



Senior Design Project

Centralized Blood Bank Management System

Fahmidur Rahman ID # 1410965642

Sakif Hasan ID # 1420602042

Faculty Advisor:

Dr. Shahnewaz Siddique

Assistant Professor

ECE Department

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Agreement Form

We take great pleasure in submitting our senior design project report on “**Centralized Blood Bank Management System**”. This report is prepared as a requirement of the Capstone Design Project CSE/EEE/ETE 499 A & B which is a two semester long senior design course. This course involves multidisciplinary teams of students who build and test custom designed systems, components or engineering processes. We would like to request you to accept this report as a partial fulfillment of Bachelor of Science degree under Electrical and Computer Engineering Department of North South University.

Declared By:

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Name: Fahmidur Rahman
ID: 1410965642

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Name: Sakif Hasan
ID: 1420602040

Approved By:

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Supervisor
Dr. Shahnewaz Siddique
Assistant Professor, Department of Electrical and Computer Engineering
North South University, Dhaka, Bangladesh

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Dr. Mohammad Rezaul Bari
Chair, Department of Electrical and Computer Engineering
North South University, Dhaka, Bangladesh

Acknowledgement

Firstly, we would like to thank our families who have supported and guided us through the times we lost faith in fulfilling our endeavors. Their support and affection is what kept us afloat during our hard times.

Secondly, we could not have done, what we did without the guidance and resourcefulness of our own North South University. The expert guidance of all our faculties and staff has led us to where we are now.

Lastly, we cannot stress this enough, but this project would not have been possible without the intellectual expertise and unrevoked guidance of our project supervisor and course instructor, **Dr. Shahnewaz Siddiqui**, his unparalleled attention to detail and technical knowledge has let us overcome our limitations and achieve our goals. Thank you, sir, for your patience and guidance.

Abstract

Blood transfusion and its related institutions like hospitals and blood banks are a common place in our modern lives, but still today people face shortage of blood during emergencies and sometimes even lose their loved ones in the process. In many cases it is mostly due to shortage of voluntary donors but sometimes it is due to lack of communication or no communication between the medical institutions. This evident problem is unacceptable in an age of internet and digitalization because with a proper platform, the issue can not only be solved but can save lives that should not be lost.

Our project creates such a platform, where users, blood banks and hospitals can communicate with everyone and be aware of the need and shortcomings of blood anywhere else. If one blood bank has a certain type of blood and one does not, then they should be able to communicate, know the shortcomings and solve through the system we named “Centralized Blood Bank Management System”. This system will allow them to notify others of their own shortage and make requests to make up for that shortage. Besides, users as in public can also make their requests through this platform in times of emergencies. Our platform has a Web app and an Android app, which makes verified transactions between all the entities and has an easy accessibility to all.