is entire my own work.

Habiba Arfin

ID# 160221010

Md. Aktarul Islam

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Md. Elias Hossain

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Batch – 4th (Regular)

Department of Computer Science & Engineering,

European University of Bangladesh.

# Declaration of Supervisor's



**EUROPEAN UNIVERSITY OF BANGLADESH**



**To Whom It May Concern**

This is to certify that the project report on " **Community Clinic Management System** " For the degree Bachelor of Science in Computer Science and Engineering from European University of Bangladesh carried out by **Md. Golam Habib** Student ID# 160221001, Md. Ashikur Rahman Student ID# 160221005, Nazrul Islam Student ID# 160222014, Md. Masum BillahStudent ID# 160222006, under our supervision.

As far as we are concern, no part of the project report has been submitted for any degree diploma, title or recognition before.

……………………………

**Md. Obaidur Rahman  
Chairman  
Department of Computer Science and Engineering  
European University of Bangladesh**



# Acknowledgement

At the very beginning, we would like to convey our sincere appreciation to the Almighty Allah for giving us the strength and ability to complete the task within the specified time.

Any project report is the product of numerous people whose efforts, ideas and suggestions make the writer's job manageable. We are indebted to many people and organization for their assistance in making this project report a reality.

We are very much thankful to our honorable supervisor, Md. Obaidur Rahman, Chairman, Department of Computer Science and Engineering, for his kind perseverance and contributions. Without his constant supervision and valuable advices and suggestions, we would not be able to complete the whole thing in a right manner.

As always, any errors or omissions are the sole responsibilities of the writers. Any suggestions improving the quality of this project report are welcome.

# Executive Summery

In Bangladesh, since 2009, establishment of 14 000 community clinics (CCs) for every 6000 population across the country brings health care to the community doorstep ([WHO](http://origin.searo.who.int/mediacentre/events/community-clinic-bangladesh-story.pdf)). Now people can avail of health, family planning and nutrition services under one roof and within half-an-hour walking distance from their homes, even in remote areas.

CCs have contributed significantly to the improvement of the overall antenatal and postnatal care in Bangladesh. The clinics provide counseling on reproductive health and consequences of early marriage, and also supply contraceptives as well as care for pregnant women. Treatment is also provided for diarrhea, pneumonia and other childhood infections.

People’s participation is an important element of CCs. Local community members actively participate in their management.

The Health and Population Sector Programme (1998-2003) aimed to bring important changes to health and family planning services in Bangladesh. The introduction of a sector wide approach brought a series of changes in the planning, financing and delivery of services. A key component was the development of the new Essential Services Package (ESP) to meet the needs of the poor, especially in rural areas and particularly women and children. Village level facilities were to be developed as a focus for the provision of ESP. These Community Clinics were to bring family planning, preventive health services and limited curative services closer to the population, and to improve the efficiency of service provision, partly by replacing outreach services with services provided from a fixed point. Community Clinics (CC) were to provide services for around 6000 people, and it was envisaged that their location would make them accessible for 80% of the population within less than 30 minutes walking distance. The design was to be simple – two rooms with drinking water and lavatory facilities, and a covered waiting area. Funds for building the clinics were provided centrally, but communities had to donate land. This was designed to increase the feeling of ownership of the developments. In a similar way each community was required to set up a group to support and assist with the management of the CC, although the staff and supplies were provided by the government. Each clinic should have two staff, one health assistant and one family welfare assistant. There is a specified allocation of equipment and a range of drugs necessary to deliver the ESP services. Staff from the CCs would continue to provide a limited range of outreach services, especially in the early period after opening, and staff from higher levels in the system would visit on a regular basis to provide additional services and to supervise the CC staff. The development included a training programme for CC staff.

In this Particular Situation we think that, we should create a system where all the facilities of the Community Clinics would be centralize and can create some inexpensive device to detect the problem of various organ of our human body. From this thought we created an inexpensive device for analyze Heart beats by ECG signals. Which is very much cheap more than other heart related device. In this regard we also create a Management system where all of the data will be created and store with a structured way. The main purpose of our project will give the luxury to explore improved services for patients. It can be used to promote basic nursing care in the hospital environment by improving the quality of care and patient safety. Rural area of Bangladesh is lack behind from the proper patient monitoring system. So, remote monitoring and guidance awareness by sharing information in an authenticated manner are the main objectives.

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# Chapter 01

## Introduction

## **Motivation**

## **Overview**

## **Objective**

### Easy to Use

### Better Patient Experience

### Alert doctors and relatives

### Giving a quality life for old aged people

# Chapter 02

## Literature Review

## Human Body

## Heart Anatomy

# Chapter 03

## Proposed System

# Chapter 04

## Implementation

# Chapter 05

## Result and Data Analysis

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## Conclusion and Future Work

# Chapter 07

## Reference