eBOOKING APPOINTMENT MANAGEMENT SYSTEM DOCUMENTATION

TABLE OF CONTENT

TABLE OF CONTENT CONTINUE

TABLE OF CONTENT CONTINUE

OVERVIEW

- *eBooking appointment management system is a simple web project that is made for e-channeling using PHP,HTML & CSS. This initiative facilitates online appointment requests for clients or patients of medical establishments, including clinics and hospitals.*

This project can also help doctors to manage their appointment with their patients. This doctor's appointment system will organize the schedules of each patient's appointment, which will be submitted as a request to the doctor they have selected. The system comprises three key roles: administrator, doctor, and patient. The system admin will populate the list of the doctors with their specialties and along with the doctor's details and system credentials. The patients can browse the doctor's appointment system website to find a doctor that has the specialty of their needs. Patients can review the doctor’s weekly schedule, enabling them to select a suitable day and time for their appointment. Subsequently, they can submit their appointment request. After that, the doctors can view all their appointments and the appointment request of the patients for their availability.

PROBLEM DEFINITION

- *Currently, the process of declaring and managing the students' results at the Ghana-India Kofi Annan Centre of Excellence in ICT is performed manually with extensive human intervention. The students' results are generated through a spreadsheet application and then printed on a paper, attached to a wall for declaration and then stored. Despite having an application that generates the result, it is not very effective as the system consumes a lot of time and human resources in performing various tasks, it is costly, it lacks data security and efficiency. And at present, the institution needs an advanced and computerized environment. And once implemented, it will minimize all the problems mentioned*

PROJECT SCOPE

- *The study aims at developing and implementing a web-based eDoc Appointment Management System is to reduce The hassles and delays patients go through before seeing a doctor.*

  The proposed is a multi-user system, developed using PHP, Bootstrap and MySQL DBMS (Database Management System) support. The system is confined to and intended for the patients. They possess privileges to booking an appointment without anu delays. The entire system is

  managed by a system three users(System Administrator, Doctor and Patient)

PROJECT LIMITATIONS

1. *The eDoc Appointment Management System does not have an email and SMS (Short Message Service) notifications.*

2. *The system does not generate report.*

SYSTEM IMPLEMENTATION

- *A development environment refers to the mix of software tools, methods, and physical resources that an IT (Information Technology) team uses to create an information system. It's usually easier to use an IDE (Integrated Development Environment), which uses built-in tools provided by the software vendor. And for the development of the current system, Visual Studio Code was used which is a well-known IDE, it is free, open-source, and community- supported.*

PROJECT REQUIREMENT DETERMINATION

The following are the functional requirements of the current system:

- *The system will have three types of users: (System Administrator, Doctor and Patient)*
- *The system allows the Administrator to add doctor.*
- *The system allows the Administrator to edit doctor info.*
- *The system allows the Administrator delete doctor.*
- *The system allows the Administrator to schedule new doctors sessions and remove sessions*
- *The system allows the Administrator to view patients details.*
- *The system allows the Administrator to view booking of patients.*

PROJECT REQUIREMENT DETERMINATION CONTINUE

The following are the functional requirements of the current system:

- *The system allows the Doctor to view their booking appointment.*
- *The system allow the Doctor to view their scheduled sessions.*
- *The system allows the Doctor to view details of patients.*
- *The system allows the Doctor to delete their account.*
- *The system allows the Doctor to edit their info*

PROJECT REQUIREMENT DETERMINATION CONTINUE

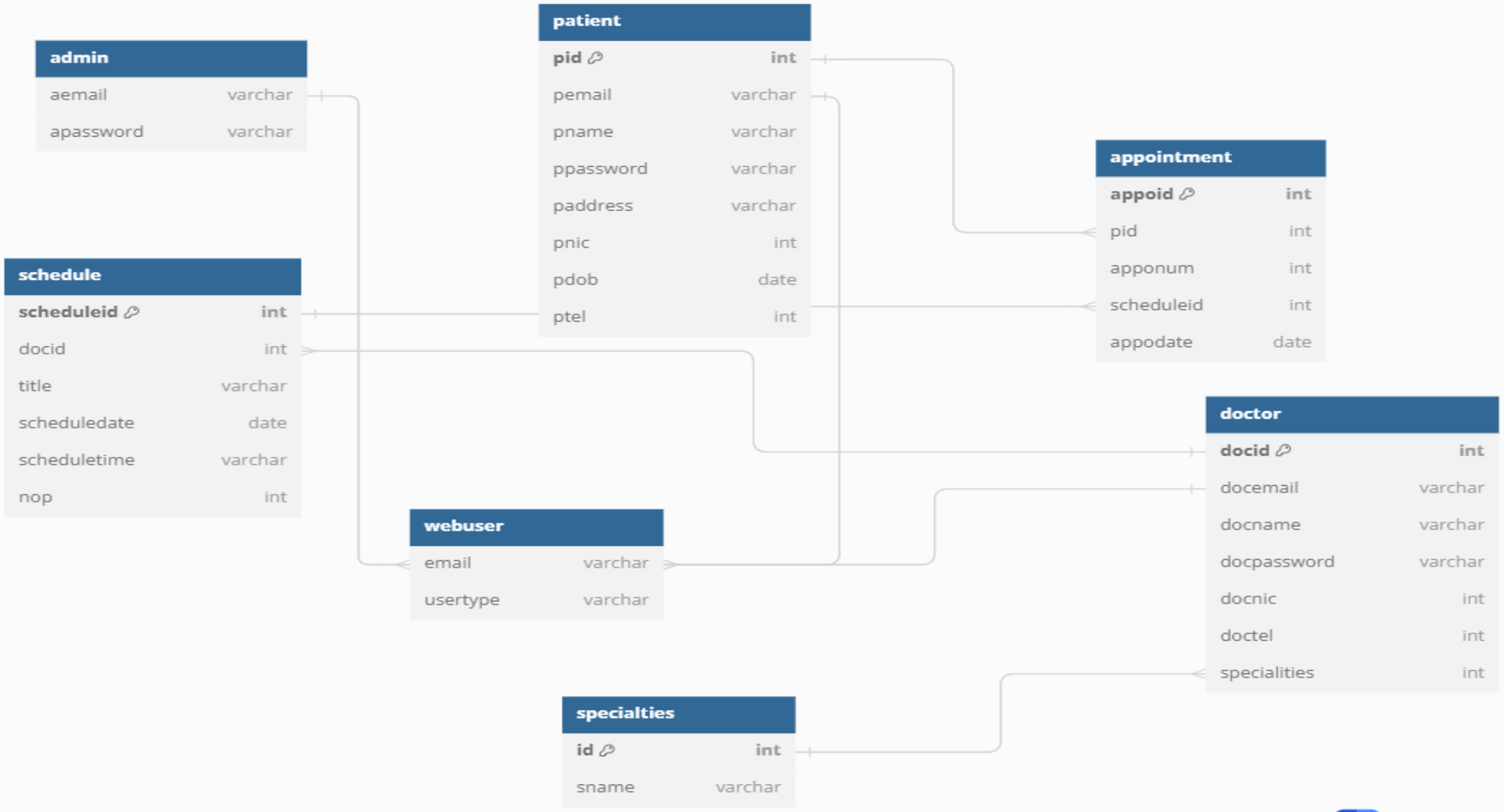
The following are the functional requirements of the current system:

- *The system allows the Patient to create an account.*
- *The system allows the Patient to book an appointment online.*
- *The system allows the Patients to view their booking appointment.*
- *The system allows the Patient to edit their info.*
- *The system allows the Patient to delete their account.*

ENTITY RELATIONSHIP DIAGRAM

- *An entity-relationship diagram (ERD) is a model that shows the logical relationships and interaction among system entities. The ER Diagram below provides an overall view of the system and a blueprint for creating the physical data structures. The following diagram displays a logical data representation of the current proposed system. Built with the help of MySQL Workbench, a visual or logical database design tool which provides data modeling, SQL development, and comprehensive administration tools for server configuration, user administration, backup, and much more.*

- *The first step was to identify the entities for the current system during the analysis phase and at this stage, a simplified method can be established to depict the relationships between entities. The current system database is composed of seven tables representing its respective entities, “admin”, “appointment”, “doctor”, “patient”, “schedule”, “specialties”, “webuser”. And its composition can be seen in the ERD below.*


admin
aemail varchar
apassword varchar
patient
pid int
pemail varchar
pname varchar
ppassword varchar
paddress varchar
pnic int
pdob date
ptel int
appointment
appoid int
pid int
apponum int
scheduleid int
appodate date
schedule
scheduleid int
docid int
title varchar
scheduledate date
scheduletime varchar
nop int
doctor
docid int
docemail varchar
docname varchar
docpassword varchar
docnic int
doctel int
specialities int
webuser
email varchar
usertype varchar
specialties
id int
sname varchar
dbdiagram.io

USER INTERFACE

Generally, the system is created around a friendly user-interface, a platform on which the users could manage the data and access the information needed. Easy to understand, manageable, reliable, interactive, that establishes a great connection with other layers of the system, manipulating the data without any inner details of it and that performs a certain task accurately. And the designing of the user-interface involved understanding the task, objectives and experience the target audience possessed. Which was possible through the application of the HTML, CSS, and Bootstrap technologies. Below is the login page for the System Administrator, Doctors and Patients, where the users are required to be authenticated to access the system. And the system will open a particular account page or dashboard according to the user level or role.

Welcome Back!

Login with your details to continue

Email:

Email Address

Password:

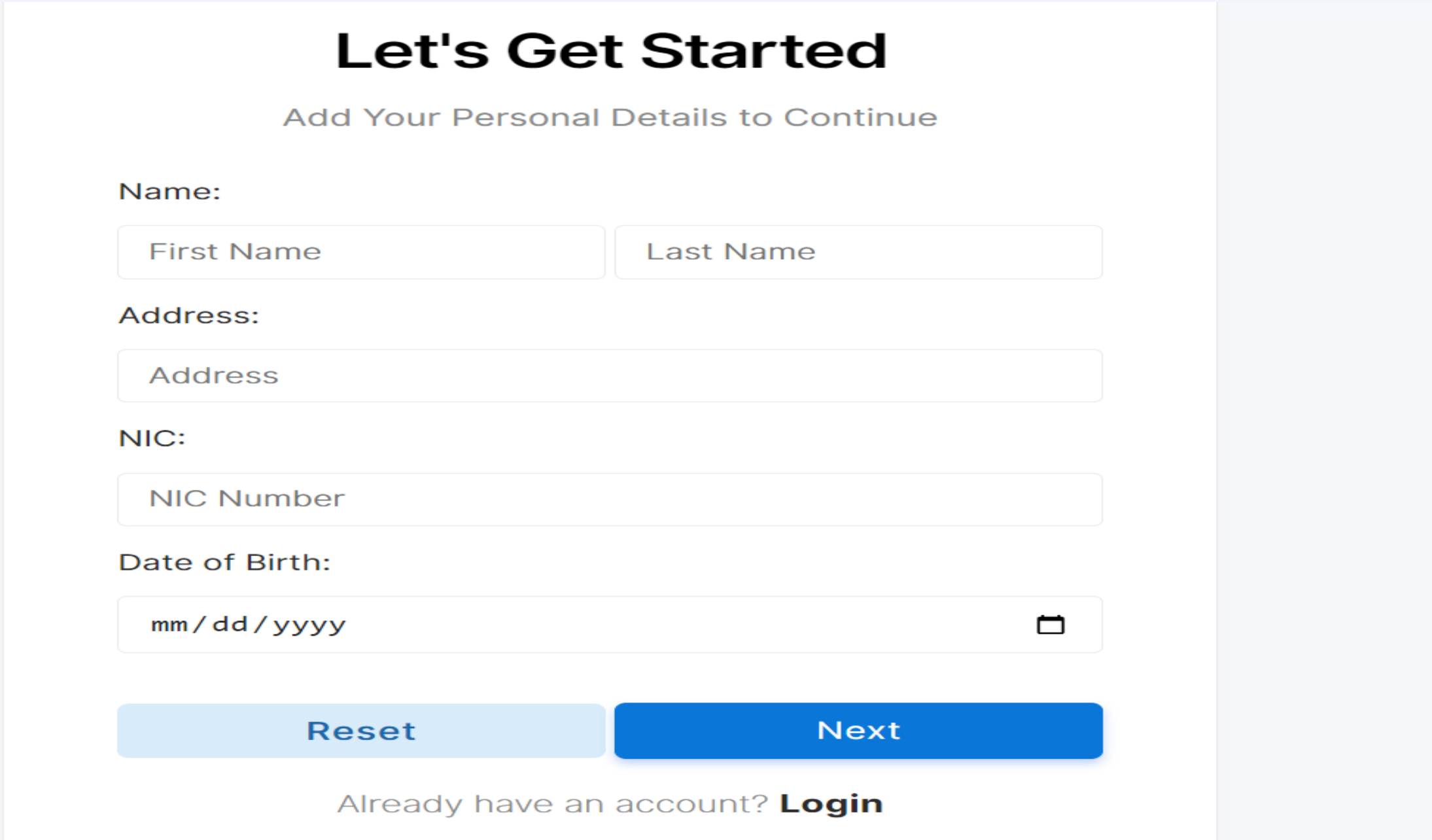
Password

Login

Don't have an account? **Sign Up**

Go Back

Below is the signup page for Patients where the patient is required to provide the personal and login details.



FUTURE WORKS

1. *The system interface could be improved, with more attractive, interactive and meaningful images.*
2. *The system will be enhance with an email and SMS (Short Message Service) notifications.*
3. *We will evolve the system by developing several versions through users' feedback, if a complete solution has not been worked out.*
4. *The system will be able to generate reports.*

CONCLUSION

- *The present research was based on the computerization and the implementation of a sophisticated Web-Based eBooking Appointment Management System for patients.*

  The main objective was to reduce the hassles and delays patients goes through when they want to see a doctor.

- *A well-defined, efficient, controlled and managed information system or software based on web technology storing, processing and providing information through the internet. And the objectives were achieved by following a process model such as system analysis, design and system implementation.*

CONCLUSION CONTINUE

- *The system analysis was composed of two activities, requirement determination and structuring. The first activity focused on the collection of data or requirements through structured interview, work environment observation and by collecting procedures and other written documents. And the latter, performed the modelling of the collected data and processes, transforming it into UML diagrams with the aid of a UML modelling tool which was converted into a graphically understandable manner. Just as structured analysis uses DFDs (Data Flow Diagrams) to model data and processes, systems analysts use UML to describe Object Oriented systems, on which the current system is based. UML is independent of any specific programming language and can be used to describe business processes and requirements generally.*

ACKNOWLEDGEMENTS

- *Immense gratitude to the Ghana-India Kofi Annan Centre of Excellence in ICT (GI-KACE).,*

  Center Manager Bolgatanga(Mr Christian Danso) and the Research and Innovation Department team(Mr. Eugene,

  Mr Bismark, Mr Moro and Mr Hermas) who provided insight and greatly assisted to the research and design of the system.