Project report

On

National Service Scheme Portal

Submitted in partial fulfillment of the requirements for the award of Degree

BACHELOR OF TECHNOLOGY
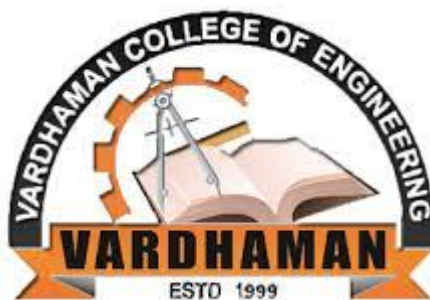
In

INFORMATION TECHNOLOGY

By

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DEPARTMENT OF INFORMATION TECHNOLOGY

VARDHAMAN COLLEGE OF ENGINEERING

(AUTONOMOUS)
(Affiliated to JNTUH, Approved by AICTE and Accredited by NBA)
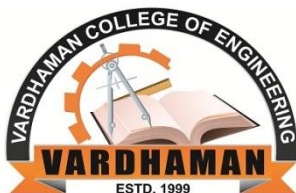Shamshabad - 501 218, Hyderabad
2014-2018

VARDHAMAN COLLEGE OF ENGINEERING

(AUTONOMOUS)

Shamshabad - 501 218, Hyderabad

DEPARTMENT OF INFORMATION TECHNOLOGY

<u>CERTIFICATE</u>

This is to certify that the project report entitled, "**National Service Scheme Portal",** done by **Chandan M Kalyani (14881A1208), Gopi Satya Sesha Rao (14881A1217)** and **V Vishnu Vardhan Reddy (14881A1258),** Submitted to the department of Information Technology in partial fulfillment of the requirements for the Degree of **BACHELOR OF TECHNOLOGY** in **Information Technology** from **Jawaharlal Nehru Technological University Hyderabad**, during the year 2014-2018. It is certified that he/she has completed the project satisfactorily.

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Viva-Voce held on……………………………………………

SIGNATURE OF THE EXTERNAL EXAMINER

ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of the task would be put in complete without the mention of the people who made it possible, whose constant guidance and encouragement crown all the efforts with success.

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I avail this opportunity to express my deep sense of gratitude and heartfelt thanks to all the members of management, for providing congenial atmosphere to complete this project successfully.

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i LIST OF ABBREVATIONS

1. **HTML:** Hyper Text Markup Language is a markup language used to design static web pages.

2. **CSS:** Style Sheets is the language for describing the presentation of Web pages, including colours, layout, and fonts.

3. **MySql:** MySQL (Structured Query Language) Database is the database management system that delivers a flexible and cost effective database platform to build robust on demand business applications.

4. **XAMPP:** XAMPP Server is a Windows web development environment. It allows you to create web applications with Apache2, PHP and a MySQL database.

5. **PhpMyAdmin:** It is a free software tool written in PHP, intended to handle the administration of MySQL with the help of a Web browser.

6. **PO:** PO stands for program officer, each college will have one PO for handling the NSS activities.

ii ABSTRACT

The aim of National Service Scheme is "Development of the Personality of Students through Community Service" where NSS Program Coordinator's (PO's) take as in-charge in college level to update the students work for every service done so far and send the data to the respective universities at the year ending in order to provide respective awards and certificates to the students as per their participation in the events. Though there is an official NSS website there is no feature where NSS PO's can have interaction with higher level officials in a responsive website and provide all students details in order to keep track of active NSS members and to provide sufficient proofs of students working in the events. There is no proper guidance given to the students in event announcements for interaction. Though blood-camps are one of the events done frequently in NSS where victims are helped through Blood-Banks, Websites and APP's, they fail in providing the required blood group to the emergency victims to save their life. Hence we want to develop a responsive website where each college will be given a profile with dynamic uploads option to update their students details along with the events done, gallery, awards and recognitions of the colleges providing along with announcements option and also providing College ranks in various levels all of State including with a special feature of Blood-group providence through NSS all over the state.

CONTENTS

Chapter - 1
INTRODUCTION

1.1 Motivation:

Being as part of National Service Scheme (NSS) from Vardhaman College of Engineering, we understood that there is a problem regarding communication, spreading notifications, consistent data of active members, awards and event gallery which leads to under world politics of award distribution in higher level.

1.2 Problem Statement:

Though there is an official NSS website there is no feature where NSS PO's can have interaction with higher level officials in a responsive website and provide all students details in order to keep track of active NSS members and to provide sufficient proofs of students working in the events. There is no proper guidance given to the students in event announcements for interaction. Though blood-camps are one of the events done frequently in NSS where victims are helped through Blood-Banks, Websites and APP's, we fail in providing the required blood group to the emergency victims to save their life. Few problems faced by NSS PO's, Students are:

- Lack of event details to the students and PC's of a particular college.
- Delay's in event and awards ceremony.
- No proper database student and faculty details.
- Under world politics in awards distribution.
- No proper glance regarding NSS and its rules that needs to be followed.
- Blood group donation fails.

1.3 Objectives of the Project:

The National Service Scheme Portal is developed as an attempt to provide a responsive website where each college will be given a profile with dynamic uploads option to update their student details along with the events done, gallery, awards and recognitions of the college providing along with announcements option all over the state including with a special feature of Blood-group providence through NSS all over the state. There is a separate GUI provided to the Admin so that he can manage all the activities. Following are the three main objectives of the proposed system:

- **Providing Valid Database:** Here a valid consistent database of active Students, Faculty, PO and College details along with Awards and Gallery will be maintained.

- **College Ranking:** Student users can be verified themselves as students within few seconds and get approved.

- **Admin Inspection:** Admin can inspect and college in order validate the performance of the college and their students along with proofs of event gallery provided in the particular college profile.

- **Blood Group:** We can provide required blood group to the victim over all India in in-time.

Chapter - 2
LITERATURE SURVEY

2.1 Existing System:

There is already an all India official website for National Service Scheme (NSS) which is maintained by National Youth and Sports Affair Ministry but which is a static website with just basic details about NSS events, gallery, award types, rules and regulations where there is no communication page to interact with NSS committee, maintain student and faculty, college details. Admin cannot inspect any of the college work and provide awards based on those performances of the colleges.

2.2 Proposed System:

We want to develop a responsive dynamic website where each college will be given a profile with dynamic uploads option to update their students details along with the events done, gallery, awards and recognitions of the colleges providing along with announcements option and also providing College ranks in various State levels (University level & Colleges level) including with a special feature of Blood-group providence through NSS over all India. Steps to follow the process are:

1. Provide your valid College Principal/PO Email-ID and phone number to the Admin.

2. In return Admin will send Automated Login ID and Password to the respective College Principal/PO Email-ID to get access to his profile account and later on the college can change its password.

3. Now, College PO can update the college profile page with events done, Award winners of the college, student/faculty details using dynamic upload option.

4. Based up on all the college pages uploading their profiles their performance will be awarded and ranking will be given to the college in State level (University level).

5. Admin has option to notify the upcoming events in all University and College level.

Chapter – 3
ANALYSIS

3.1 Software Requirement Specification:

3.1.1 <u>User Requirements</u>:

- College Principal/PO Email and Phone number to send Login and Password details.
- College PO's to update gallery, awards and student/faculty details.

3.1.2 <u>Hardware Requirement</u>:

- RAM   - 1 GB
- Hard Disk   - 500 GB

3.1.3 <u>Software Requirements</u>:

- Operating System   - All operating systems
- Application Server   - XAMPP Server
- Front End   -HTML5, CSS3
- Scripts   - JavaScript
- Server Side Script   - PHP
- Database   - MY SQL

Chapter – 4
DESIGN

4.1 Introduction:

SDLC Methodologies:

- This document play a vital role in the development of life cycle (SDLC) as it describes the complete requirement of the system. It means for use by developers and will be the basic during testing phase. Any changes made to the requirements in the future will have to go through formal change approval process.
- As originally envisioned, the iterations were typically 6 months to 2 years long. Each phase starts with a design goal and ends with a client reviewing the progress thus far. Analysis and engineering efforts are applied at each phase of the project, with an eye toward the end goal of the project.

The following diagram shows how a spiral model acts like:
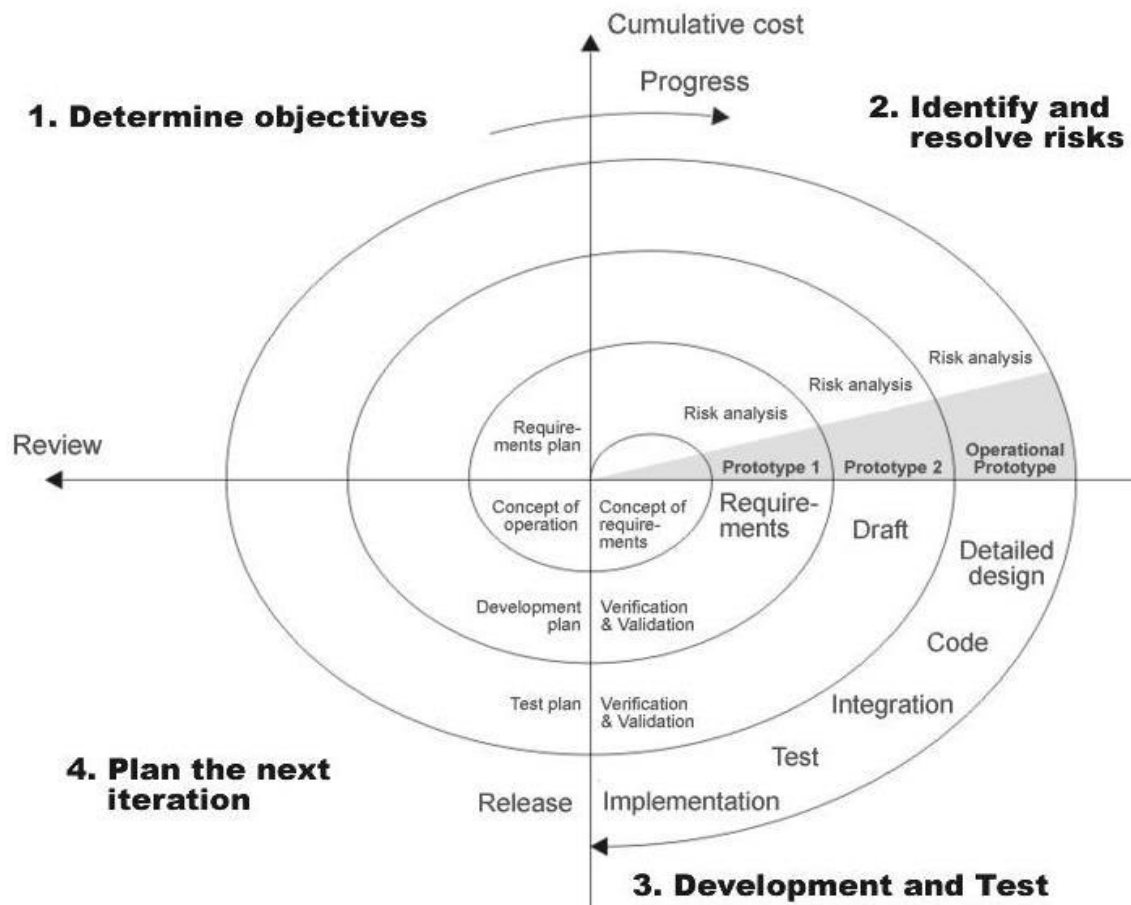
4.2 UML Diagrams:

Use Case Diagram:

The purpose of use case diagram that was finally designed for the National Service Scheme Portal can be seen in Figure 4.2.1, 4.2.2, and 4.2.3.
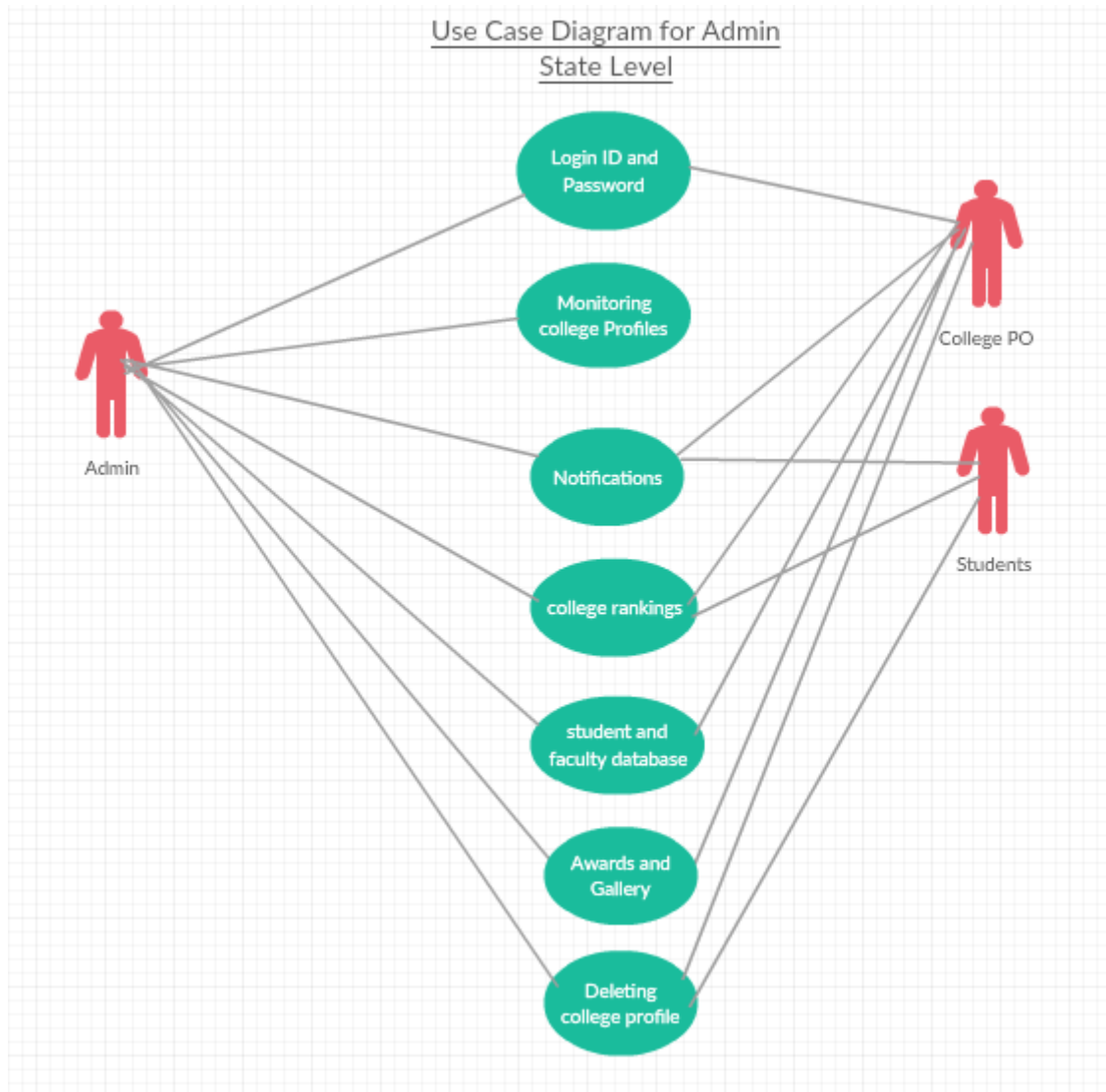
FIG: 4.2.1 Use Case Diagram for Admin.

Use Case Diagram for Victim

NSS Website

Blood Group
page

select state

select city

select district

select college

Upload victim
details

NSS Blood
Donors

Victim

college PO

Students

FIG: 4.2.2 Use Case Diagram for Blood Group Victim.

Use Case Diagram for College PO

Login ID and
Password

College profile

Upload college
details

upload awards and
gallery

upload student and
faculty database

Blood Group

College PO

Admin

Students
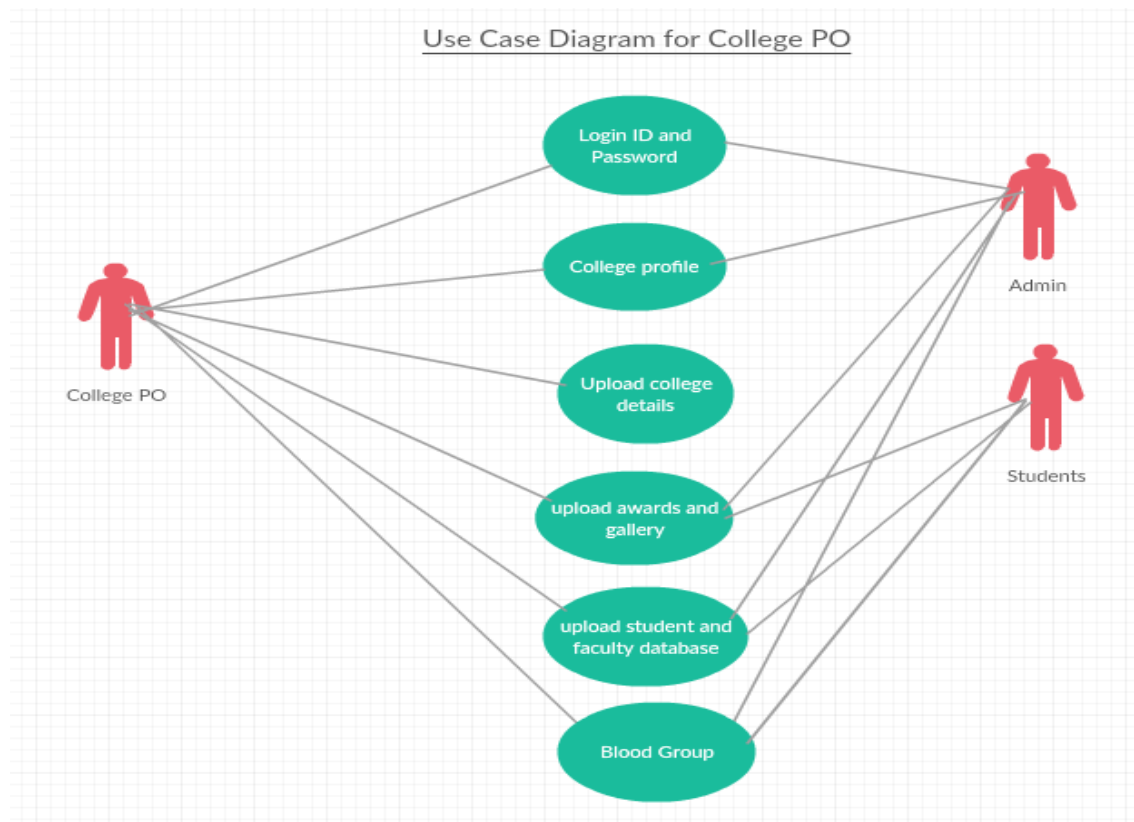
FIG: 4.2.3 Use Case Diagram for College PO.

Sequence Diagrams:

Sequence diagram and collaboration diagram are called INTERACTION DIAGRAMS. An interaction diagram shows an interaction, consisting of set of objects and their relationship including the messages that may be dispatched among them. A sequence diagram is an introduction that empathizes the time ordering of messages. Graphically a sequence diagram is a table that shows objects arranged along the X-axis and messages ordered in increasing time along the Y-axis.

Sequence Diagram for Accessing College Profile

| Admin | College PO | Data Base |

Login & Password
Login College Profile
Login Access
Upload Awards & Gallery
Upload College details
View College Profile
Event Notification
Events done details
Based on Events Ranking is given
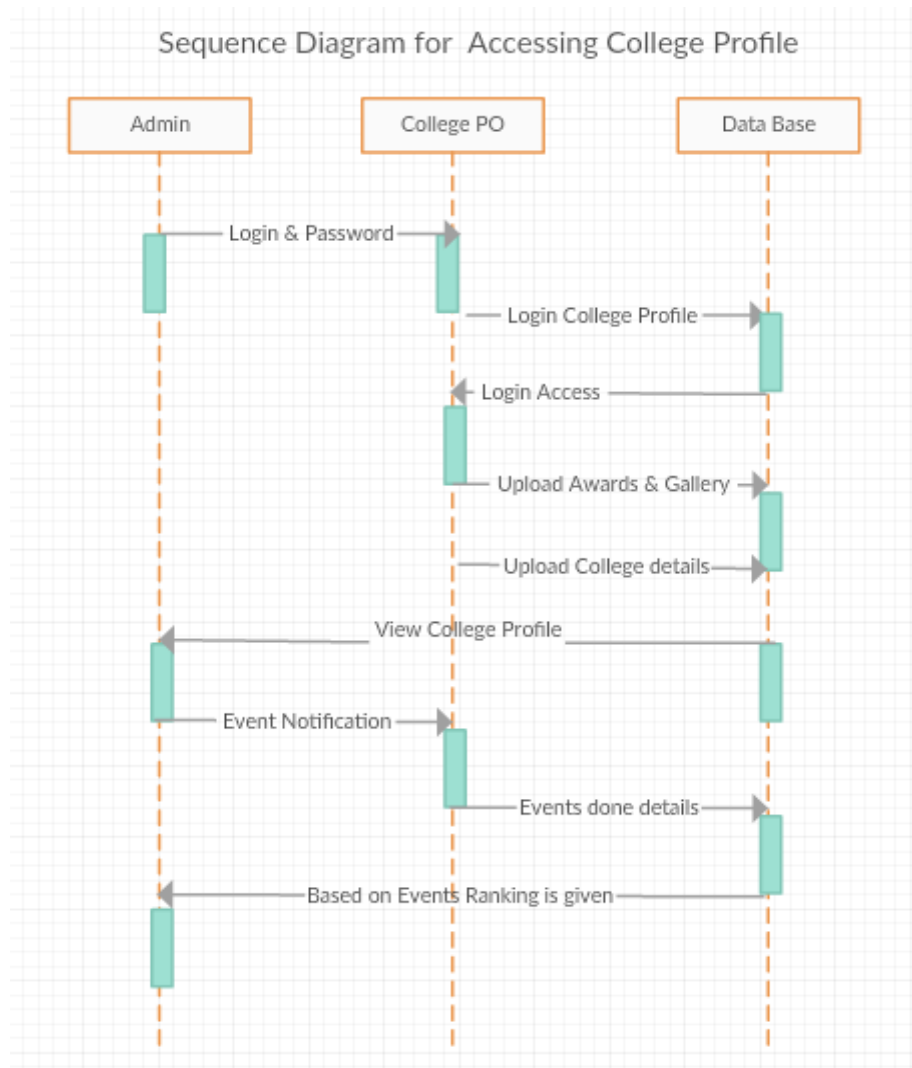
FIG: 4.2.4 Sequence Diagram for College PO.

Sequence Diagram for Blood Group Request

College PO | Victim | NSS BloodGroup Page

Open Service Page

Select district & college

Enter Victim Details

Request will be forwarded

PO will respond

Sends Students to donate

Blood Donation done by students will be recorded
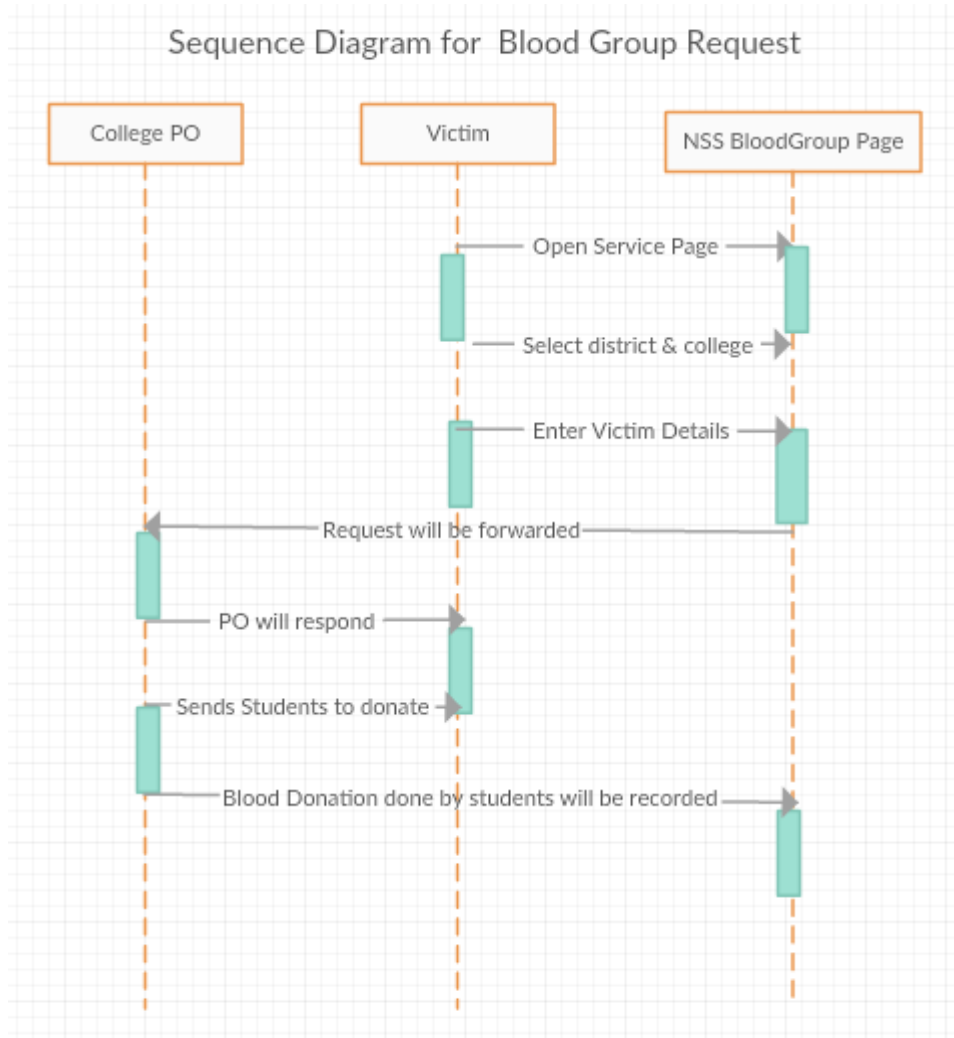
FIG: 4.2.5 Sequence Diagram for Blood Group Request

Class Diagram:

A **class diagram** is an illustration of the relationships and source code dependencies among **classes** in the Unified Modelling Language (UML). In this context, a **class** defines the methods and variables in an object, which is a specific entity in a program or the unit of code representing that entity.
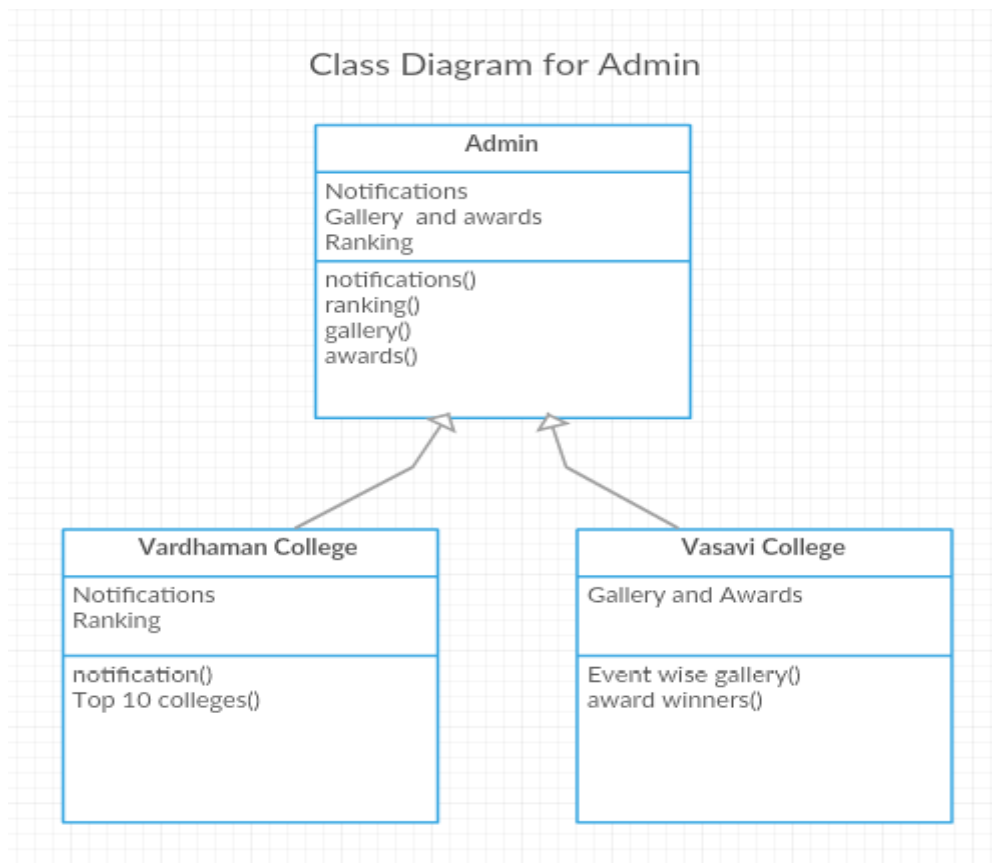
FIG: 4.2.6 Class Diagram for Admin
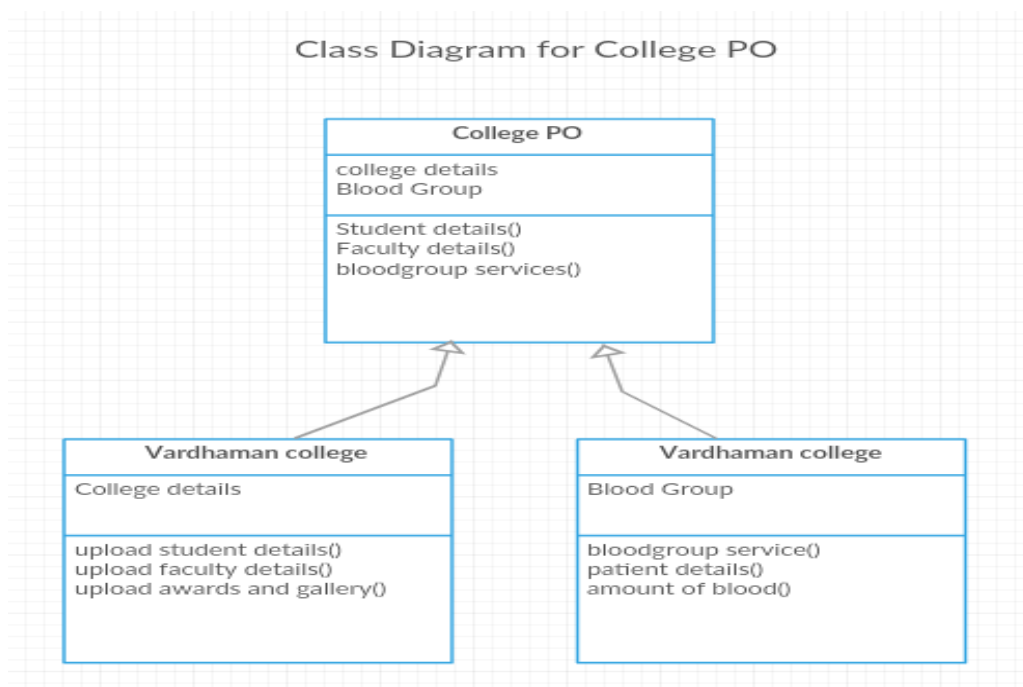
FIG: 4.2.7 Class Diagram for College Po

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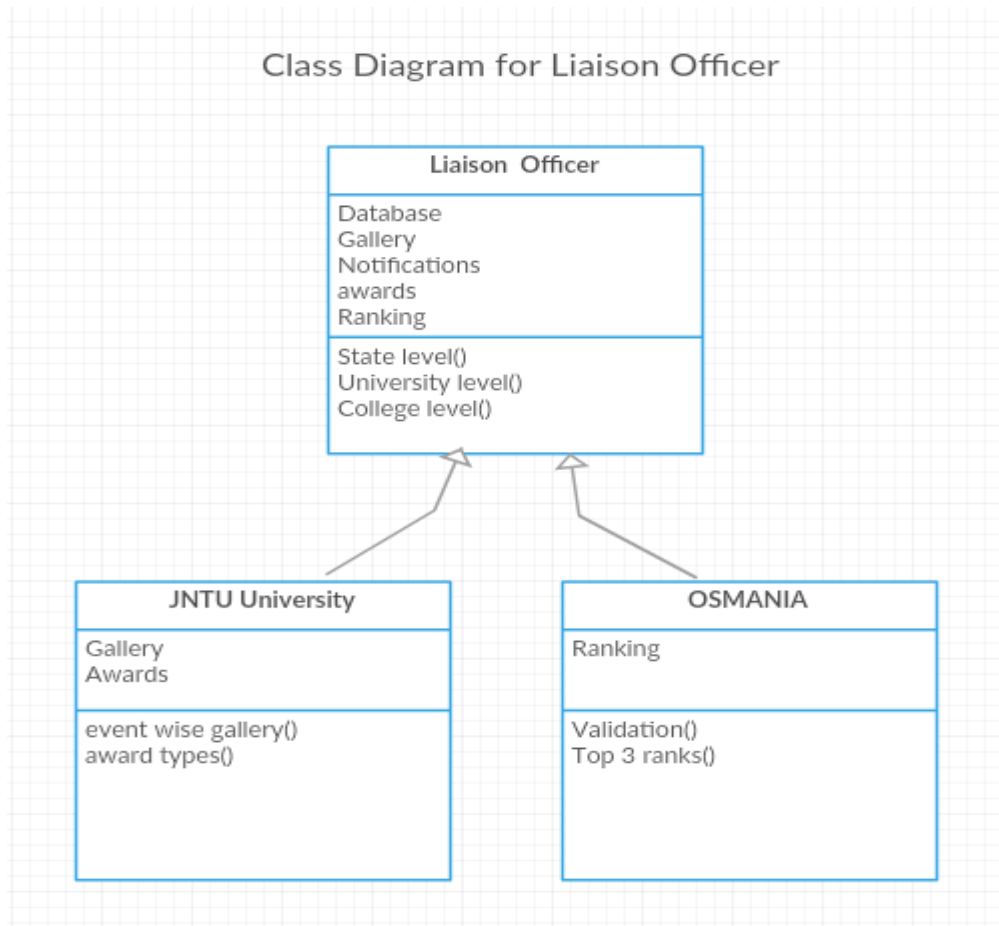
FIG: 4.2.8 Class Diagram for Liaison Officer

4.3 MODULE DESIGN AND ORGANIZATION:

The proposed project contains mainly five modules they are

    i. Admin Module

    ii. College PO Module

    iii. Blood-Group Victim Module

Chapter – 5
IMPLEMENTATION

5.1 Introduction:

The project described within this document is a National Service Scheme Portal is designed to reduce the load of management of activities and awards. Being an integrated Online Portal System it will reduce paper work, provides softcopy proof's and consume both time and resource. Design to facilitate user friendly interface for both administrator and College PO as well as secure information is provided to user scope. It can be easy accessible at anywhere, any time and at any device as it is portable website designed to be access from laptop, mobiles, tablets, ETC.

5.2 Explanation of Key functions:

The proposed project contains mainly five modules they are:

1. Admin Module
2. College PO Module
3. Blood-Group Victim

1. <u>Admin Module:</u>

- Admin has the supreme power of the portal.
- Admin provides login id and password to the college PO.
- BPA is responsible for maintaining the whole system.
- BPA can send mail to respected college PO interact if any issue.

2. <u>College PO Module:</u>

- College PO can register by sending request.
- College PO can upload all the college awards, details and gallery.
- College PO will be notified when blood group request comes to the college page by the victim.
- College PO can update the password when needed.

3. <u>Blood-Group Victim Module:</u>

- Here victim/family member should upload victim details which include blood-group, description, and doctor's prescription.
- Request any blood group needed by the victim.
- Request can be recorded from anywhere and any device.
- Victim can select any college from the given list of colleges from district wise.

5.3 Method of Implementation

5.3.1 Outputs

Chairman Name

Name

Chairman Email Id

Email Id

Chairman's Image

Choose File No file chosen

Chairman Phone No.

Phone Number

Principal Name

Name

Principal's Email

Email

Principal's Image

Choose File No file chosen

Principal Phone No.

Phone Number

College PO Name

Name

College PO's Email

Email Id

College PO's Image

Choose File No file chosen

College PO's Phone No.

Phone Number

University

Select University ▼

College Type

Select College Type ▼

Fig 5.3.1.1: The above screenshots denotes the College PO Dynamic upload college details form.

Fig 5.3.1.2: The above screenshots denotes the College PO Dynamic upload Awards form.

Fig 5.3.1.3: The above screenshots denotes the College PO Dynamic upload Gallery form.

Home   NSS Details ⌄   NSS Awards ⌄   NSS Activities ⌄   NSS Programs ⌄   Joined Colleges ⌄   Gallery   Contact Us   Login

Blood Donation

Select State

Andhra Pradesh ▼

Select City

Hyderabad ▼

Select District

Rangareddy ▼

Select College

vmeg

Patient Name

Patient Name

Patient Number

Patient Number

Patient Age

Patient Age

Select College

A+ ▼

Patient Age

Patient Age

Select College

A+   ▼

Description

Hospital Name

Hospital Name

Hospital Area

Hospital Area

Hospital Number

Hospital Number

Choose File   No file chosen

Submit

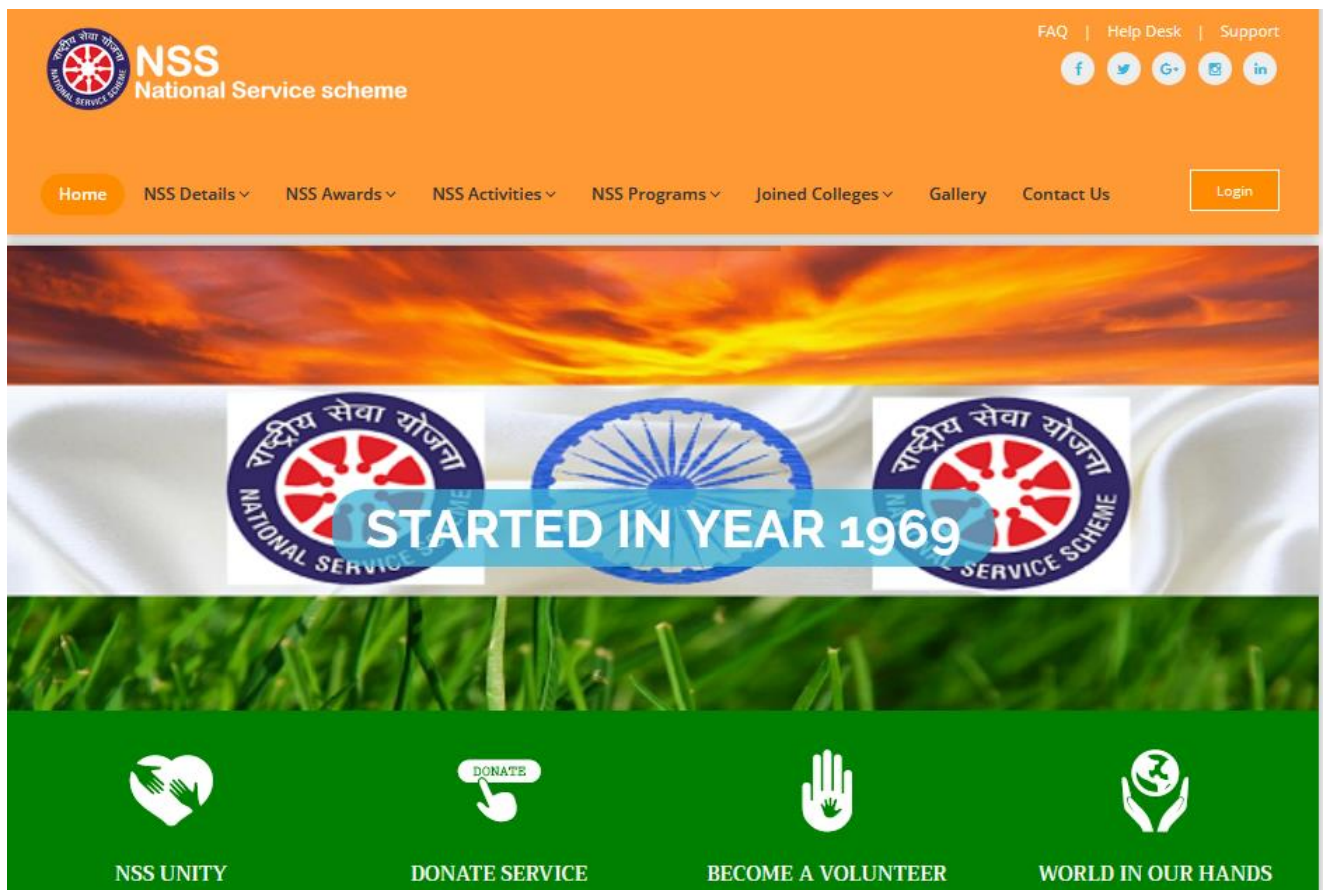**Fig 5.3.1.4: The above screenshots denotes Blood-Group form.**

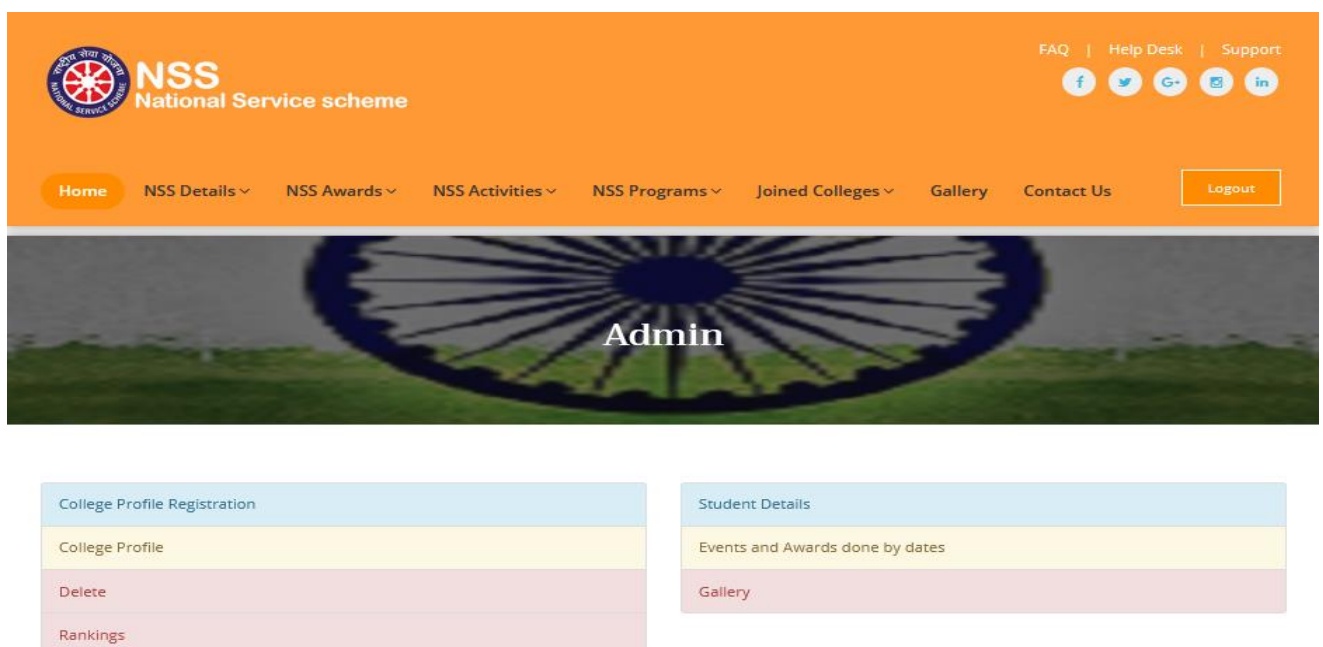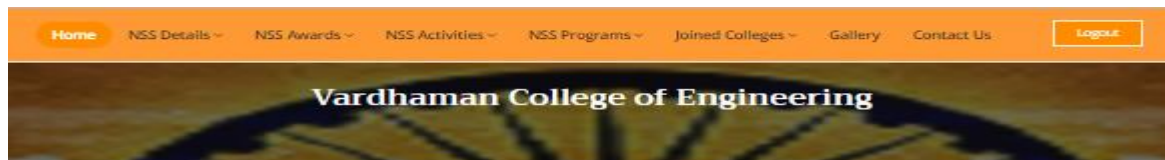**Fig 5.3.1.5: The above screenshot denotes Home Page.**

Fig 5.3.1.6: The above screenshot denotes Admin Page.

Fig 5.3.1.7: The above screenshots denotes College Profile Page.
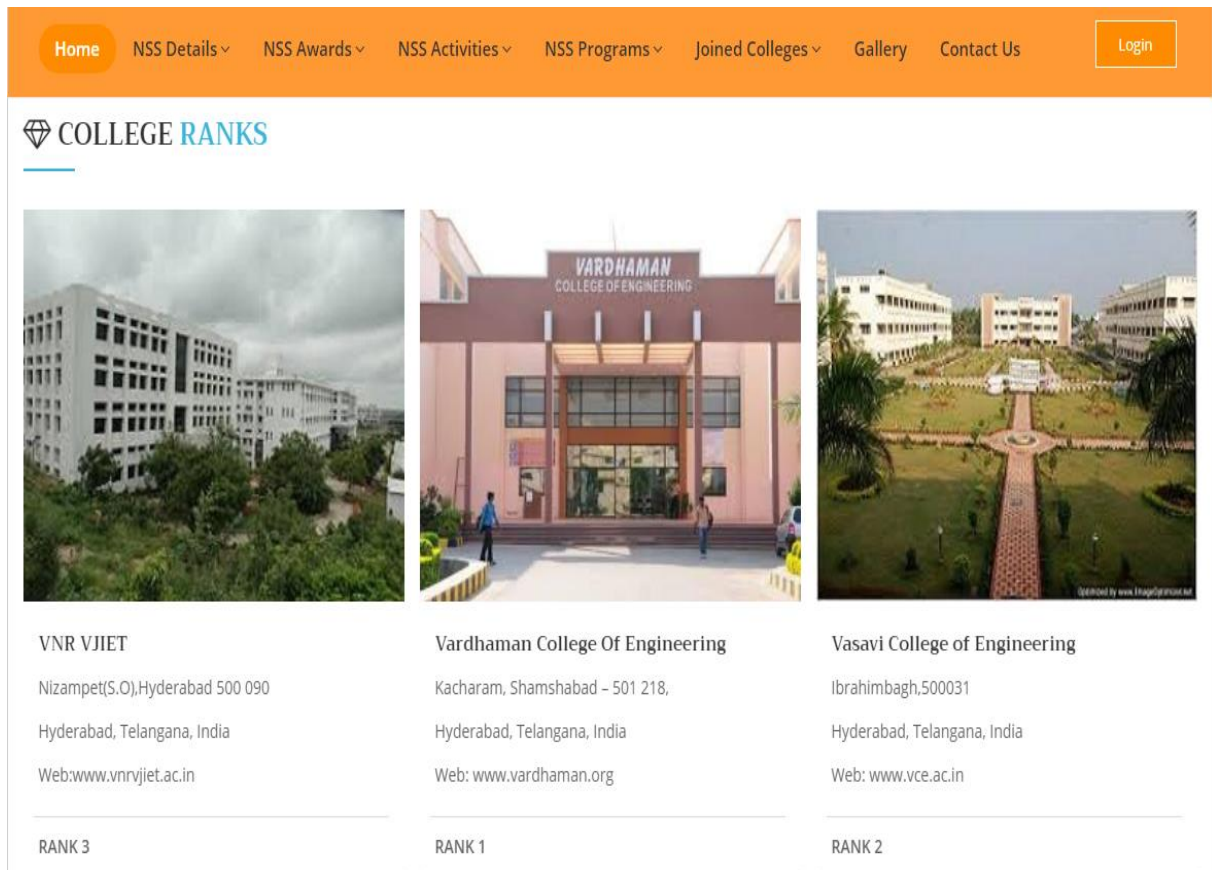
Fig 5.3.1.8: The above screenshots denotes College Rankings Page.

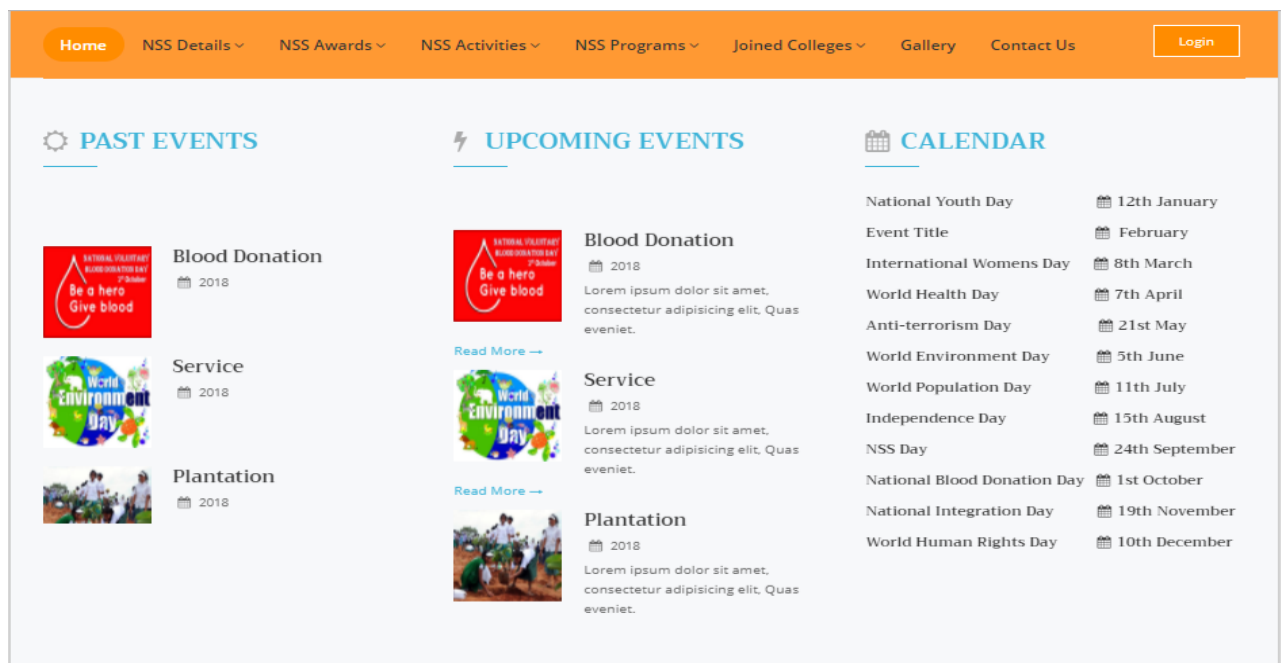**Fig 5.3.1.9: The above screenshots denotes Event Notifications Page.**
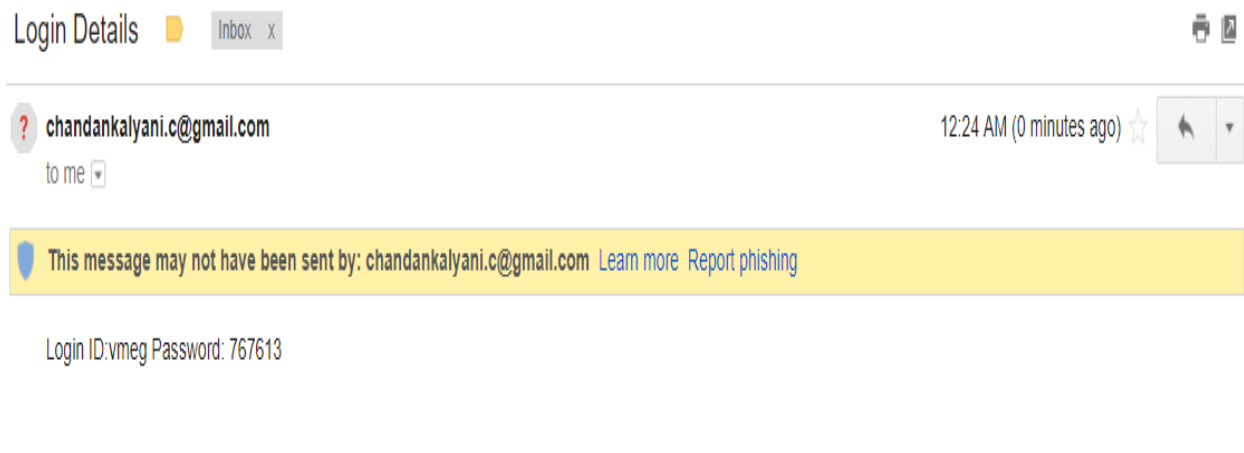
5.3.2: Result Analysis

Fig 5.3.2.1: The above screenshot denotes Automated Login ID and Password output sent to college email Page.
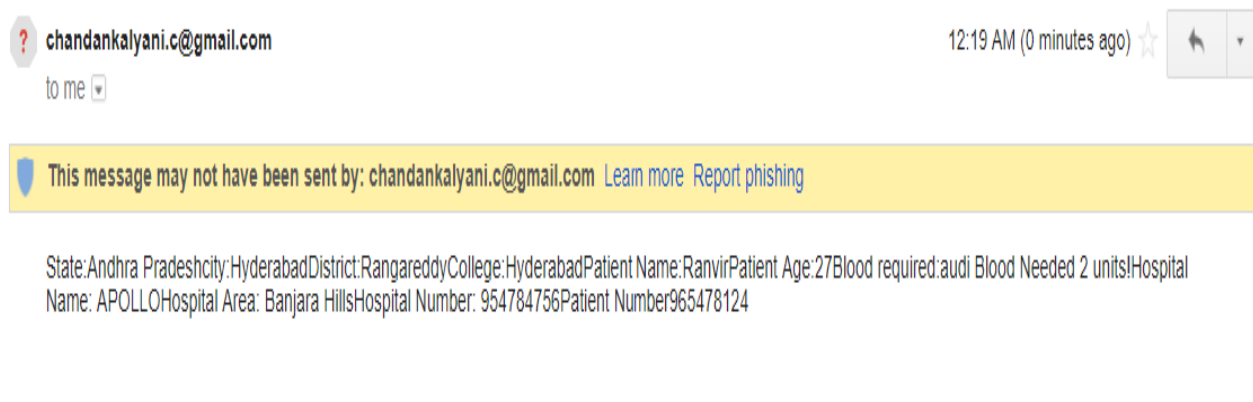

Fig 5.3.2.2: The above screenshot denotes victim request sent to College PO email Page.
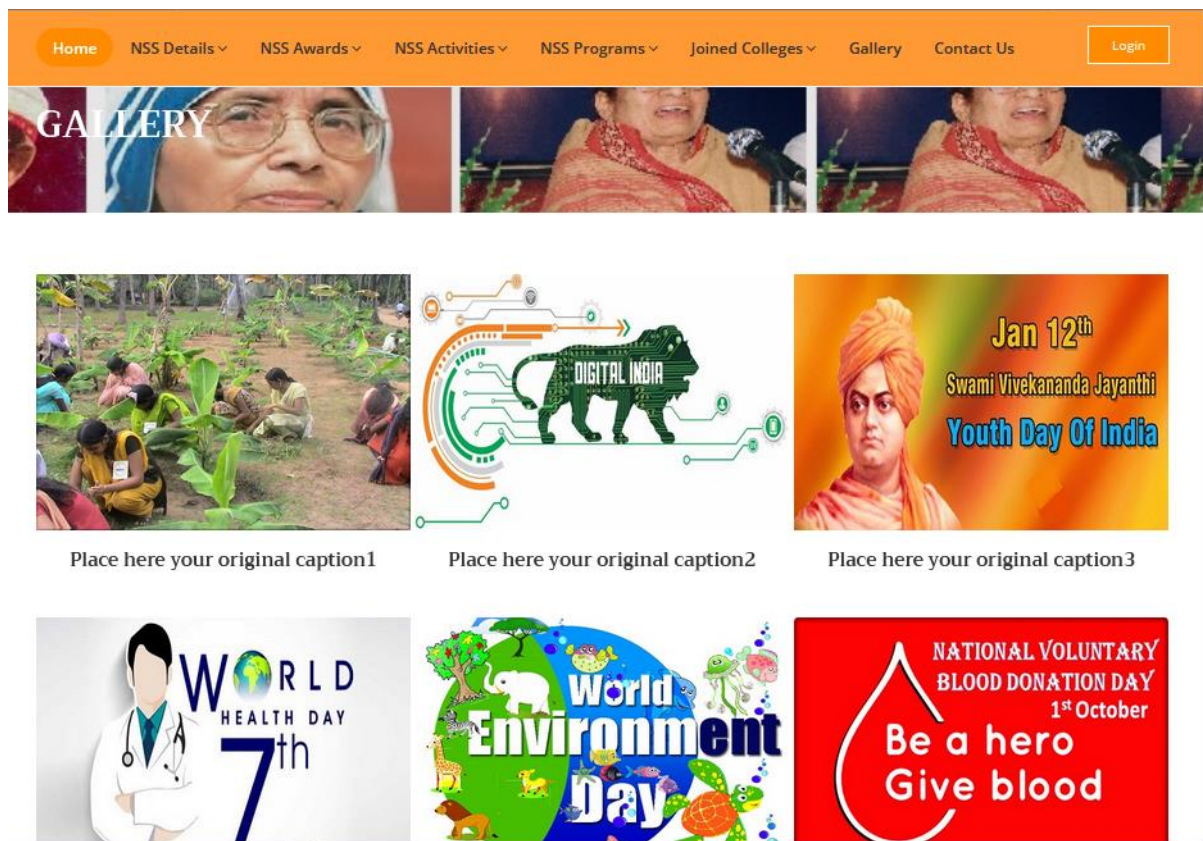
Fig 5.3.2.3: The above screenshot denotes Dynamically uploaded Gallery Page.

Chapter – 6
TESTING & VALIDATION

6.1 Introduction:

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or a finished product, it is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

6.2 Design of test cases and scenarios:

Test Case 1:

S.No	Steps Involved	Inputs	Expected Result	Actual Result	Test Cases Pass/Fail
1.	Run Website	http://localhost/nss	Website should open	Website is opened	Pass
2.	Login College Profile by College PO	Login ID and Password	Login college profile should open	Login page is opened	Pass
3.	Upload Gallery images	Upload any two images	Display the images uploaded	Undefined variable: file upload	Fail
4.	Admin college profile view	Selecting College name	Should open college profile	Index not found: page error	Fail
5.	Blood-Group request	Upload victim details and send request	Request sent	Error sending request.	Fail

Test Case 2:

S.No	Steps Involved	Inputs	Expected Result	Actual Result	Test Cases Pass/Fail
1.	Run Website	http://localhost/nss	Website should open	Website is opened	Pass
2.	Login College Profile by College PO	Login ID and Password	Login college profile should open	Login page is opened	Pass
3.	Upload Gallery images	Upload any two images	Display the images uploaded	Undefined ariable: file upload	Pass
4.	Admin college profile view	Selecting College name	Should open college profile	Index not found: page error	Pass
5.	Blood-Group request	Upload victim details and send request	Request sent	Error sending request.	Pass

Chapter – 7
CONCLUSION

7.1 Project Conclusion:

From a proper analysis of positive points and constraints on the portal, it can be safely concluded that the product has a highly efficient GUI based interface. This portal can be easily plugged in many systems and also the interface is user friendly.

Generally, there are more than 68 Lakh students present in college level in Telangana State. There is always problem regarding announcements of the events and awards related to National Service Scheme (NSS) due to political influence while selecting the awards for the students.

So, there is a need to develop a system that can solve the mentioned problems. This software comes with the solution avoiding such problems faced by the people which include both Admin and college PO in getting bus pass. It's the fastest and simple solution making whole process is dynamic.

7.2 Project Future Enhancement:

We plan to continue our research in the following directions. First we are plaining to extend the portal from State level to National level providing all India level supreme Admin who has powers to give rights for the selected liaison officer from state level officials by providing automating Login ID and Password generations system.

Now it's the website we developed but later on we are going to develop mobile application so that it will be easily accessed by the users instantly without much difficulty in accessing every time.

As the demand for the project is very high there will be more number of users hence providing an ordinary database is little expensive to store and retrieve the data all the time so it's better if we upgrade to cloud to store, retrieve and process the data instantly all the time at a very inexpensive cost.

7.3 Bibliography:

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- PHP and MySQL Web Development – Luke Welling, Laura.
- SQL Server –2000 – Dusan Petkovic.

7.4 Websites:
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   http://nss.nic.in/
2. Details referred to build the website regarding css, javascript, php and my sql.
   https://www.w3schools.com/