



## Web-based corp members posting system based on area of specialization

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### Abstract

This research is aimed at designing a web-based corp members posting system based on area of specialization for NYSC that enables posting officer to upload corp members information. The National youth service corps (NYSC) is an organization set by the Nigerian government to involve the country's graduates in the development of the country this is known as national service year. During this service year, corps members are posted to States and communities of cities far from their state of origin. In the existing NYSC posting system, corp members are posted to place of primary assignment without considering the area of specialization of that corps member and also there is no centralized database system that keeps corps members posing record based on area of specialization. The aim of the study is to design a Web-based NYSC Posting System Based on Area of Specialization in other to achieve this, the improve Web-based Corps Member posting system provides a system where various corps member can be posted to their place of primary assignment based on their area of specialization and also to provide a centralized database system that keeps track of corps member information based on their area of specialization and their place of primary assignment (PPA) information. The methodology adopted is Rapid Application Development, both primary and secondary data collection methods are used during the fact-finding process. Under the primary method we have the interview and under the secondary method we have web surfing. PHP (Hypertext Pre-processor) programming language is used to develop dynamic websites and MYSQL is used for the creation of database. The study works only covers the development of A Web-based Corps Member Posting System Based on Area of Specialization. The improved Web-based NYSC posting system based on area of specialization enables corps members to be posted to their primary place of assignment based on their field of study. Future work may see the introduction of biometric technology to authenticate various corps members that has been posted to their primary assignment place based on area of specialization.

**Keywords:** Web-based, NYSC, corps member, posting, area of specialization

### Introduction

#### Background to the Study

The national youth service corps (NYSC) is an organization set by the Nigerian government to involve the country's graduates in the development of the country. There is no military conscription in Nigeria, but since 1973 graduates of the universities and polytechnic have been required to take part in the national youth service corps (NYSC) program for one year (Verba, *et al* 2005) <sup>[12]</sup> This is known as national service year, corps members are posted to states far from their state of origin. They are expected to mix with people of other tribes, social and family backgrounds, to learn the culture of the indigenes in the place they are posted to and also to carry out their national duties accorded to them by the NYSC. This action is aimed to bring about unity in the country and to help youth which are the corp members to appreciate other ethnic groups and also to acquire skills in various fields of endeavor. There is an orientation period of approximately three weeks spend in the camp by the corp members which involves them participating in various activities like skill acquisition where the corp members are exposed to learn various skills. Match pass which serves as a form of military training. After which comes the posting letter which is then being served to the corp members depicting the local government they are posted to, wherein they find their place of primary assignment. The posting of the corp members is being done randomly not minding their field of study or specialty. Before the orientation and posting stage comes the mobilization and deployment stage. This stage includes briefing of prospective corps members, collation and processing of data on them by the NYSC,

display of the data in all institution to identify 1 correct error before posting and deployment is carried out. In accordance with the decree 51 of June 1993, only successfully graduated candidates in the various certificate/diploma or degree are qualified to be called up for services in the NYSC Scheme. Only such candidates are qualified to collect their call up letter from students' affairs offices of the respective institutions, The NYSC Service is stipulated to last for continuous period of 12 calendar months (Abdulazeez, 2016) <sup>[1]</sup> after which there is also a passing out ceremony at the end of the year. The program has also helped in creating entry-level jobs for a lot of Nigerian youths. The National Youth Service Corps year comprises of four (4) main programs in which every corps member must satisfactorily participate before he/she is qualified to be issued a Certificate of National Service. The service year therefore comprises of orientation courses, primary assignment, community development services and winding up/passing out parade.

#### Orientation Courses

A National Youth Service Corps year starts with a 3 weeks orientation course and it is compulsory for all Nigeria graduates mobilized for national service. The course lasts for three (3) weeks and is designed to achieve the following objectives:

1. To give Corps Members a better understanding of the objectives of the NYSC Scheme and enable them internalize its ideals.
2. To acquaint members with their environment in their political, cultural, social and economic setting.

3. To prepare Corps members for their particular roles in the Scheme.
4. To equip them with practical social and leadership skills that will enable them meet the challenges of the service year ahead.
5. To inculcate in the Corps members the spirit of national consciousness as a basic ingredient in nation building.
6. To instill discipline in the youths.
7. To give Corps members adequate physical and mental training.

To achieve the above objectives the orientation course opens with a swearing –in/opening ceremony presided over by the executive Governor of the State/FCT Minister. The oath of Allegiance and the National Pledge are administered by the Chief Judge of the State/FCT.

The orientation course content involves physical training, drills, lectures on the people and tradition of the host State, professional lectures for Corps health personnel's, lawyers, teachers and Skill acquisition training etc. Corps members participate in social activities designed to create opportunities for them to interact.

They participate in dance and drama competitions, Miss NYSC and Mr. Macho. They also participate in inter platoon competitions on football, volleyball, table tennis, cooking and sanitation. Corps members are also trained on Man 'O' War activities leading to competitions on inter platoon drills and tug of war (FGN, 2009).

### Primary Place of Assignment

Primary Place of Assignment (PPA) is where the corp members are expected to render selfless service with dedication for a year of active service to the country. PPA is the second stage of the NYSC service year after the 21 days on various orientations camps in the country. For corps members, the orientation camp is the main part of NYSC. During PPA, corps members are expected to be vigilant, interact and learn from the locals with humility and as well make a lasting positive impact on those that will come across their way. At their PPA, Corp members are assigned to each local government. They will register with the local government inspector (LGI). After which you will head to schools, ministry, local government, or any company as contained in your posting letter.

### 1. Statement of the Problem/Justification

Nigerian universities and polytechnics are presently producing thousands of graduates every year. After graduation, most students waste extra year before they go for service. Most corp members are posted to palaces where their service is not relit. This method of data processing reveals a number of problems which includes:

1. Difficulty locating a platform where various corp members can be posted to their place of primary assignment based on their field of study.
2. Inability accessing a mechanism that classifies corp members base on their various field of specialization.

The study is beneficial to both NYSC officials, the state, the local government, organizations and the public as a whole, corp members are being allocated/ posted to their various local government area where they are expected to carry out their primary assignment assign to them by the NYSC based on their area of specialty.

The study helps in a good number of ways to improve NYSC posting system; it enables the fast posting of corp members to their place of primary assignment without delay.

### 2. Aim and Objectives of the Study

The study aims at developing a Web-based NYSC corps member Posting System based on area of Specialization.

The objectives of the study are:

1. To design databases for corp member's entity, callup number entity, area of specialization entity, list of work place entity, local government entity, state entity and organization sub unit entity.
2. To design corp members data capturing user interface.
3. To design organizations data capturing user interface.
4. To provide a mechanism that classifies corp members base on their various field of studies.
5. To provide an algorithm for corp member posting process.
6. To implement the posting system with the use of web development tools such as PHP, HTML, java script.

### Review of Concepts

The National Youth Service Corps (NYSC) Scheme is a Scheme that involves Nigerian graduates in the development and integration of their country. The NYSC Scheme was created in a bid to reconstruct, reconcile and rebuild the country after the Nigerian civil war. the unfortunate antecedents in our national history gave impetus to the establishment of the National Youth Service Corps by decree No. 24 of 22<sup>nd</sup> May 1973 which stated that the NYSC is being established " With a view to the proper encouragement and development of common tie among the youths of Nigeria and the promotion of national Unity" (Uweche, 2014) <sup>[11]</sup>.

In preparation for NYSC, there is a stage of mobilization and deployment. This stage includes briefing of prospective Corps members, collation and processing of data on them by the NYSC, display of the data in all institution to identify 1 correct error before posting and deployment is carried out. In accordance with the decree 51 of June 1993, only successfully graduated candidates in the various certificate/ diploma or degree are qualified to be called up for services in the NYSC Scheme. Only such candidates are qualified to collect their call up letter from students' affairs offices of the respective institutions, The NYSC Service is stipulated to last for continuous period of 12 calendar months.

The National Youth Service Corps year comprises of four (4) main programs in which every corps member must satisfactorily participate before he/she is qualified to be issued a Certificate of National Service. The service year therefore comprises of orientation courses, Primary Assignment, Community Development Service, Winding Up / Passing -out (FAN, 2009).

### 1. Objectives of NYSC Scheme

The objectives of the NYSC Scheme are:

1. To inculcate discipline in Nigerian Youths by instituting in them a tradition of industry at work, and of patriotic and loyal service to Nigeria in any situation they may find themselves.
2. To raise the moral tone of the Nigerians Youths by giving the opportunity to learn about higher ideals of National achievements, social and cultural improvement.

3. To develop in the Nigerian Youths the attitudes of mind, acquired through shared experience and suitable training which will make them more amendable to mobilization in the National interest.
4. To enable Nigerians Youth, acquire the spirit of self-reliance by encouraging them to develop skill for self-employment.
5. To contribute to accelerated growth of the national economy.
6. To develop common tie among the Nigerian Youth and promote national unity and Integration (Ademowu, 2012).

### 1.1. Usefulness of NYSC to the public

There is always the need to ascertain the rating of the current situation by the public to be able to determine an appropriate step and intervention by government or management (Okeowo, 2009). One of the usefulness of NYSC to public is to promote national economic, encourage employer to employ Nigeria irrespective of their background.

### 1.2. Challenges Facing NYSC

However, NYSC currently face many challenges, some of which include underfunding, large number of graduates above what was anticipated by founders of the program, and rejection of NYSC corps members on primary assignment. The biggest challenge for NYSC today is what happens to the thousands of graduates that pass out of NYSC program each year. It is not right for government to allow those who have served this country meritoriously to languish in the hopeless job markets of Nigeria. The federal government should create social welfare schemes for passed-out NYSC corps members, and pay current corps members even better allowances. NYSC should also be restructured to reflect today's reality (Amos Aristotle, 2015).

### 1.3. Operation of the NYSC Scheme

The decree set up a National Directorate comprising a chairman, the Director-General, representatives of committees of vice chancellors, rectors, the armed forces, police, the Nigeria employers' consultative association and time special members. The Directorate is the governing and policy making body of the National Youth Services Corps. The Director General is the chief Executive of the scheme while the coordinator is in charge of the state secretariat. The Decree also provides for the establishment of a Governing Board in each state of the federation. The state Governing Board has a statutory responsibility to assist the Directorate in the smooth operation of the scheme in the state. The Decree also established local governing committees and State Zonal Officers to assist in the operation of the scheme at the grassroots levels.

### 1.4. Databases

J.M. Martin defined database as a collection of inter-related data stored together without harmful or unnecessary redundancy to serve multiple application". Mac-Millan dictionary of Information Technology defines database as "a collection of inter-related data stored so that it may be accessed by authorized users with simple user-friendly

dialogues". An entity may be concrete as person or book, or it may be abstract such as a loan or a holiday or a concept. Entities are the basic units of objects which can have concrete existence or constitute ideas or concepts. An entity set is a set of entities of the same type that share the same properties or attributes. An entity is represented by set of attributes. An attribute is also referred as data item, data element, data field. Attributes are descriptive properties possessed by each member of an entity set. A grouping of related entities becomes an entity set. The general theme behind a database, is to handle information as an integrated whole. The general objective is to make information access easy, quick, inexpensive and flexible for the user.

### Methodology

Design and development of web-based NYSC Posting System Based on Area of Specialization in other to achieve this, the improve Web-based NYSC posting system will provides a system where various corps member can be posted to their place of primary assignment based on their area of specialization and also to provide a centralized database system that keeps track of corps member information based on their area of specialization and their PPA information. The methodology adopted is Rapid Application Development, both primary and secondary data collection methods are used during the fact-finding process. Under the primary method we have the interview and under the secondary method we have web surfing.

#### 1. Software development

Most challenges facing software development organizations can be summarized as more, better, and faster. The Rapid Application Development path attacks these challenges head on by providing a means for developing systems faster, while reducing cost and increasing quality. Fundamentals of the Rapid Application Development methodology thus include:

1. Combining the best available techniques and specifying the sequence of task that will make those techniques most effective.
2. Using evolutionary prototypes that are eventually transformed into final product.

The structure of the RAD lifecycle is thus designed to ensure that developers build the systems that the users really need. User requirements are refined, a solution is designed, the solution is prototyped, the prototype is reviewed, user input is provided, and the process begins again. Rapid Application Development has four essential aspects:

#### 2. Use case diagram

A use case diagram illustrates a unit of functionality provided by the system. The use cases diagram is to help development teams visualize the functional requirement of a system including the relationship of "actor" (human being who will interact with the system) to essential processes as well as relationship among different use case, Figure 1: shows the use case diagram of the Web-based NYSC posting System.

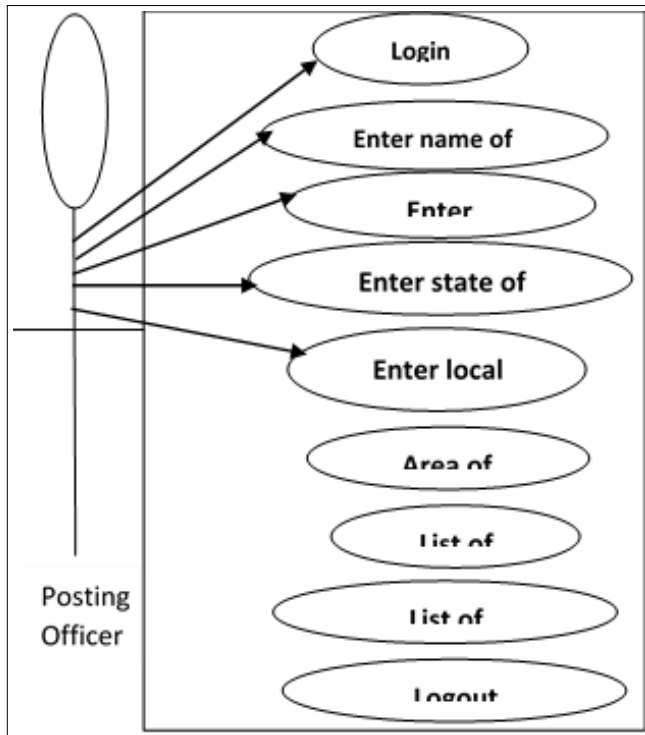


Fig 1: Use case diagram of the Web-based NYSC posting System

**3. Advantages of Rapid Application Development Methodology**

The following are the advantages of Rapid Application Development Methodology, they are:

1. Flexible and adaptable to changes
2. It is useful when you have to reduce the overall project risk.
3. It is easier to transfer deliverables as scripts, high level abstractions and intermediate codes are used.
4. Due to code generators and code reuse, there is a reduction of manual coding.
5. Due to prototyping in nature, there is a possibility of a lesser defect.
6. Each phrase in Rapid Application Development Methodology delivers highest priority functionality to client.
7. With less people, productivity can be increased in short time.

**3.1. Constrains of the Existing NYSC Posting System**

1. It is low and time wasting
2. It encourages favoritism among some employees.
3. The posting letter can be mutilated in the sense that it uses paper which may be altered anytime by unknown employees.
4. It is prone to bribery and corruption

This Shows the existing NYSC posting System

In the existing NYSC posting system has two interfaces, the two interfaces are personal details interface and academic detail interface of the corp member, it involves the following entities:

1. **Service Year:** This is the year the corp member spends in serving the country for a period of 12 calendar months which involve the corp member carrying out its national duties in the various state, local governments, primary place of assignment which the corp member will be posted to.

2. **Corp member Name:** this implies the name of the corp member that wants to be posted to his/her place of primary assignment.
3. **Call up Number.:** This is the call up number of the corp member
4. **Sex:** this is the gender of the corp member
5. **Age:** the age of the corp member.
6. **Marital Status:** This is to indicate if the corp member is single or married.
7. **L.G.A:** its means local government of origin, it is the place where the corp member is being posted to, to carry out its duty in the place of its primary assignment.
8. **State of Origin:** this is the state where the corp member is from, its enables the posting officer to know its state of origin as not to post the corp member back to its own state
9. **Religion:** it states the religion the corp member belongs to, Muslim or Christian.
10. **Health Status:** tells the medical status/report of the corp member, if the corp member is healthy or not or has any medical condition that needs to be address in other to determine where the corp member should be posted to.
11. **Institution Attended:** this is the university/institution the corp member attended.
12. **Graduation Year:** this is the year the corp member graduated.
13. **Discipline:** this feature enables the corp members area of study to be known.
14. **Academic Qualification:** This is the degree/qualification awarded to the corp member by his/her institution attended.
15. **Passport:** this is the image of the corp member.
16. **Browse:** it's a feature that enables the search/uploading of the corp members photograph from the location its being saved.
17. **Clear:** this feature enables the clearing of the passport photograph of the corp member if it happens to be a wrong image.
18. **Save:** this feature is used to save the information entered into the system concerning the corp member.
19. **Close:** this feature puts an end to the entered information of the corp member.

Corp members are posted to their place of primary assignment without checking their area of specialization what he or she studied. The existing NYSC staff can manipulate corp members posting

to the location of their chosen since they have influence. The mapping method used in performing the posting is slow especially in data entry and retrieval of information.

**3.2. Limitations of the existing NYSC posting system**

As established above, the following are the bottlenecks of the existing NYSC posting system.

1. The increasing numbers of corp members within the state makes it time consuming as it takes time to post corp members one after the other.
2. It does not have an interface for posting. It does not have area of specialization.
3. The posting in the existing system is being done manually not determining the corp member field of study.
4. It does not have list of work places for corp members to be posted to base on their field of study.

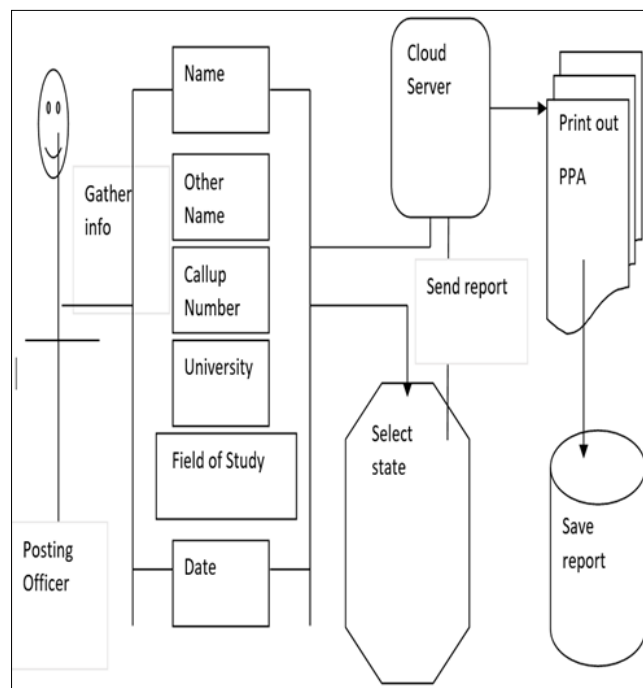
**4. Justification of the Web-based NYSC posting System based on area of specialization**

The Web-based NYSC posting System based on area of specialization is designed for quality information gathering

processing, automatic allocation/posting of corp members by the system and storage of corp members information to the database. In the Web-based NYSC posting System data entry and information retrieval are easy, simple and fast compared to the existing NYSC posting system which is characterized by slow information retrieval and posting being done manually NYSC officials.

**4.1. Advantages of the Web-based NYSC posting System based on area of specialization**

1. It allows for the automatic posting of corp members to their place of primary assignment by the system in accordance to their specialty.
2. It has a mechanism that classifies corp members base on their various felid of study.
3. It has a database for name of corp member entity, callup number entity, area of specialization entity, state entity, local government area entity, list of work place entity and organization sub unit entity.



**Fig 2:** Architectural designs of the Web based NYSC posting System based on area of specialization

**4.2. Design of the Web-based NYSC posting System based on area of specialization**

In the Architectural designs of the Web based NYSC posting System based on area of specialization the

**Posting officer:** is the person who is in charge of posting details of corp member.

**Gathering Information:** is the process of collecting detail information’s of a particular corp member. The information includes name, other name, callup number, university, field of study and date.

**A cloud server:** is a logical server that is built, hosted and delivered through a cloud computing platform over the Internet. The corps member can only access the web site when is hosted on a cloud server.

**Send report:** The posting officer send report to the cloud server and then gets feedback from the system.

**Select state:** the action or process of selecting is choosing out something. The posting officer selects the state corps member is to be posted to during the registration process. In the Web-based NYSC posting system based on area of specialization system the posting officer is the user of the system. The posting officer have to register with the system after registration has been completed then he/she can login, the information required for posting are name of corp member, other name, callup number, university, field of study and date. The posting officer then submit the data into the database on a cloud server then the system automatically allocates list of work place, list of sub organization and then the system checks the corp member’s field of study and uses

it to select the area of specialization for that particular corp member to be posted to his/her primary place of assignment, the posting officer then print out the posting letter.

**4.3. Input Design of the Web-based NYSC posting System based on area of specialization**

The input design includes a form where the posting officer has to enter the corp members personal details, academic details, then save the details and click on post to enable the system automatically post/allocate corp members to their various place of primary assignment, the posting master then click on print in order to print out the posting letter for

the corp member, the posting letter carries the following details, corp member name, callup number, area of specialization, state to be posted to, local government area of primary assignment, work place of primary assignment and sub organization unit.

**Flowchart of the web base NYSC posting system based on area of specialization System**

A flowchart is a diagram that represents a workflow or process. It is also seen as a dramatic representation of an algorithm, a step-step approach to solving a task.

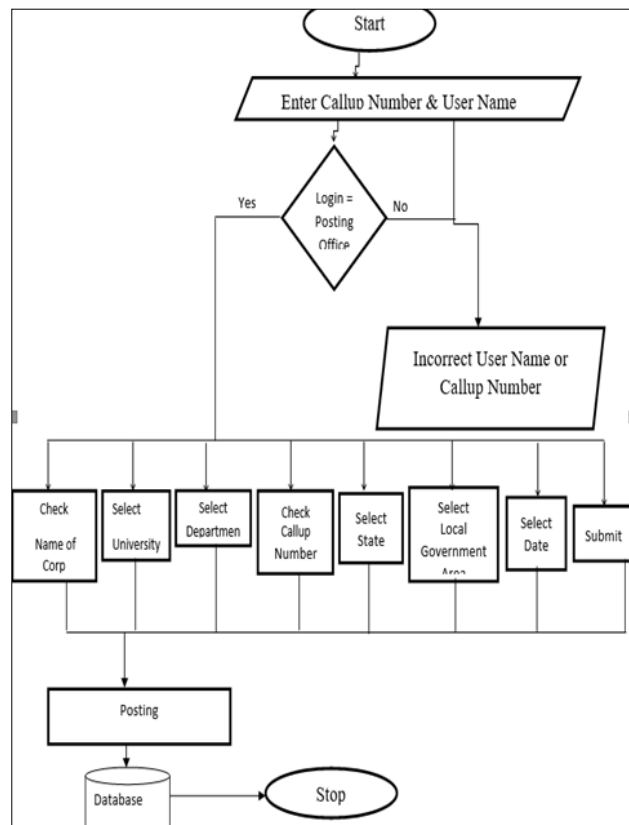


Fig 3: Shows flowchart of a web base NYSC posting system based on area of specialization system

**Algorithm of the Web based NYSC Posting System based on are of specialization**

- Step 1: START {
- Step 2: Login posting office
- Step 3: Enter corp member details
- Step 4: Login user can create account to login
- Step 5: IF (the record is completed fill) THEN: Submit into the database assign area of Specialization to corp member
- Step 6: Else
- Step 7: Return user to step 4
- Step 8: Direct user to dashboard for printing.
- Step 8: Process Logout
- Step 9: } Stop

**Login Page**

Figure 3.3.5: Shows the diagram of the login page: The login page enables the posting officer to login to the portal to enables filling in of the corps member academic details.

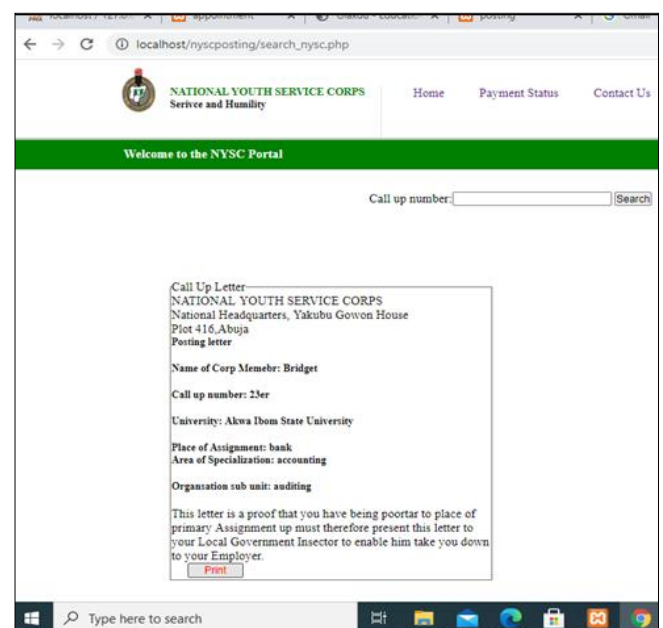
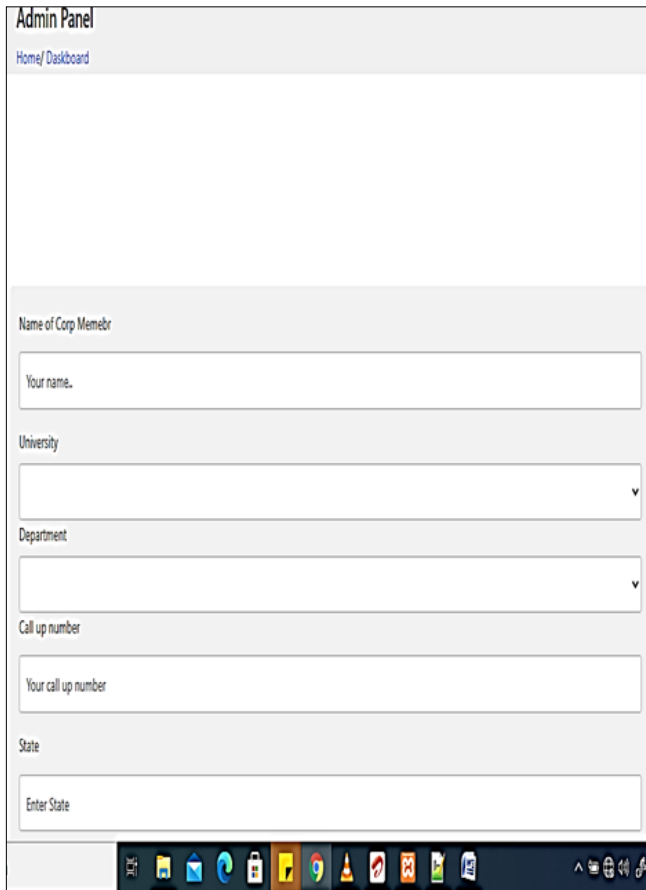


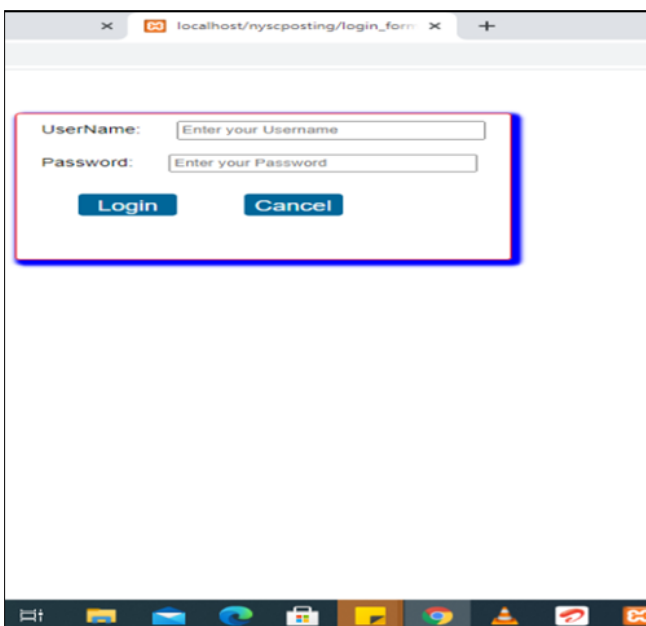
Fig 4: Result Page

**Data entry page**

Figure 3.3.5: Shows the data entry page: this page enables the posting officer to input corp member data, information about the corp member to enable the posting officer submit the corp member details for posting, the form includes: name of corp member, university attended by the corps member, department, state, date, after which the posting officer then click on submit, to enable the system post the corp member.



**Fig 5: Data Entry Page**



**Fig 6: Login Page**

**Result Page**

This diagram shows the result page: the result page shows the posting letter of the corps member, which carries: the corps member name, call up number. University attended, place of assignment, area of specialization and organizational sub unit.

**Print Posting letter Page**

Print Posting letter Page: it enables the posting officer to print out the posting letter for the corp member, the corp member then takes the letter to his/her local government inspector to take to his/ her employer in his/her primary place of assignment.

**System Change Over**

In the web base NYSC posting system based on area of specialization system direct changeover is used. In a direct changeover the old system is stopped completely, and the new system is started. All of the data that used to be input into the old system now goes into the new one. In the old system if the system fails, there is no back-up, so data can be lost. While in the new system back up is done simultaneous.

**Summary**

The study is aimed at designing A Web-based NYSC Posting System Based On area Of Specialization for NYSC that enables posting officer to upload corp members information, then the system automatically generates the area of specialization attached to the posting letter to enables the NYSC officials to know the corps member discipline and where he/she needs to be posted to in his/her primary place of assignment. In the course of the study, research was conducted and data were sourced through reviews of related work, interview and the internet.

The data were analyzed and the system was development using the Rapid Application Development. At the end of the process, a fully system capable of solving posting corps members to their area of specialization problem was developed.

**Conclusion**

The study has theoretically and practically demonstrated on how various corp members can be posted to their place of primary assignment based on their area of specialization with the result achieved in chapter four. The study saves time, more reliable, accurate and efficient.

The mode of posting corps member need to be improved by using biometrics to authenticate corp members.

**Recommendations**

From the analysis gathered from NYSC, the following are recommended:

1. There should be biometric technology to authenticate various corps members that has been posted to their primary assignment place based on area of specialization.
2. There should be a facial biometric that authenticate posting officer that want to deploy corps member to their place of primary assignment based on their area of specialization.

**Contribution to Knowledge**

The study has great impact to scholars in sourcing for information on how to build an application for various

organizations such as NGO, Government agencies, private sectors. The study has made it possible for the posting of corps member to their main area of specialization.

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