ONLINE HOSPITAL RECRUITMENT SYSTEM

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I. DECLARATION

This proposal is an original work and has not been presented to any degree in any other institution

Name
Signature
Date
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Date
This proposal has been put into submission for approval and
examination with the approval of the university supervisor;
Name
Signature
Date

II. DEDICATION

We dedicate this project to our God and our parents/ guardians.

III. ACKNOWLEDGMENT

We would like to express our gratitude to our supervisor for guiding us throughout the entire creation process. Moreover, our institute's library has served as a great source of information in the creation of our system

IV. ABSTRACT

This project presents a review of the software program 'Online hospital recruitment system', which should be used in hospital management.

Using the web, software, and other technology; it finds, evaluates, and hires people. It evaluates potential applicants based on: the cost of hire, time to fill, and source of hire.

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CHAPTER 1

1.1: Background of the Study

Recruiting in the healthcare industry has proven to be challenging for recruiters searching for highly-qualified hires in this day and age. It has led to changes such as reliance on technology, which it seems demands have had significant impacts on the health care industry.

It is especially true for hiring in the healthcare sector as more advanced skills are in higher demand to keep up with new trends.

In the current age, healthcare professionals should have the ability to

into operation ethical and safe operations, with the most significant level of technical mastery.

1.2: Problem Statement

Creating an online hospital recruitment system.

1.3: Aims and Objectives of Problem Statement

- 1. Only allow authorized personnel to add the eligible application information to the database.
- 2. Software should show vacant positions for hires to apply for
- 3. The Hire should be able to make an application for the vacant position.
- 4. The applicant should be able to view their results after a set time.

1.4: Research questions

- 1. Can the software show vacant positions for hires to apply for?
- 2. Can HR be able to manipulate the application status of an application?

3. Can the applicant be able to apply for the desired job?

1.5: Rationale of the project

The proposed system will bring about the following benefits;

- 1. Reduce costs for instance, the cost of high turnover, costs of low productivity, and direct hiring costs.
- 2. Help hospitals achieve better hires, increase productivity, and improve employer brand.
- 3. The project will also provide the hiring team with a better applicant pool.
- 4. The proposed system will give the organization a better competitive edge.

1.6: Significance of the Study

An effective online hospital recruitment system will fulfill the requirements of a job and ensure that the hospital continues to maintain its commitment to providing equal opportunities to employees. Adherence to such a policy will let the hospital hire the best applicants possible.

In addition, the software brings about;

- Better performance
- Greater Efficiency
- Better Control
- Security

1.7: Delamination of the System

The system will only be fully accessed by hospital administrators for instance HR department.

Partial access will be granted to potential hires for applications.

1.8: Operational Definition of Terminologies

• HR: Human resources

1.9: Conclusion

The computerization of systems is vital in every field of human endeavor. Here information concerning applicants can be efficiently through this new system, and some of the difficulties encountered with a manual system are solved. It will also reduce the workload and time of staff, increasing efficiency. The application can also automatically update records in various files, therefore relieving the hospital administrators' stress of working on file security of data.

CHAPTER 2: LITERATURE REVIEW

2.1: Introduction

Recruitment is the process of getting human resources into the organization's departments, sections, and jobs (Kanagavalli Gurusamy 2019).

E-recruitment has many labels: internet recruitment, online recruitment, web-recruitment, and many others. Unlike traditional recruitment, e-recruitment makes use of information technology to handle the recruitment processes (Mike Abia and Irwin Brown).

2.2: Global Perspective

Case Study: International Healthcare Recruitment

Since 1998, 'Worldwide Health Staff Solutions has been connecting healthcare facilities with qualified RNs and healthcare professionals from around the world. Our job is to help you fill staff shortages at your hospital, rehabilitation facility, nursing home, outpatient clinic, or other medical settings.

Their portal includes details concerning their organization's history and necessary instructions. Moreover, includes fields an applicant can fill in addition to uploading necessary documentation.

MERITS

- 1. Accessible.
- 2. Flexible and easy to use.
- 3. Time-saving

DEMERITS

- 1. Website is not detailed
- 2. Too impersonal.

Case Study: YOUR WORLD HEALTHCARE

They offer a selection of employment prospects around the world, including long-term career moves and temporary positions.

Their website has a selection of medical fields where an applicant can pick their field of practice. The applicant will be redirected to another page where they will fill in their details and send the necessary documentation.

MERITS

- 1. Accessible.
- 2. Flexible and easy to use.
- 3. Time-saving

DFMFRITS

- 1. Website is not detailed
- 2. Too impersonal.

2.3: Regional Perspective

Case Study: E-recruitment system for Namibian government.

The purpose for development: speeding up and automating the job ranking and recruitment process in Namibia.

Features:1. it is web-based.

- 2. CV parsing
- 3. multi-channel posting.

MERITS

1. Accessible.

- 2. Flexible and easy to use.
- 3. Time-saving.

DEMERITS

- 1. Website is not detailed
- 2. Too impersonal.

Case Study: African Union E-recruitment system.

The purpose for development: To attract African applicants from the continent and diaspora and also maintain a talent warehouse of potential candidates who can join the AU

Features:

- 1. CRM
- 2. Monitoring
- 3. Communication tracking
- 4. Accessed in two official languages of AU English and French.
- 5. Sends thank you notes to applicants.

MERITS

- 1. Dynamic content.
- 2. Shortens hiring process.
- 3. User-friendly.
- 4. Personalized design.

DEMERITS

1. Automatic weeding of candidates.

2. High volume responses.

2.4: Local Perspective

Case Study: Online Job portal for Kenya

The purpose for development: developing or building an online search jobs application for job seekers.

Features

- 1. Matches between candidates and customer's needs
- 2. Web-based
- 3. User-friendly.

STRENGTHS

- 1. Quick and simple.
- 2. saves employers hours.

WEAKNESSES

- 1. Bugs and data crushes.
- 2. Poor website.
- 3. High volume responses.
- 4. Automatic weeding of candidates

Case study: Tenwek Hospital.

Their website includes features such as; information, medical services, training programs, etc.

I also provide applicants with information on what to expect once they start their residency in the facility.

Strengths

• The website does well to advertise its facility to potential hires.

Weaknesses

 The website does not provide an area for a hire to apply for any specific program

2.5: Research Gaps

For all the merits an online recruitment system may have some of the demerits include;

- 1. It can be difficult to measure their effectiveness
- online recruitment services offer an in-depth analysis of your posting; therefore, it can be hard to figure out what is and isn't working and how to optimize an ad
- 2. It attracts bad candidates
- it's very easy for people to apply for jobs online; this can
 potentially be a negative point as well, though. Posting a
 position online usually results in hundreds of applicants, many
 of whom will not be suitable for or serious about the role, thus
 diluting the quality of your talent pool.

2.6: Summary

In summary, by the study conducted on the global, regional, and local instances of recruitment systems, we sought to create a system that would resolve the above reasons and create an online recruitment system.

CHAPTER THREE: SYSTEM METHODOLOGY

3.1: INTRODUCTION

This branch concentrates on the methods used in data collection such as; questionnaires and interviews.

3.2: Software Development Methodology

The system will be built using the waterfall system development methodology.

The Waterfall Model was the first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases.

The Waterfall model is the earliest SDLC approach that was used for software development.

The waterfall Model illustrates the software development process in a linear sequential flow. This means that any phase in the development process begins only if the previous phase is complete. In this waterfall model, the phases do not overlap (https://www.tutorialspoint.com/).

3.3: Location of Your Study

We conducted our study at the 7 branches.

3.4: Target Population and Sample Size

The target population includes those in hospital management for instance; the HR department.

The sample size will include no more than ten people relevant to this system.

3.4.1: Sample size

3.4.1.1: Confidence interval

While determining a sample size one has to measure the degree of uncertainty or certainty in a sampling method and how much uncertainty within a particular statistic.

Hence the confidence interval is important in determining sample size.

3.4.1.2: confidence level

This represents how often the responses you receive will vary from each other and the mean number.

Formula for calculating sample size using Cochran's formula:

Population size = not known(n)

Confidence level = 95% (z = 1.96)

Confidence interval = 5 units

Standard deviation = 20

N = 2(2sd/ES)Sq

Where: n= sample size

Sd = standard deviation

ES = confidence interval

Sq = squared

=2(1.96 * 20/5)sq

=122.93

=122 people

Citation:

- Sphweb.bumc.bu.edu
- www.geopoll.com

References:

- Statistical Distributions, 3rd edition by Evans M., Hastings N.
- Organizational Research by Bartlett, J.etal(2001)

3.5: Sampling Procedures

Simple random sampling

We used this method so that every member of the population was given an equal chance of being selected. The sampling frame included the whole population.

We gave all the staff members numbers and then used a random number generator to choose who was going to be included in the study

3.6: Data Collection Instruments

3.6.1: Questionnaire

Various questions were asked in a hospital. Questions asked in the questionnaire included:

- a) What is a preferred way of recruiting hires into the organization between an automated system and a manual system?
- b) What is a more cost-efficient recruitment system between online recruitment and a manual system?
- c) Between manual and online recruitment which one has more workload.
- d) Does an online recruitment system serve a larger number of recruits compared to a manual system?

3.6.2: Interview

questions asked during the interview include:

- a) What challenges are faced when using a manual system?
- b) Does a manual suffer from any backlog of data?
- c) Has there been any instances of missing out on good recruits when using an automated system?
- d) Has online recruitment increased the organization's performance?

3.7: Data Presentation

122 relevant individuals were randomly selected. Based on the questionnaire provided the following was concluded;

question	Automated system	Manual system
The preferred way of recruiting hires into the organization	90	32
The most cost- efficient recruitment system	101	21
The system with the most workload	10	112
The largest no. of recruits	115	7

3.8: Ethical Considerations in Research

Ethical considerations matter in research for scientific integrity human rights, dignity, and collaboration between science and society.

During our research, we ensured that ethics were followed.

3.8.1: Getting approval for our research

The Dedan Kimathi university gave us the approval to carry out research related to this study.

3.8.2: Ethical issues

Firstly, participation in our research was completely voluntary.

Informed consent

We ensured that all the people who participated in our research received all the information they needed to determine whether they want to participate.

This includes:

- What the study was about.
- Risks and benefits of taking part
- How long study would take.

We also assured them that their data would be kept confidential.

Anonymity

We used pseudonymization to ensure that the participation details remained anonymous in this issue. This helps remove personal information.

Result communication

After conducting our research we communicated the results back to all the participants who took part in the research.

Citations:

- www.scribbr.com>research-ethics.
- research-methodology.net

references:

• THE CENTER FOR BIOETHICS & HUMAN DIGNITY, by Trinity International University.

3.9: Conclusion

In conclusion, it is better to have recruitment processes done through software systems rather than a manual recruitment system.

CHAPTER FOUR: ANALYSIS AND DESIGN

4.1: INTRODUCTION

The hospital recruitment system allows job seekers to view the opportunity through advertisements help to them apply for the job.

4.2: REQUIREMENT ANALYSIS

4.2.1: Functional Requirements

- 1. Register a new member account
- 2. Allow member login
- 3. The applicant views the jobs through an Advertisement.
- 4. Applicants apply for the job.
- 5. Recruited Applicants are informed.
- 6. HR Manager can generate reports from the information and he/she is the only authorized
- 7. personnel to add the eligible application information to the database.

4.2.2: Non-functional Requirements

- a) **Reliability issues**: in case of a system crash, it should not be down for more than 30 minutes.
- b) **Usability issues**: the system should display necessary modules such as application modules
- c) **Performance issue**: the system should respond to user requests
- d) **Security**: only the admins will be able to enter the system to make maintenance
- e) **Operational**: the system should support OS which includes:
 - Windows (7,8,10)
 - RAM 4GB
 - Processor: at least 2ghz

4.4: SYSTEM ANALYSIS

The Merriam-Webster dictionary defines system analysis as "the process of studying a procedure or business to identify its goals and purposes and create systems and procedures that will achieve efficiently achieve them view sees system analysis as a problemsolving technique that breaks down a system into its component pieces for the studying how well those parts work and interact to accomplish their purpose.

USER CHARACTERISTICS

Applicant

These are the persons who desire to apply for the job.

Organization

These are the person with certain privileges to announce recruitment depending upon the organization's need. He/ She may contain a group of persons under him/her to publish the advertisement and give suggestions on whether or not to approve the recruitment.

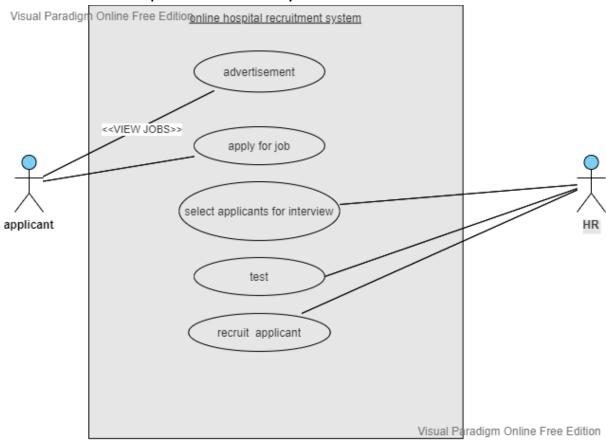
HR

He/ She is the person who upon receiving intimation from the RS, performs a personal verification of the applicants and sees if he/she has eligibility for the advertised job through a process of Test and Interview

4.4.1: Use Case analysis

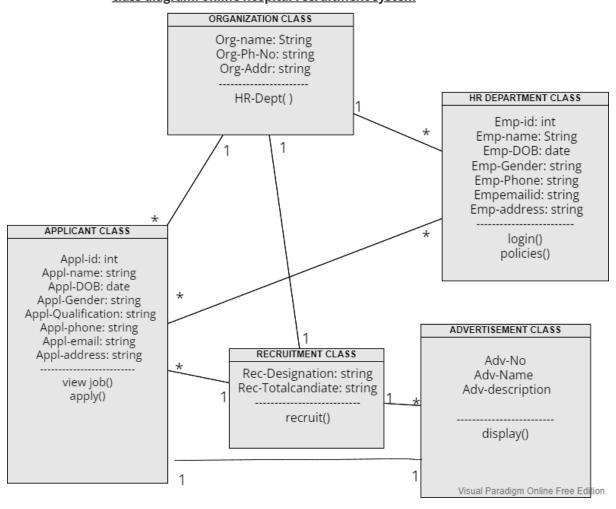
Use case analysis is a technique used to identify the requirements of a system (normally associated with software/process design) and the information used to both define processes used and classes (which are a collection of actors and processes) which will be used both in the use case diagram and the overall use case in the development or redesign of a software system or program. The use case analysis is

the foundation upon which the system will be built.

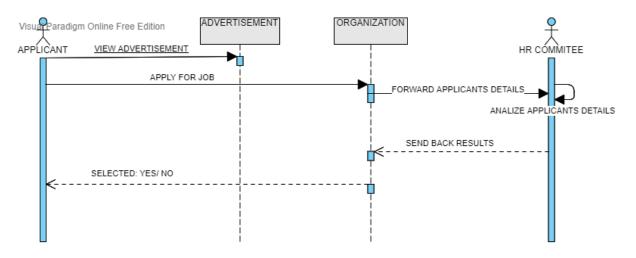


4.4.2: CLASS DIAGRAM

Visual Paradigm Online Fcrassificagram: online hospital recruitment system



4.4.3: SEQUENCE DIAGRAM



SEQUENCE DIAGRAM: ONLINE HOSPITAL RECRUTMENT SYSTEM

Visual Paradigm Online Free Edition

CHAPTER FIVE: TESTING AND RESULTS

5.1: INTRODUCTION

The following includes system GUI and functionalities.

5.1.2: DEFINITIONS

Unit Testing

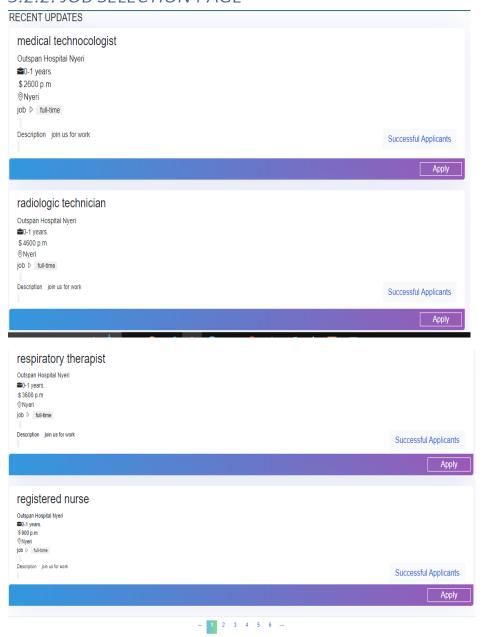
5.2.1: HOME PAGE



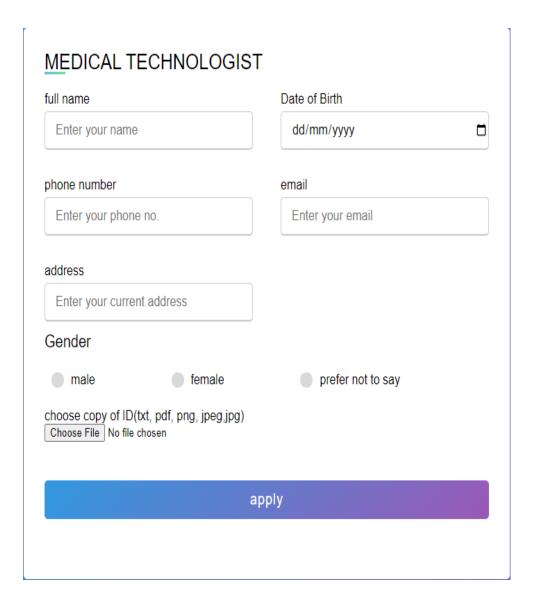




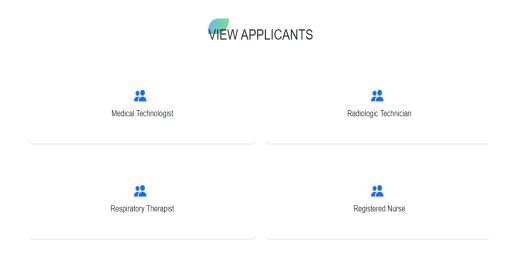
5.2.2: JOB SELECTION PAGE



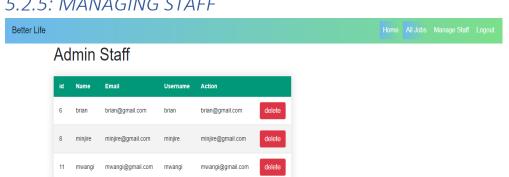
5.2.3: APPLICATION PAGE



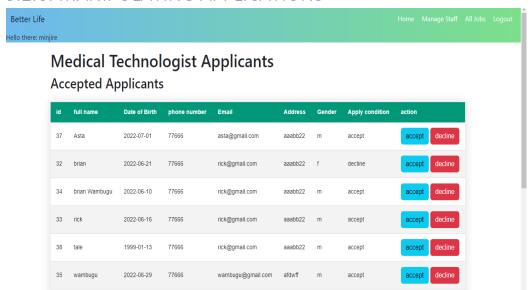
5.2.4: ADMIN HOME PAGE



5.2.5: MANAGING STAFF



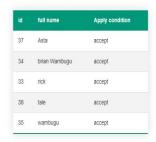
5.2.6: MANIPULATING APPLICATIONS



5.2.7: RESULTS PAGE

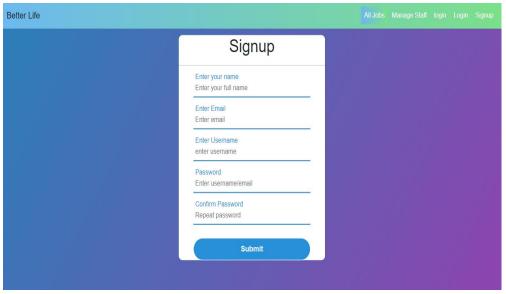
Better Life admin login about

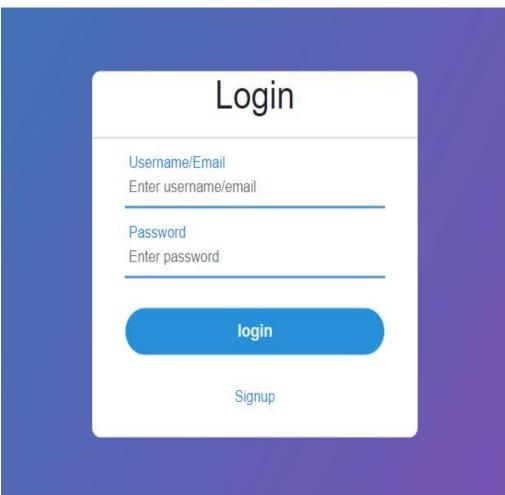
Medical Technologist Accepted Applicants



Home page

5.2.8: SIGNUP AND LOGIN PAGE (ADMIN)





Integration

5.3.1: APPLICANT ACCESS

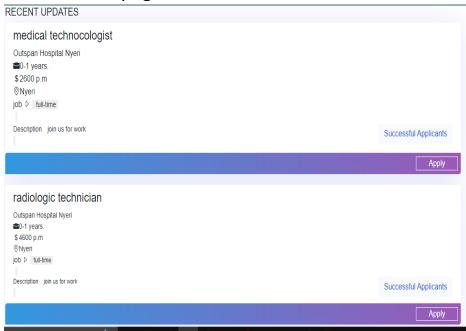
Pages that can be accessed by an applicant (in order) include:

a) Index page

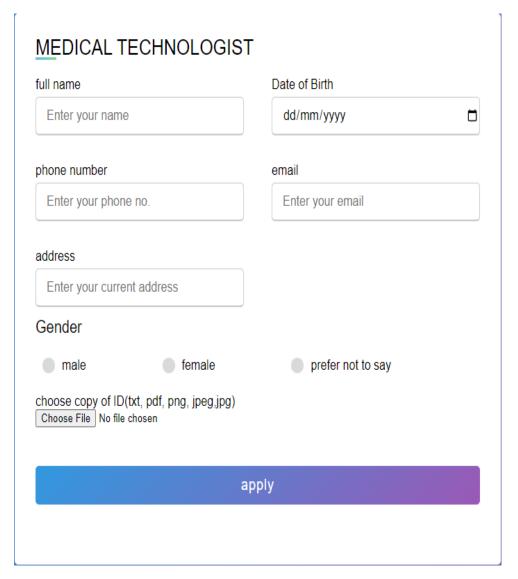




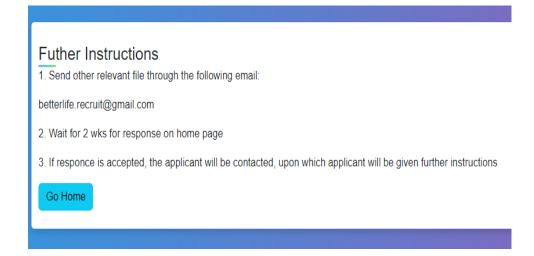
b) Job selection page



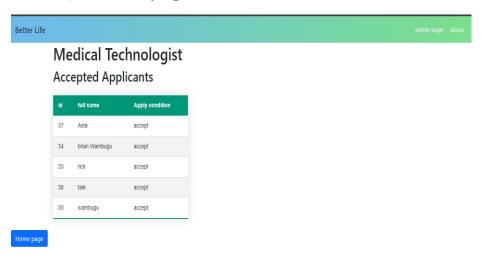
c) Job application page



d) Instructions page (after applying)



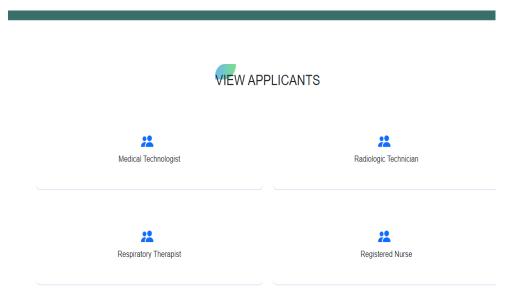
e) Results page



5.3.1: ADMIN ACCESS

Pages that can only be accessed by HR or an admin include:

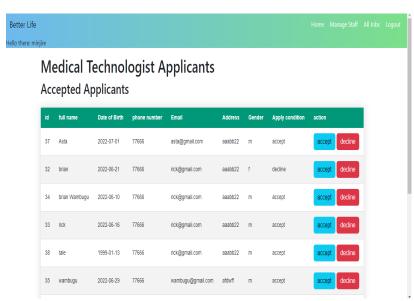
a) Admin home page



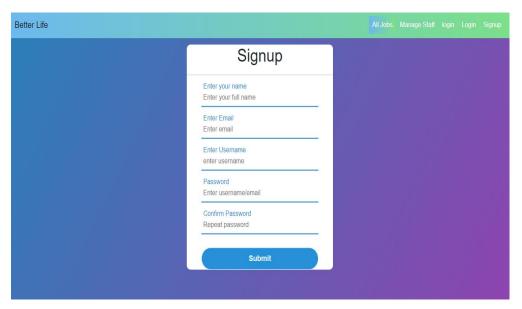
b) Managing staff page

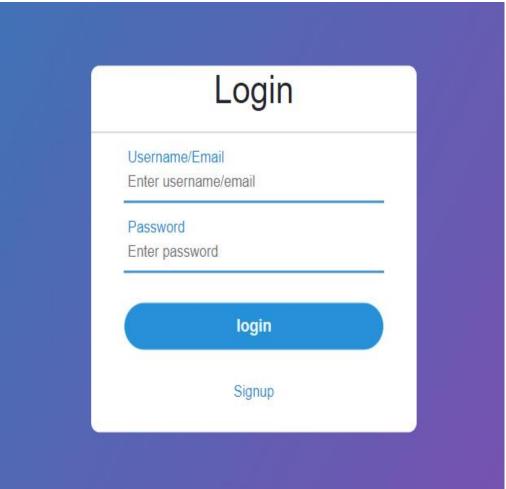


c) Manipulating applications page



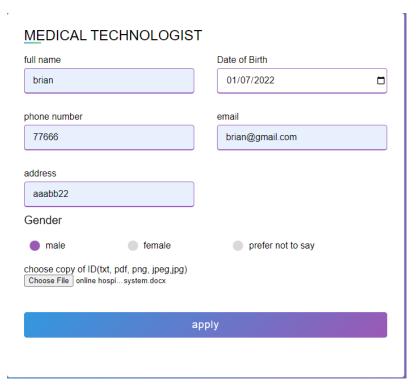
d) Signup and login pages



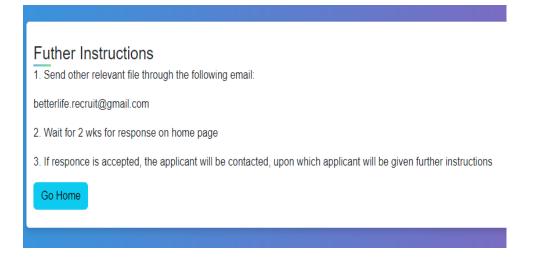


System Testing

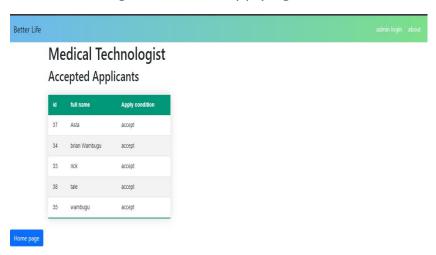
i. Applying for a job:



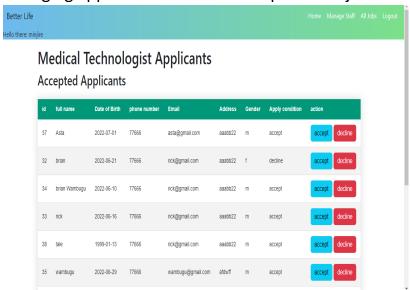
ii. Redirected to instructions page after applying:



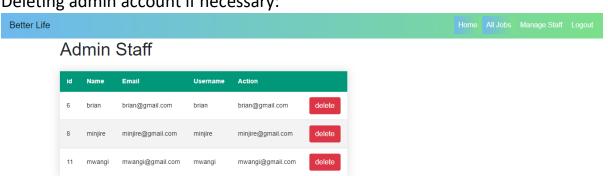
iii. Checking results after applying:



iv. Changing application status to accepted or rejected:

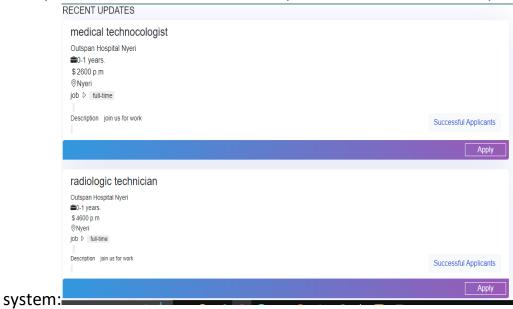


v. Deleting admin account if necessary:



Acceptance Testing

The system can work well with a computer with a windows 10 operating



CHAPTER SIX: IMPLEMENTATION AND DEPLOYMENT

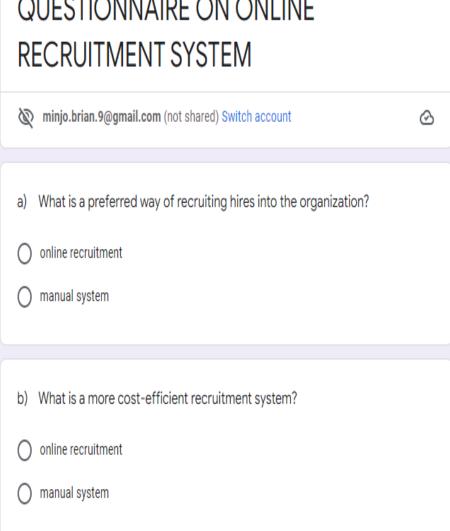
The software is to be deployed and accessed through the internet. It is then to be accessed through devices such as phones and laptops.

APPENDIX REFERENCES

- Nafia Sultana, Nahida Sultana. Analyzing the Effectiveness of Online Recruitment: A Case Study on Recruiters of Bangladesh.
- Muhammad Zaheer, Rizwan Sandhu. MEASURING THE PERCEIVED EFFECTIVENESS OF AN ONLINE RECRUITMENT SYSTEM.
- Mike Abia and Irwin Brown. Conceptualizations of Erecruitment: A Literature Review and Analysis, April 2020.
- Gurusamy, Kanagavalli. A Systematic review of literature on Recruitment and Selection Process, June 2019.
- Siôn Phillpott. The Advantages and Disadvantages of Online Recruitment.

QUESTIONNAIRE SHEET

QUESTIONNAIRE ON ONLINE



c) which one has more workload? Online recruitment manual system
which system serves a larger number of recruits? online recruitment manual system

INTERVIEW ON ONLINE RECRUITMENT SYSTEM

minjo.brian.9@gmail.com (not shared) Switch account	©
What challenges are faced when using a manual system? Your answer	
b) Does a manual suffer from any backlog of data? Your answer	
c) Has there been any instances of missing out on good recruits when us automated system?	sing an
Your answer	
d) Has online recruitment increased the organization's performance?	
Your answer	