DESIGN AND IMPLEMENTATION OF ONLINE JOB PORTAL

A STUDY OF ABRAHAM ADESANYA POLYTECHNIC EBBU- IGBO

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(A STUDY OF ABRAHAM ADESANYA POLYTECHNIC IJEBU-IGBO)

BY

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BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF COMPUTER SCIENCE, SCHOOL OF SCIENCE.

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CERTIFICATION

I certify that this research work was carried out by **RABIU NURUDEEN OLAWALE** with matriculation number **15/04/0007** in the department of Computer Science, School of Science, Abraham Adesanya Polytechnic Ijebu-Igbo under the supervision of AKINOLA.K.E (MR).

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DEDICATION

This project is dedicated to God almighty, the beginner and the finisher of my inspirations; I thank Him for the wisdom and the strength to be able to complete this project, also to my parent Mr & Mrs Rabiu for their love, care, support and prayer in all endeavour of my life.

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My profound gratitude goes to Almighty God, the creator, the most merciful, the provider for being my shield, my source of wisdom, knowledge, understanding, power and inspiration, He deserves all the glory.

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All entire lecturers of the Department of Computer Science from the HOD Mrs. Odumosu A. A. to other lecturers Mr. Alowosile, O.Y, Mrs. Adedeji A. A. and Mr. Moshood, M. O. are hereby appreciated for imparting knowledge capable of making me to stand out as a knowledgeable person in the society.

My sincere gratitude goes to my father and my sweet mother Mr. and Mrs Rabiu for their support and prayers, for being the most wonderful parent one should ever pray and ask for. You shall reap the fruits of your labour. Also to my siblings for their love and support.

I appreciated my mentors, for being there for me especially during those moments no one understood me, in person of Shonuga Damilare and Quadri Mujidat Olashile, and to all the Bad (Guys) in the school Major, Teefunds, IBK. Freshino, Alausa, Favour, Ranti Fetuga, Isa, Queen Wunmi and Immaculate.

ABSTRACT

Computers are known for their wide range of uses, especially in Information Technology (IT) fields. However little or no thought has been given to designing a complete and thorough artificial intelligence online job recruitment portal to foster the human resources activities in a particular work environment. PHP was used for the designing of the system software alongside with some other developmental tools; MySQL was used as a data repository for the system software. This system software is designed to assist the organization in attaining a standardized sample of recruiting staff in the work environment; the design of the system software is quite simple and easily understood. Its flexibility makes it amenable for future changes and amendment to either incorporate other aspects of intelligence or to be designed for any other school age or class.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Recruitment is important for organizations since it performs the essential function of drawing an important resource, human capital, into the organization. British American Tobacco Nigeria has tried many aspects in recruiting staffs into the organization. But they're yet to deals with the online examination recruitment.

In future, the internet world will have an even closer relation with our daily lives, online teaching and online examination are the direction towards which the academic circle will move. An online examination system does not have the limitation of time and place. Users can arrange their examination time in accordance to the progress of their lesson. Since the test is graded by computers, time which would have been required for manual marking and grading is saved. Test takers can check the test solutions immediately after the test, thus letting candidates know their mistakes and work to correct them

The formulation of questions for a test is often treated with doubts and suspicions. In a typical online examination system, the questions are strict and set with care. Although the exam questions are in the multiple choice format (objectives), the questions are chosen at random. All students have the same questions but the order of questions is different. Since the order of the question differs on each computer, the motive in students to cheat is reduced. Cheating at examinations is unacceptable. It is common knowledge that people are likely to cheat in a network environment but this is wrong as cheating at

examinations is unacceptable as it affects the fairness of an examination. This situation implies that to overcome the tendency to cheat is the major challenge in online examinations. Despite the pitfalls, online examination is very important and useful as it breaks the barrier of distance and different geographical location. Applicants from all over the world can access the system thereby giving the examiners a good chance to identify highly intelligent prospective staff.

Conducting examination before employees are recruited is very important as their level of success in the exams will reflect their level of competence or ability. Online examination widens the spectrum for organizations to reach out to more applicants and to get the best. It is on this premise that this research study is set to examine the design and implementation of an online examination system for recruitment of staff.

1.2 Statement of Problem

Many organizations do not have competitive personnel and this negatively affects the productivity and image of the organization. In addition, there is no effective structure to recruit staffs that is able to stand up to the responsibility of their duties. Many organizations still adopt the manual method of recruiting and the applicants are limited to those in their immediate environment. Also, many applicants find it difficult to get to the examination centres due to distance and high cost of transportation. Organizations are unable to reach out to a wide spectrum of applicants so as to be able to recruit the best employees. The traditional examination for recruitment is usually characterized by cheating which hampers the credibility of recruited employees. There is need for a more

effective system that is able to reach out to a wider spectrum of employees, breaking the barrier of distance and cost and thereby promoting the recruitment of well qualified staff.

1.3 Objectives of the study

The following are the objectives of the study;

- To identify the structure/characteristics of an existing method of staff recruitment.
- To find out the challenges/disadvantages of the adoption of online examination system for the recruitment of staff.
- To identify the benefits of an online examination system for the recruitment of staff
- To design and implement an online examination system for the recruitment of staff.

1.4 Significance of the study

The significance of the study is that it will bring to light the relevance of adopting online examination system for employee short-listing or e-recruitment system and the need for its adoption by organizations. It will help organizations solve the present challenges they are facing in attracting eligible and professional employees by providing a software system that processes the application of different applicants. It will also save them time and cost of recruiting. In addition, other scholars seeking for valuable information on the subject will find this research material relevant which will contain questions like English, Computer, Current Affairs, General knowledge and so on.

1.5 Scope of the Study

This study covers the design and implementation of an online examination system for the recruitment of staff in Nigeria British Tobacco which will contain home, registration , exam and the admin interface.

1.6 Definition of Terms

Online: Refers to a system connected to the internet that can be accessed remotely from any part of the world.

Examination: A test designed to assess somebody's ability or knowledge in a particular subject or field

Employment – the condition of working for pay

Application - a formal and usually written request for something such as a job, a grant of money, or admission to a school or college

Short-list - to put somebody or something on a final list of candidates for a position or award

Recruitment - to enrol somebody as a worker or member, or to take on people as workers or members

Human resources - the field of business concerned with recruiting and managing employees

Management - the organizing and controlling of the affairs of a business or a sector of a business

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is concerned with the review of related literature, the contributions of other researchers is examined in this chapter. It looks at:

- The Need for employee recruitment using online examination
- Steps involved in employee recruitment
- The concept of online examination
- System structure/characteristics of online examination
- Advantages of Using Online Examination System for Employee Recruitment
- Disadvantages of Using Online Examination for Employee Recruitment

2.2 The Need for Employee Recruitment Using Online Examination

Organizations make use of e-recruitment because of several reasons Chapman & Webster (2003). These include:

- Cost Savings
- Ease of Use for Candidates
- Larger candidate pool
- Ease of use for the organisation
- Increasing the speed to hire
- Success in finding candidates

- Keeping ahead of competitors

Parry and Tyson (2008) studied the use and success of e-recruitment methods in the UK. They conducted a six-year survey and performed qualitative interviews among human resources managers. The survey had 25,224 respondents over the six years, and represented 935 organizations per survey. Interviews were held to supplement the survey data with a more in-depth view. Fifteen qualitative interviews were conducted with senior human resources or resourcing managers responsible for recruitment, and five additional interviews were conducted with providers of online recruitment technology. They found from research that cost effectiveness is the most important reason (75%) mentioned by organizations, followed by ease of use for candidates (64%), a larger candidate pool (53%) and ease of use for the organization (52%). Galanaki (2002) performed a survey among a sample of 99 organizations, of which 34 organizations responded. This research found similar importance regarding reasons to use e-recruitment, like cost effectiveness (46%), wide response rate (46%), reaching a specific niche (42%) and reaching passive job seekers (38%). Pin (2001) found, among 167 organizations, additional support for time savings (64%), lower recruitment costs (51%) and 24hrs a day, 7 days a week online (51%).

2.3 Steps involved in Employee recruitment

The recruitment process begins with identify of a vacancy where after the recruiter receives authorization to fill in this vacancy Chapman & Webster (2003). In order to do so, the vacant job needs to be carefully analyzed. Analyzing the job might include determining the necessary knowledge, skills, and experience required to perform

the job appropriately and defining the required specifications. After identifying and analyzing a vacancy, it can be placed in, for example, newspapers or other media sources. Applicants can apply for vacancies by using the internet. Likewise, further correspondence between organization and applicant depends on the internet to a large extent. Cappelli (2001) describes the recruitment process in three steps. First, candidates need to be attracted. This concerns using the organization's reputation, product image, online technology and other methods to draw as many potential applicants as possible to the organization's website. On the website, organizations can reinforce their human resources brand and provide information about jobs and working conditions. The second step in this process is sorting applicants. This relates, for example, to employing sophisticated, standardized online tests to screen candidates, and winnowing the applicant pool to a manageable number. Third, the contacts need to be managed quickly. Due to the use of the internet, organizations are able to respond more quickly to a desirable candidate. An e-recruitment process follows ideally from a systematic human resource planning process, whereby an organization analyses and plans for the flow of people into, though, and out of the organization Chapman & Webster (2003). Yet, there is a fourth step, which does not belong necessarily to e-recruitment but to every recruitment process. This concerns closing the deal Cappelli (2001). It refers to making the phone call, setting up the meeting and shaking the hand. From this description, one can notice that the e-element is absent. In this way, Cappelli (2001) highlights the importance of the human touch at the end of the recruitment process. According to him, human touch is increasingly neglected in e-recruitment processes but remains very crucial.

2.4 Review of related literature

Cober et al (2000), According to the current research on the recruitment, the Web is increasing in use both as a source of applicants for organizations and as a job search device for individuals looking for employment. As many as 90% of large organizations in the United States have incorporated the Web in their current recruitment practices.

Cober et al (2000), Online recruiting can also produce cost savings and higher applicant earnings. Companies have reported savings of 95% when changing from modern to online recruiting causes and discrete companies have generated as many as 10,000 applicants through their recruitment web sites to fill less than 1000 jobs.

Stasinskaya (2002) suggestions have been sustained by the chartered institute of personnel and development (CIPD) in 2006, that 71% of their survey respondents used e-recruitment to reduce recruiting costs, 60% to extend the selection pool and 47% to improve the speed of time to employ.

Eleanna (2002), Online recruitment is a new tool, at the removal of the human resources departments, which has known a impressive success in very short time. This paper presents the findings of some expressive research, involving UK IT companies. The research tries to identify the effect that the perceived characteristics of the research have on the decision of companies to recruit through the Internet.

The attributes tested are cost efficiency; recruitment cycle time; response rate; quality of response; impact on the image of the company; directing of specific niches; targeting of the passive job-seeker; worldwide coverage; essential resources, time and effort to implement; attraction of the mean to the job seekers (especially IT professionals and

young graduates); risk of excess of answers; and impact of the size and reputation of the company. The paper provides an insight on how the companies recognize and value online recruitment.

Reeve, Highhouse and Brooks (2006) investigated how effective reactions of job searchers affect overall evaluation of organizational appeal and organizational image. A survey conducted by marketresearch.com (2006),on the E-Recruitment market, found that the, major trends of e-recruitment were:

- More advanced tools for candidate management on corporate career sites;
- Increasing use of social networking technologies (Facebook, LinkedIn) to reach candidates; and
- More opportunities for specialists in the market.

A research by Matthews (2006), on the recruitment of law students by the United States Internal Revenue Service designated that how by moving up the start data of its campus recruitment energies it was able to fill jobs more easily and with better quality entities. Maurer and Liu (2007) opined that web-based recruitment protects cost up to 87% per new employee employed by an organization. Parry and Tyson (2008), conducted a study on the recruitment activities of establishments for a period of six years with the use of survey and interview methods, questions were asked as to why the respondents exploited or did not employ online recruitment, whether they predicted their use of the Internet for recruitment to change, and what impact they expected Internet recruitment to have on the use of other recruitment methods.

Avinash (2012) published an article about E-recruitment which stated that online recruitment has many advantages to companies like low cost, less time, quick, wider area, better match and along with this they have highlighted some points of disadvantages of online recruitment like scrutinizing applications is a problem, lack of internet awareness in India in some places and they said that employers want to have face to face interaction with candidates.

2.5 The Concept of Online Examination

In future, the internet world will have an even closer relation with our daily lives, online teaching and online examination are the direction towards which the academic circle will move. An online examination system does not have the limitation of time and place. Users can arrange their examination time in accordance to the progress of their lesson. Since the test is graded by computers, time which would have been required for manual marking and grading is saved. Test takers can check the test solutions immediately after the test, thus letting candidates know their mistakes and work to correct them

2.6 Characteristics of Online Examination

- The system has simple fraud protection function; it employs random generation of the order of questions in each student's test making cheating extremely difficult.
- Besides textual test questions, the questions could also be in diagram form, animations and other multimedia forms making the test questions more diverse.
- The time limit of a test is set by the teacher; hence students will not be able to login after the time is up.

- Teachers can set durations for a test; the clock begins when a student login to the test; when time is up, the system automatically submits the tests.
- A student cannot login again once the test has been submitted. In other words, the system prevent re-taking of tests.
- Teachers while still setting questions for a test may at time add or delete questions. They can also edit previously set tests.
- Both teachers and students can check test results online through the simple interface.
- All test can generated automatically from the test bank by specifying the chapter and the number of questions in a test.
- Statistical analysis can aim at a particular test to determine the average score scored by students on a particular test, which is used by teachers as reference material to remedy teaching.

2.7 Advantages of Using Online Examination System for Employee Recruitment

It has a strategic significance as it puts emphasis on the need to attract high-quality people in order to gain a competitive advantage Parry & Tyson, 2008; Malinowski, Keim, & Wietzel,(2005).

"To ensure successful application management for the applicant and for us as the company, it is vital to have a transparent system of job listings and interested candidates. To guarantee transparency, we need an application management system that all personnel

departments can efficiently and independently access. It would be impossible to ensure this type of access at a company as large as Deutsche Post World Net with resume folders and e-mail applications. That is why we work strictly with online applications (Website Deutsche Post)."

A second outcome of successful implementation online examination for recruitment concerns *productivity benefits* of e-recruitment. These are widely discussed in the literature. If e-recruitment is successfully implemented, it might lead to efficiency advantages like cost reduction and time saving Cappelli (2001) shows that lowering recruitment costs is the number two advantage of e-recruitment. 51 % of their respondents perceived cost savings as an advantage. Time saving includes job posting and processing time, which can be reduced by e-recruitment Jones, Hecker, & Holland, (2002).Job postings, applicant response, and processing of résumés can be done faster

Pin, Laorden, & Sáenz-Diez, (2001).Next to that, the immediacy of listing reduces the time taken for recruitment to remove quality job candidates from circulation before other competitors have the opportunity to act Jones (2003). This affects the hiring cycle. Time saving advantages also influence cost reduction. Finally, e-recruitment system quality. Regarding to this construct, interviewees perceived the system to be relevant. The system provides users several tools through which they can perform and structure their recruitment process. The online test or exams is an integral part of the system.

The SAP E-recruiting Business Case (2004) describes, among other things, the initially expected benefits of the system. These benefits include, first of all, decreasing recruitment costs by matching supply and demand, proactive recruitment of personnel,

decreasing the turnaround time of the recruitment process, and purposeful use of recruitment channels. Secondly, the new system was expected to reduce the turnaround time from 90 to 50 days. Finally, the time spent on resume handling was to be decreased by at least 2.5 hours per resume

2.8 Disadvantages of Using Online Examination for Employee Recruitment

Although there are aspects that influenced e-recruitment using online examination in a positive way, the new technology also contributed negatively to the quality of the recruitment process. Due to the increased administrative burden, there is less time left to perform the key activity of recruitment, recruiting potential employees. Another issue concerns the user-friendliness of the system. Because of its time-consuming and cumbersome design, e-recruitment requires users to perform many tasks and to perform illogical work processes. Yet, as recruiters state that this is a disadvantage, they perceive it is worse that the system is applicant unfriendly. This refers to the system's extensive nature, to the ease of understanding of the system, and the effort required of applicants.

The system is actually programmed and may fail to see other areas of strength the applicants have as opposed to the manual method of recruitment.

CHAPTER THREE

RESEARCH METHODOLOGY AND ANALYSIS OF THE EXISTING SYSTEM

3.1 Research Methodology

Research methodology has many research dimensions and methods. The scope of research methodology is wider than research method. This is mainly adopted by the researcher in undertaking this research. Methodology is the underlying principles and rules that govern a systematic method; on the other hand it is a systematic procedure for a set of activities. Thus, from these definitions a methodology encompasses the methods used within a study.

3.2 Methods of Data Collection

Although there are various methods of data collection, the researcher of this project work chose three main sources of data collection in carrying out their study. They are:

i. Primary source
ii. Secondary source
iii. Oral Interview

3.2.1 Primary Source

The primary source refers to the collection of data from the real source, which can also be regarded as the physical data that was gathered during the course of the research. The researcher made use of empirical approach such as personal interview.

3.2.2 Secondary Source

The secondary sources of data collection for this type of project cannot be over emphasized. The secondary data were obtained by the researcher from internet, journals, and library source.

3.2.3 Oral Interview

Some staff of the organization was interviewed to share their perspective and experience about the manual system of staff recruitment. Their response was that the manual system is highly cumbersome, boring and time consuming.

3.3 Analysis of the Existing System

In a study of this nature, before designing a new system, it is always important to make a thorough investigation so as to know the goal in which the system is set to achieve. It was investigated that the following are the objective of the existing system which is very hard to achieve the basic task of the system. A key question is: What must be done to solve the problem? One aspect of analysis is defining the boundaries of the system and determining whether or not candidate system should consider other related systems. During analysis, data are collected on the available files, decision points, and transactions handled by the present system.

3.3.1 Problems of the Existing System

A lot of problems were associated with the existing system, involves the use of manual system to store information. The system has proved defective as the objective of the system has also failed. Among the problems associated with the existing system include the following:

- The work is done manually which takes much time to recognize job seekers on the day of interviewed,
- More number of labors was needed.
- The amount of time needed to register each job seeker is much, as there are thousands of registered job seeker, searching process is a difficult task.

3.4 Analysis of the Proposed System

The present system has proved to be inefficiency and involves usage of man power. Based on the analysis of the existing system the proposed system requires information such as job seeker registration form. When a job seeker wants to register, the system provides him/her a form to collect basic information such as names, username and password; Curriculum Vitae, when applying for a job, the application will require the applicant to upload a digital copy of his CV; the applicant profiled a unique applicant homepage where the administrators can communicate with the individual applicants about their interview eligibility and date etc.

Thus, the features of the proposed system are job vacancy advertisement, secure applicant records, applicant profile, easy navigation and user friendly interface. The online recruitment will reduce the work that was done manually. The man power is reduced to the maximum extent. Job seekers are registered within no time and all their records are kept safe in the database for future referencing.

3.4.1 Advantage of the Proposed System

The proposed system will be coupled with the merit in recent trends of Information Communication Technology, which will be integrated into an organized

system for better data capturing and information flow. The main objectives are as follows:

- A fast and more efficient recruitment process.
- Saving staff time in entering and manipulating data.
- User friendly
- Easy accessibility.

3.5 System Blueprint

The purpose of the System Blueprint is to provide a complete description of the system configuration and how its components fit together, the complete configuration includes the custom link for each template and their communications. The System Blueprint evolves throughout the project and becomes a key component of the final documentation for the system.

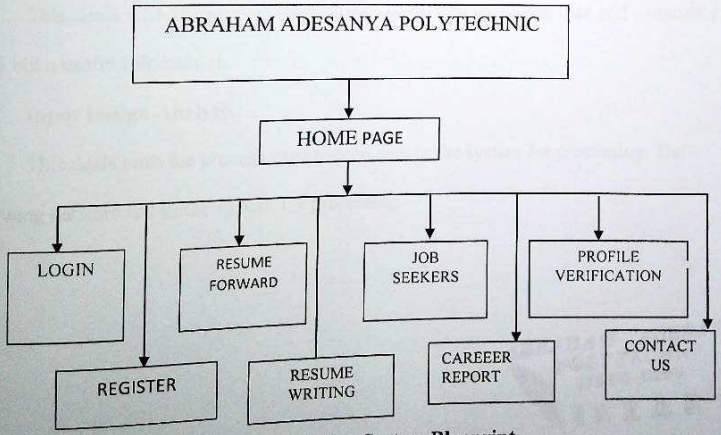

Figure 3.1: Depicting System Blueprint

3.6 Organizational Chart

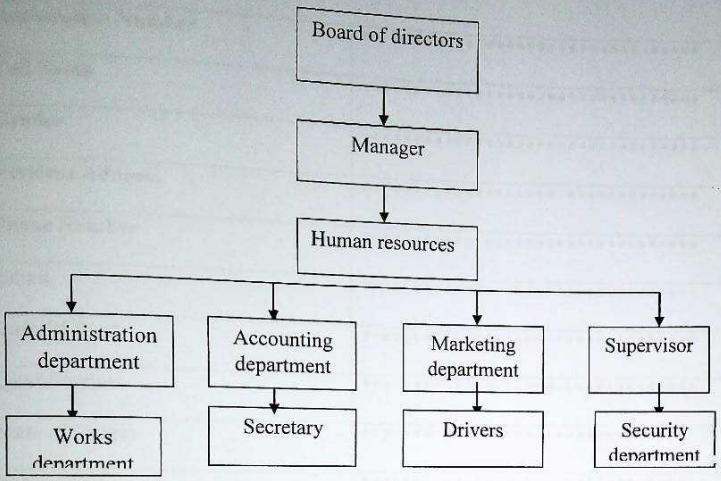

Figure 3.2: Depicting Organizational Chart

3.7 Input Process and Output Design Analysis

This deals with the process used to feed in data, work on the data and eventually gives out a useful information

3.7.1 Input Design Analysis

This deals with the process used to feed data to the system for processing. The following data are fed to the system for processing.

Table 3.1: Showing New Staff Registration

Registration Number	**********
Full Name	**********
Gender	**********
Resident Address	**********
Phone Number	**********
Email	**********
Date Of Birth	**********
Qualification	**********
State of Origin	**********
Nationality	**********

Table 3.1: Showing Add New Passenger Design Analysis

3.7.2 Process Design Analysis

Once the inputs are collected, the obtained data are processed properly for effective use. The data/information processed is stored in the computer for subsequent use.

3.7.3 Output Analysis

This involves the resultant documentation generated after processing of data/information supplied to the system.

3.8 System Flowchart

Flowchart is a representation of the algorithm using standard symbols, each symbols has a new function. A Flowchart is also a type of diagram that represents an

algorithm, workflow or process, showing the steps as boxes of various kinds, and their order by connecting them arrows.

This diagrammatic representation illustrates a solution model to a given problem in designing a system software, it also illustrate step by step procedure taken to accomplish a pictorial of the features of a particular software, Flowchart are used in analyzing, designing, documenting a process in various field of design.

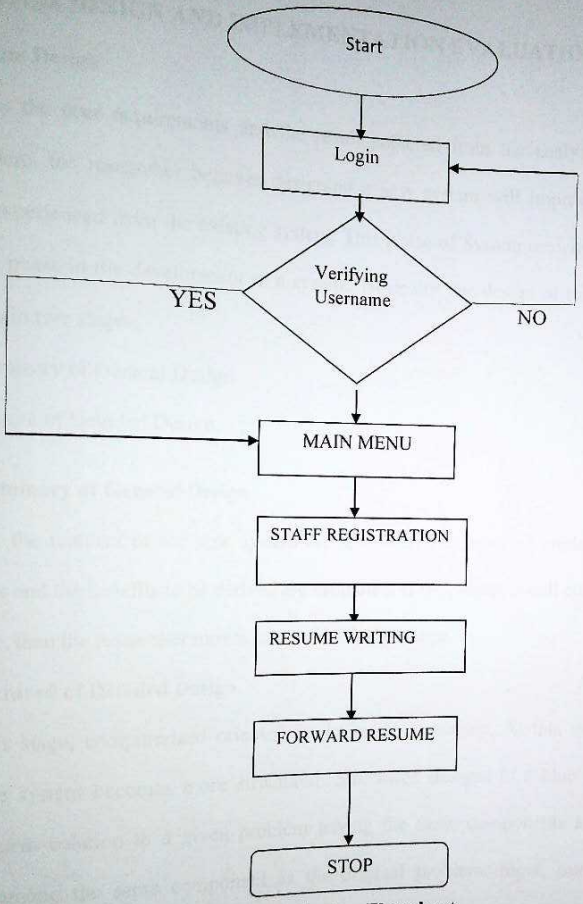

Figure 3.3: Depicting System Flowchart

CHAPTER FOUR

SYSTEM DESIGN AND IMPLEMENTATION EVALUATION

4.1 System Design

Based on the user requirements and the result gathered from the analysis of the existing system, the researcher believes designing a new system will improve all the difficulties experienced from the existing system. This phase of System designing is the most crucial phase in the development of a system. Normally, the design of this system software was in two stages:

i. Preliminary of General Design

ii. Structure of Detailed Design

4.1.1 Preliminary of General Design

Here, the features of the new system are specified. The costs of implementing these features and the benefits to be derived are estimated. If the project is still considered to be feasible, then the researcher moves to detailed design stage.

4.1.2 Structured of Detailed Design

In this stage, computerized oriented works begin in earnest. At this stage, the design of the system becomes more structured. Structured designs is a blue print of computer system solution to a given problem having the same components and inter relationship among the same component as the original problem, input, output and processing specification are drawn up in detail. In the design stage, the programming language and the platform in which the new system will run are also decided. There are several tools and techniques used for designing. These are:

i. Flowchart

ii. Data Flow Diagram (DFDs)

iii. Decision Table

iv. Decision Tree

4.2 Input Design Specification

Input initiates any computing process, it is when the accurate data are collected and inputted properly that the desired result can be gotten. Here, the input design of this research work is of different category.

4.2.1 Login Screen

This is where access to the application is controlled as only authorized user (an administrator) has the username and password to log in. Access is only granted if username and password are entered correctly. This program is designed in such a way that only the administrator that can have access to the general function of the system software. This is shown in the figure below:

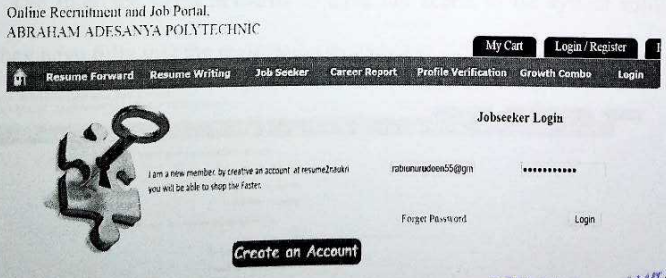

Fig 4.1: Showing Login Screen Design

4.2.2 Home page Interface

The home page of the system shows various menus of the application. It also shows login link for already existing users at the top of the application and a link for new user to quickly register. The user's login platform enhances people to register by inputting their data into the system software.

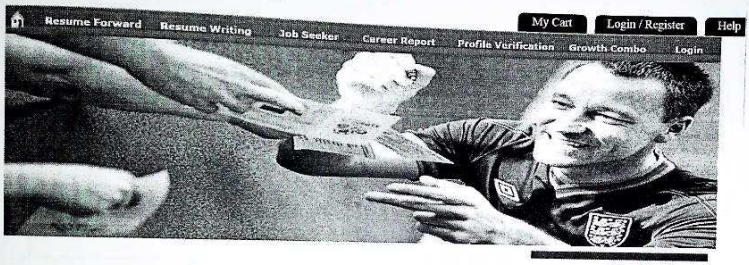

Fig 4.2: Depicting Homepage Interface

4.2.3 New-User Interface

The interface helps new-user to have full access to the system software once they have fully met the registration requirement.

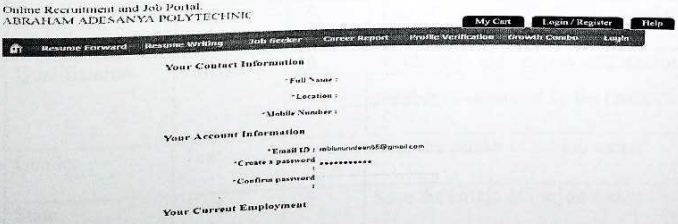

Fig 4.3: Depicting Job Seeker Interface

4.2.4 Database Design

The database program used to implement the back-end of the system software is MySQL. Access to the database of the system was made possible by a graphical interface of MySQL. In any good database design, effort should be made to remove completely or at best reduce redundancy. The tables in the database are as follows:

Administrator Database Design

Table 4.1: Showing Administrator Database Design

Field	Type	Null	Length
Username	Varchar	No	24
Password	Varchar	No	30

Job Seeker Registration Database

Table 4.2: Showing Job Seeker Interface

Field Name	**Data Type**	**Field Size**	**Description**
Name	Text	50	This saves the name of the job seeker
Qualification	Integer	20	It identify the person registration number as generated by the program
Gender	Text	6	Save the gender of the job seeker
State	Text	25	Save the Origin of the job seeker
Address	Text	Infinity	Save the Address of the job seeker

4.3 System Requirement

Computer system is made up of different component that are put together to work as a unit in order to achieve a common goal. In order to achieve the implementation of this research work, hardware requirement and Software requirement were used.

4.3.1 Hardware Requirement

In the course of the design, the software developed needed the following hardware for an effective and efficient operation of the new system

- Intel Computer System
- At least 512 MB RAM
- At least 40 GB hard disk
- Colored Monitor
- An uninterruptible power supply (UPS)

4.3.2 Software Requirement

For the effective implementation of the new system software, the following software has to be installed on the computer system.

- A window 7 or higher version for faster processing
- Wamp
- PHP
- Anti-virus software

4.4 Software Testing

This defines the test requirement, which the software should meet and it is progressively integrated into complete package. This process of test plan is concerned

with providing that a package produces correct and expected result for all possible input data. For this software testing, we have three basic testing that should be adopted via:

a. Module testing

b. Integrated testing and

c. System testing

4.4.1 Module Testing

This design comprises of several modules, when triggered up at certain events, it perform a specific function. So, module testing of each of the modules in software to verify that were meet in their respective objective module testing were carried out to ensure that information properly flows in and out of the program module under test.

4.4.2 Integrated Testing

After the unit and general testing, all the modules in each subsystem were integrated into one subsystem and tested and finally all the subsystems were integrated into one system and equally tested.

4.4.3 System Testing

Before bringing data processing system into use, it is necessary that the system is both comprehensive within its intended limits and fully correct. So, each routine must have been written according to specification and tested to complete satisfaction. Also bags must have been removed completely and program run produced exactly what is required of it. Then, the valid test data were used in this project work to stimulate the type of errors like the syntax and logical errors the user might commit during the use of the new system and to check if the program will respond in an appropriate manner.

4.5 System Evaluation

The system performance was satisfactory. It is very simple to use. Performance evaluation was carried out in all the testing process including the unit and general testing.

4.6 Implementation of System Design

Implementation is the process of putting new system software into effect of intension depicted in the design stage and realized from the development stage. It has the sole aim of integrating a proven functional system development through test with hypothetical input into the operation of organization. Before a new system is implemented, all of its component must be subjected to extensive test to establish a logical correctness; efficiency and adherence to design specification operations are simulated and are used to test the system.

4.7 Software Maintenance

Software maintenance is a very broad activity often defined as precaution made on a software system after it becomes operational, This covers the correction of errors, the enhancement, deletion and addition of capabilities, the adaptation to changes in data requirements and operation environments, the improvement of performance, usability, or any other quality attribute. Several authors disagree with this view and affirm that software maintenance should start well before a system becomes operational. In this research work we look into various types of maintenance that can be adopted while using system software, they are:

i. Corrective maintenance: reactive modification of a software product performed after delivery to correct discovered faults.

ii. Adaptive maintenance: modification of a software product performed after delivery to keep a computer program usable in a changed or changing environment.

iii. Perfective maintenance: modification of a software product performed after delivery to improve performance or maintainability.

iv. Preventive Maintenance: the purpose is making program easier to understand and hence facilitating future maintenance work.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

As a result of the Web revolution, companies are going global by creating a Web presence, and users are going online, with the huge number of companies and users online, the need for online recruitment systems arise to organize the huge job data available in companies websites and other places, in this project, we built a Web application in the form of profile management portal to help employers and job seekers to find each other in a proper and useful way. Recruitment and selection of staff, forms a core part of the central activities underlying human resource management and it involves the acquisition, development and reward of workers. It forms an important part of the work of human resource managers or designated specialists within work organizations. It has an important role to play in ensuring worker performance and positive organizational outcomes. Basically, for an organization to get competent employees they need to be tested. Organizations have taken advantage of the internet to aid their recruitment process.

5.2 CONCLUSION

In this project, we introduced a new technique of suggesting instant results for both employers and job seekers as they enter their data and requirements, where the job seekers get a list of suggested vacancies when they register, and for the employers, the system gives a list of potential job seekers when the employer add a new vacancy, this is done automatically after inserting data without the need from user to initiate a certain

function. It is very important for organizations to take advantage of the internet and adopt online examination system for the recruitment of staff. This will increase their chances of getting competent employees and also eliminate the barrier of distance and bias in recruitment of employees.

5.3 RECOMMENDATION

The following recommendations are made based on the findings of the research work:

- IT professionals such as computer programmers, web designers and database administrators should be employed.
- Recruitment of staff should be computerized
- Professionals experienced in the development of online recruitment and examination systems should be consulted for guidelines.
- Staff in the recruitment unit should be sent for advanced training to learn how to develop and maintain online examination system for staff recruitment.

REFERENCES

Alavi & Leidner (1999) Knowledge management systems: Issues, challenges, and benefits, *Communications of the Association for Information Systems*, 1(7).

Avinash, Vishal & Nikhil (2012), E-Recruitment, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, 1(4).

Beadles, Lowery & Johns (2005). The impact of human resource information systems: An exploratory study in the public sector, *Communication of the IIMA, 5*(4), pp. 39–46.

Cappelli (2001) A fuzzy genetic algorithm for driver scheduling European Journal of O peratinl Research.

Chapman & Webster (2003). Management Information System;New Jersey: Hall Inc. Eaglewood Publishers.

Cober, Brown, Blumental, Doverspike & Levy (2000), The Quest for the Qualified Job Surfer: It's time the public sector catches the wave. Public Personnel Management,; 29:479-496.

Curtis, & Cobham (2002). *Business information systems*. London, UK Pearson.

Dessler, (2005) *Human Resource Management*, 10.ed., USA: Prentice Hall.

Eleanna Galanaki. (2002); The decision to recruit online: a descriptive study, Career Development International, 7(4):243-251

Gürol, Wolff, & ErtemsirBerkin, (2010). E-HRM in Turkey: A case study *of E-Business Development and Management in the Global Economy*, 530–540.

Haag, & Cummings, M. (2008). *Management information systems for the information age.* New York, USA: McGraw Hill.

Hendrickson, (2003). Human resource information systems: Backbone technology of contemporary human resources, *Journal of Labour Research, 24*(3), pp. 381–394.

Gürol, Wolff, & Ertemsir Berkin, (2010). E-HRM in Turkey: A case study. In I. Lee (Ed.), *Encyclopedia of E-Business Development and Management in the Global Economy*, pp. 530–540.

Karakanian, (2000). Are human resources departments ready for E-HR?*Information Systems Management, 17*(4), pp.1–5.

Keim, & Weitzel,(2009). An adoption and diffusion perspective on HRIS usage. In Coronas & Oliva (Ed.), *Encyclopedia of Human Resources Information Systems: Challenges in E-HRM* (pp. 18–23). Hershey, PA: IGI Global.

Kulik, & Perry, (2008) When less is more: The effect of devolution on HR's strategic Role and Donstrued Image, *Human Resource Management, 47*(3), pp.541–558.

Lin & Stasinskaya (2002), Data warehouse management concerns in online recruiting. Human Systems Management, Amsterdam. 21(1).

Maurer, Liu (2007); Developing Effective E-Recruiting Websites: Insights for Managers from Marketers. Business Horizons; 50(4):305-314.

APPLICATION CODE

```
<?php session_start(); ?>
<?php
        $email=$_SESSION['EMAIL'];
        include("dbconnection.php");
        $query="select order_id from order_id where email='$email' ";
        $result=mysql_query("$query");
        $count=mysql_num_rows($result);
        $ord=array();
        while($data=mysql_fetch_array($result))
        {
                $ord[]=$data;
        }
        foreach($ord as $r)
        {
                $ord_id=$r[0];

        }
?>
<?php
      $tac=$_POST['tac'];
      if($tac=='tnc')
```

```
            $s1=$s1+1;
        $s2=substr($ord_id,6);
        $order_id="R2N"."$s1"."$s2";
        $_SESSION['ORDER_ID']=$order_id;
//      echo"$ord_id<br>";
//      echo"$order_id";
//-------------------------------------------------------------------
//-------------------------------------
$my_ser_name[]=array();
$query="select ser_name from cart where email='$email' and odat='$dat' ";
$result=mysql_query("$query");
$count=mysql_num_rows($result);
$cart=array();
while($data=mysql_fetch_array($result))
{
        $cart[]=$data;
}
foreach($cart as $c)
{
        $s_n="$s_n"." $c[0]".",";
}
$grand_total1=$_SESSION['FGT'];
```

```
<form name="carform" action="u_dbc.php" method="post" enctype="multipart/form-
    data" onsubmit="return validation()">
<?php
    //*****************************************************************?
    >
<!--FIRST TABLE*************************************-->
<table width="500" height="106" border="0" align="center" bordercolor="#000000" >
<p style="font-size:20px; margin-left:50px;" ><b>Your Contact Information</b></p>
 <tr>
  <th width="337" height="20" scope="row"><div align="right"><font
     color='red'>*</font>Full Name : </div></th>
  <td width="501" height="20">
   <div align="left">

    <input name="full_name" type="text" maxlength="15" size="30" value="" /><!--
     dfgdfgdfg-->
     </div></td>
 </tr>
 <tr>
  <td height="50" scope="row"><div align="right"> <font
     color='red'>*</font><b>Location :</b></div></td>
```

```
<td width="501" height="20">
<div align="left">
<label>
<input name="curr_loc" type="text" maxlength="15" size="30" value="" /><!--
dfgdfgdfg-->
</label>
</div></td>
</tr>
<tr>
<th height="20" scope="row"><div align="right"><font color='red'>*</font>Mobile
Number : </div></th>
<td width="501" height="20">
<div align="left">
<input type="text" name="mob_no" size="30" value="" /><!--dfgdfgdfg-->
</div></td>
</tr>
</table>
<!--CLOSE FIRST TABLE-->
<!--SECOND TABLE-->
<table width='500' height='60' align="center" border="0" bordercolor="#000000" >
<p style="font-size:20px; margin-left:50px;" ><b>Your Account Information</b></p>
```

```
<tr>        <td width="337" height="20" scope="row"><div align="right"> <b><font
    color='red'>*</font>Email ID :</b> </div></td>

 <td width="501" height="20">
  <div align="left">

   <input type="text" name="email" id="txtEmail" style="width:295px" />

  </div></td>
</tr>
<tr height="30">
  <th height="20" scope="row"><div align="right"><font color='red'>*</font>Create a
    password :</div></th>
 <td width="501" height="20">
    <div align="left">
 <input type="password" name="crpass" size="30" id="crpass" />        <!--dfgdfgdfg-
    ->
 </div></td>
</tr>
<tr height="30">
 <th          height="20"          scope="row"><div          align="right"><iont
   color='red'>*</font>Confirm password : </div></th>
```

```
        <td width="501" height="20">
          <div align="left">

        <input type="password" name="conpass" id="conpass"  size="30" /><!--dfgdfgdfg-
          ->

        </div></td>
      </tr>

    </table>
    <!--CLOSE SECOND TABLE-->

    <?php
          //*****************************************************************?
          >

    <!--THIRD TABLE-->
    <table    width="500"    height="126"    border="0"    align="center"    cellpadding="0"
          cellspacing="0" bordercolor="#000000" summary="rcmsandbjas">

    <p style="font-size:20px;margin-left:50px;" ><b>Your Current Employment</b></p>
      <tr>
```

```
<th width="337" height="20" scope="row"><div align="right">Experience :
</div></th>
<td width="501" height="20">
<div align="left">

<select style="width:70px;" name="expyear">
<option value="-1">Select</option><option value="99">Fresher</option><option value="0" label="0"></option><option value="1" label="1">1</option><option value="2" label="2">2</option><option value="3" label="3">3</option><option value="4" label="4">4</option><option value="5" label="5">5</option><option value="6" label="6">6</option><option value="7" label="7">7</option><option value="8" label="8">8</option><option value="9" label="9">9</option><option value="10" label="10">10</option><option value="11" label="11">11</option><option value="12" label="12">12</option><option value="13" label="13">13</option><option value="14" label="14">14</option><option value="15" label="15">15</option><option value="16" label="16">16</option><option value="17" label="17">17</option><option value="18" label="18">18</option><option value="19" label="19">19</option><option value="20" label="20">20</option><option value="21" label="21">21</option><option value="22" label="22">22</option><option value="23" label="23">23</option><option
```

```
value="24"                    label="24">24</option><option                    value="25"
label="25">25</option><option    value="26"    label="26">26</option><option
value="27"                    label="27">27</option><option                    value="28"
label="28">28</option><option    value="29"    label="29">29</option><option
value="30"                    label="30">30</option><option                    value="31"
label="30+">30+</option></select>
</div></td>
</tr>
<tr>
<th width="337" height="20" scope="row"><div align="right">Skills : </div></th>
<td width="501" height="20">
<div align="left">
<input name="key_skill" type="text" maxlength="15"  size="30" value="" /><!--
dfgdfgdfg-->

</div></td>
</tr>
<tr>
<th height="20" scope="row"><div align="right">Profile :</div></th>
<td width="501" height="20"><div align="left">

<input type="text" name="profile" size="30" value="" />
```

```
    </div></td>
  </tr>
  <tr>
   <th height="20" scope="row"><div align="right">Company Name : </div></th>
   <td width="501" height="20"><div align="left">

     <input type="text" name="comp_name"  size="30" />

   </div></td>
  </tr>
    </td>
</table>
<!--CLOSE THIRD TABLE-->
<?php ?>
<!--FOURTH TABLE-->
<table    width="500"    height="96"    border="0"    align="center"    cellpadding="0"
      cellspacing="0" bordercolor="#000000" summary="rcmsandbjas">
  <p style="font-size:20px;margin-left:50px;" ><b>Your Education Background</b></p
  <tr>
   <th      width="337"      height="20"      scope="row"><div      align="right"><font
      color='red'>*</font>Education : </div></th>
   <td width="501" height="20">
```

```
<div align="left">

<select name="basicedu">

<?php foreach($user_data as $ud) echo"<option value=$ud[11]>$ud[11]</option>";
 ?>

<option value="-1" label="Select">Select</option>

<option value="Not Pursuing Graduation" label="Not Pursuing Graduation">Not
 Pursuing Graduation</option>

<option value="B.A" label="B.A">B.A</option>

<option value="B.Arch" label="B.Arch">B.Arch</option><option value="BCA"
 label="BCA">BCA</option><option                    value="5"
 label="B.B.A">B.B.A</option><option                    value="6"
 label="B.Com">B.Com</option><option                    value="7"
 label="B.Ed">B.Ed</option><option                    value="8"
 label="BDS">BDS</option><option                    value="9"
 label="BHM">BHM</option><option                    value="10"
 label="B.Pharma">B.Pharma</option><option                    value="11"
 label="B.Sc">B.Sc</option><option                    value="12"
 label="B.Tech/B.E.">B.Tech/B.E.</option><option                    value="13"
 label="LLB">LLB</option><option                    value="14"
 label="MBBS">MBBS</option><option                    value="15"
 label="Diploma">Diploma</option><option                    value="16"
```

```
label="BVSC">BVSC</option><option                    value="9999"
label="Other">Other</option></select>

</div></td>
</tr>

<tr>
<th width="450" height="40" scope="row"><div align="right"><div
align="right">Upload Resume: </div>
<span style="float:left; color: #999999; font-style:italic;"> </span></th>
<td width="400" height="30">
<div align="left">
<input type="file" name="resume" id="resume"
style="width:295px" />
</div></td>
</tr>
<tr><td><font color='red'><?php $r=$_GET['r']; if($r==1) echo"Invalid File";
?></font><td></tr>

<!--
<tr>
```

```
<td width="600" height="20" ><font style="font-size:10px;"
color='red'>*</font>Please Enter This Code:</td>
<td width="400" height="30" style="margin-top:10px;">
<div style="margin-top:0px;">
<table><tr><td >
<input type=text name='code1'></td>
<td>
<?php
$str="RK0123456789";
$b="";
for($i=0;$i<4;$i++)
{
$a=$str{rand()%12};
$c=$a.".jpg"
echo"<img src='images/phpimages/$c'>
$b=$b.$a
}
echo"<input type=hidden value=$b name='code2'>";
?>
</td></tr>
```