

NSS PORTAL

Submitted in partial fulfillment of the requirements of the
degree

BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING

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CERTIFICATE

This is to certify that the Mini Project entitled “**NSS PORTAL**” is a bonafide work of **Avishkar Phawade (121A1076), Aayush Shah (121A1098), Dhruv Shetty (121A1101), Pranav Pawar (121A1074)** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of “**Bachelor of Engineering**” in “**Computer Engineering**”.

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ABSTRACT

In this project we develop the NSS management system software for our college. The National Service Scheme (NSS) is an Indian government-sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. Popularly known as NSS, the scheme was launched in Gandhiji's Centenary year, 1969. Aimed at developing student's personality through community service, NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a campus-community linkage.

The national service Scheme provides diversified opportunities to students in colleges and universities to develop their personality through community services. Community services rendered by university level students have covered several aspects like adoption of villages for intensive development work, mass tree plantation, technology transfer programmes, technologies for rural development, various training programmes for self-help groups and rural youth etc.

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INTRODUCTION

1.1 Overview

The National Service Scheme (NSS) is an Indian government-sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. Popularly known as NSS, the scheme was launched in Gandhiji's Centenary year, 1969. Aimed at developing student's personality through community service, NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a campus-community linkage.

Various diversified opportunities are provided by National service Scheme to students in colleges and universities to develop their personality through community services. The cardinal principle of the NSS program is that it is organized by the students themselves, and both students and teachers through their combined participation in community service, get a sense of involvement in the tasks of nation building.

In this project, our main motive is to develop a user-friendly interface with easy to use controls. The project consists of web based application that the users can use to gain information, communicate and keep a record of all the activities done in the past. The application uses MYSQL as a database, we can keep a backup of the database to safe keep it from system crashes. The Web Application of NSS will have a login, where a registered user can log in and access the available information.

The application can be accessed in mobile phones and computers of any operating system, using a web browser. The responsive feature of the application will set the components based on the device resolution. This reduces a lot of code, complexity and makes it easy to develop.

1.2 Motivation

In the present world everything has become online. With the help of the internet, communication has become much easier and faster. National service scheme is a public service program conducted by Government of India. College students participate in NSS to provide service to the society and help the needy, activities like educating the poor, cleaning the surroundings, plantation, yoga, blood donation camp, beach cleaning and other events will be conducted by the NSS team. Generally the information will be shared to the students by conducting a meeting, it will not reach every student as some might not be able to attend the meeting. If the information is available in the Internet through a portal or website, all the students they will get an update on the current situation and ongoing events, with the help of this project students can login to a web application and check all the available information like events, organizers date of the event and the location of the event.

1.3 Problem statement and Objectives

Most of the colleges use offline mode for communicating with students who participate in social service schemes like National Service Scheme. Announcements of activities and events will be known to the students by the staff or the organization only through offline meetings. Thus this way of information sharing is not fast and efficient.

Using a Web Application for spreading information like Events, Registration, Photos, Collaboration, Participation and others will become much easier and efficient compared to meetings, when an information is posted will be available to all the respective individuals quickly. As all the data will be stored and maintained with back-up, it can be updated and maintained easily by the institution and the authorized members, information will reach the students in an instant.

Staff or an Admin can add events, modify and delete an event, admin can manage the staff,

add new staff or modify information about the staff. The project will help the students, staff and institution to communicate easily and share information rapidly to everyone.

Objectives

1. To remove a huge gap in interactions between volunteers and the system.
2. Provide all necessary information.
3. Way of Information sharing should be faster and more efficient.
4. All the data will be stored and maintained with back-up, it can be updated and maintained easily by the institution.
5. Announcement of activities should reach maximum people within an instant.
6. Minimize the need of conducting offline meets to share information with volunteers.

1.4 Organization of Report

This material is provided to allow the readers to easily find out their areas of interest. Generally this dissertation is organized into three chapters.

Chapter 1 describes the detail overview of NSS Procedures with some challenges, background and problem statement. It also proposed the objectives and contribution of this research.

Chapter 2 describes the review of all relevant research that influence on NSS activities and procedure. It also demonstrates the work done by others on this project. It also provides the short review of methods that we are going to use. Here is also the comparison of all NSS management procedures and activities that are implemented and also their vulnerabilities and technical challenges.

Chapter 3 describes the detail work on the project that what methodologies are used to achieve the progress of NSS Portal. It demonstrates the overall tools design, planning, implementation and the whole process and its work flow. It also describes the framework, functionalities, challenges, requirements and specifications that are required to implement on this system. Generally this chapter describes the core development of the whole NSS Portal. It describes the results, achievements and clarification of the NSS Portal. This chapter basically provides the summary of all the results that we are achieve through the trial or testing of the machine. This chapter also describes the conclusion of the work, short summary of overall research and also the benefits. It also provides some discussion with some future research extension.

LITERATURE SURVEY

2.1 Survey of Existing System

Colleges use offline mode for communicating with students who participate in social service schemes like National Service Scheme. Announcements of activities and events will be known to the students by the staff or the organization through offline meetings. National service scheme is a public service program conducted by Government of India. College students participate in NSS to provide service to the society and help the needy, activities like educating the poor, cleaning the surroundings, plantation, yoga, blood donation camp, beach cleaning and other events will be conducted by the NSS team. Generally the information will be shared to the students by conducting a meeting, it will not reach every student as some might not be able to attend the meeting.

Conventional method of adding new Volunteers Enrolment is only paper based and manual operations only to be done. If the Volunteers details are more, then searching the volunteers from the list is done manually, which is time taking and also not able to identify easily too. Search process of the volunteers usually is manual in the existing systems. In the existing system, the reports cannot be done, as all the process are paper works only.

2.2 Limitation Existing system or Research gap

All the colleges or education institutions which are part of NSS had been doing things offline. When an event is organized by the college NSS team, the information usually reaches the candidates of NSS through a meeting. The news spreads slower sometimes, if not all candidates has attended the meeting. This is one of the drawback of offline method. For a student to join NSS, he has to fill an application form with required information to join. The organization has to manage all the documents carefully and store them in a safe place. It becomes very difficult as more number of students apply.

Accessing the information of the applicants becomes a difficult task. With offline process, retrieving information of a registered student and editing the information becomes difficult. Generally, colleges and other education institutions follow the same. To contact the NSS team or get any information about anything, the respective person has to visit the NSS Team of their respective colleges. This makes the information exchange difficult and slow. As the information about NSS events or activities reaches the students slow, they will miss many events if the information doesn't reach the interested students within time. As the same continues the number of participants becomes less.

Conventional systems leave a huge gap in interactions among volunteers and the system. Conventional systems require the volunteer be physically present at the same place at the same time. More time taking process. More hectic process too, if the number of volunteers are more.

2.3 Mini Project Contribution

The development of a National Service Scheme (NSS) website for a college can provide numerous benefits and contributions to the college, including:

1. Increased Visibility: A website for NSS college unit can increase the organization's visibility within the college and the community. The website can be used to promote the activities and achievements of the organization, which can help in attracting more members, volunteers, and sponsors.

2. Better Communication: The website can serve as a platform for better communication among the members, volunteers, and advisors of the NSS college unit. The website can provide updated information about the events, activities, and other important news related to the organization. It can also facilitate online communication through email, forums, and social media.

3. Efficient Data Management: The NSS college website can use MYSQL to store and manage data related to the organization's activities, members, and volunteers. The database can be designed with tables, fields, and relationships to ensure efficient storage and retrieval

of data. This can help in streamlining the administration of the organization and improving decision-making processes.

4. Online Registration: The website can include online registration forms for new members and volunteers, which can simplify the application process and reduce paperwork. The website can also include online payment options for membership fees or donations, which can increase convenience for members and supporters.

The development of a website for the National Service Scheme (NSS) college unit can provide several contributions towards the NSS, including:

1. Increased Awareness: The website can serve as a platform to raise awareness about the NSS and its activities. It can provide information about the organization's mission, objectives, and goals, as well as the various community service projects and activities undertaken by the NSS. This can help in attracting more volunteers and supporters towards the NSS cause.

2. Improved Outreach: The website can improve the outreach of the NSS by reaching out to a wider audience. The website can be accessed from anywhere and can be shared across various social media platforms, making it easier for people to learn about the NSS and get involved in its activities.

3. Enhanced Communication: The website can serve as a channel for improved communication between the NSS college unit and the NSS headquarters. The website can be used to share information about the college unit's activities, achievements, and challenges with the NSS headquarters, which can help in improving coordination and support from the NSS headquarters.

4. Efficient Data Management: The website can use MYSQL to store and manage data related to the NSS activities, volunteers, and members. This can help in streamlining the administration of the NSS and improving decision-making processes. The website can also provide real-time data analytics, which can help in identifying trends and opportunities for improvement.

PROPOSED SYSTEM

3.1 Introduction

A user-friendly system, with great User Interface and easy to use controls. The proposed system contains an application where the users can use to gain information, communicate and keep records of all the activities done in the past. Post contents, announcements of events and more. The application uses PHP, PHP is a backend Python framework. The front end of the application is developed using HTML and css. The Web Application of NSS will have a login, where a registered user can login and access the available information. The users are authenticated which makes it secure.

New Users can register using the registration form where they have to fill certain information which are required by the NSS Officers, Only registered users can login into the application. An offline application is converted in to Registration in the app. This way we can keep track of all the users or the applicants. We can retrieve information of users which will be stored in the database. The application uses MYSQL as database, we can keep backup of the database to safe keep it from system crashes.

In the proposed system, we intend to develop a web-based application providing the necessary services and online enrolment of the Volunteers Adding new volunteers made automation reduces the paper works and makes attractive for new volunteers to join easily, as the process became very small. The enrolled volunteers can be easily searching with the basic features of name, class etc. Using proposed system performance of the NCC volunteers can be monitored and thus improvement can be done accordingly.

In this system each schedule can be tracked from the start till the end of the Project cycle. User friendliness is provided in the application with various controls. The system makes the overall project management much easier and flexible. Readily uploads the latest updates and allows users to interact.

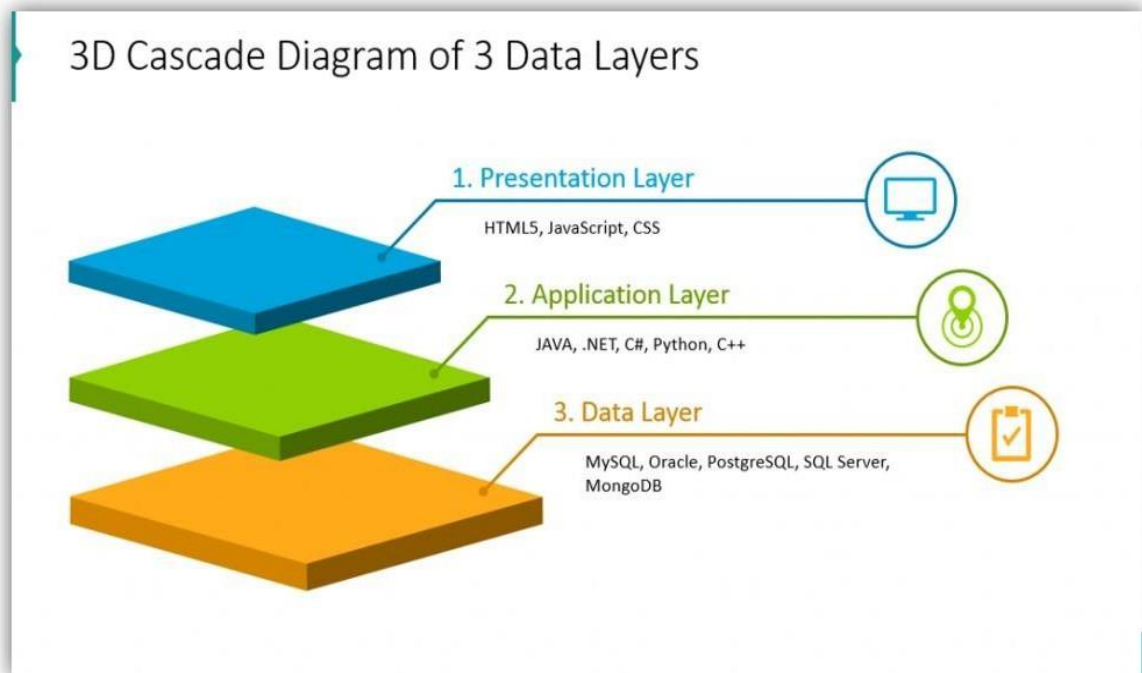
3.2 Architecture/Framework

The architecture for the National Service Scheme (NSS) college unit website using HTML, CSS, MYSQL, and XAMPP server can be divided into three main components: the presentation layer, the application layer, and the data layer.

Presentation Layer: The presentation layer is responsible for presenting the website's content to the user in an interactive and user-friendly manner. It includes HTML and CSS, which are used to create the website's layout, design, and user interface. The presentation layer also includes JavaScript, which is used for client-side scripting to add interactivity to the website.

Application Layer: The application layer is responsible for implementing the website's business logic and functionality. It includes PHP, which is used for server-side scripting to handle user requests and generate dynamic content. The application layer also includes the XAMPP server, which provides the environment for running the PHP scripts and managing the web server.

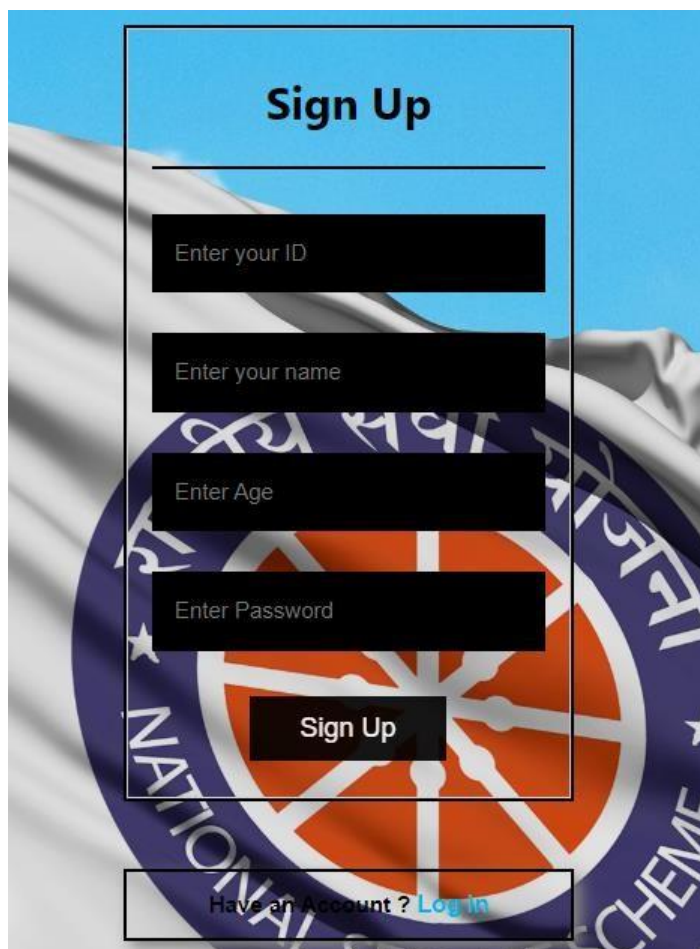
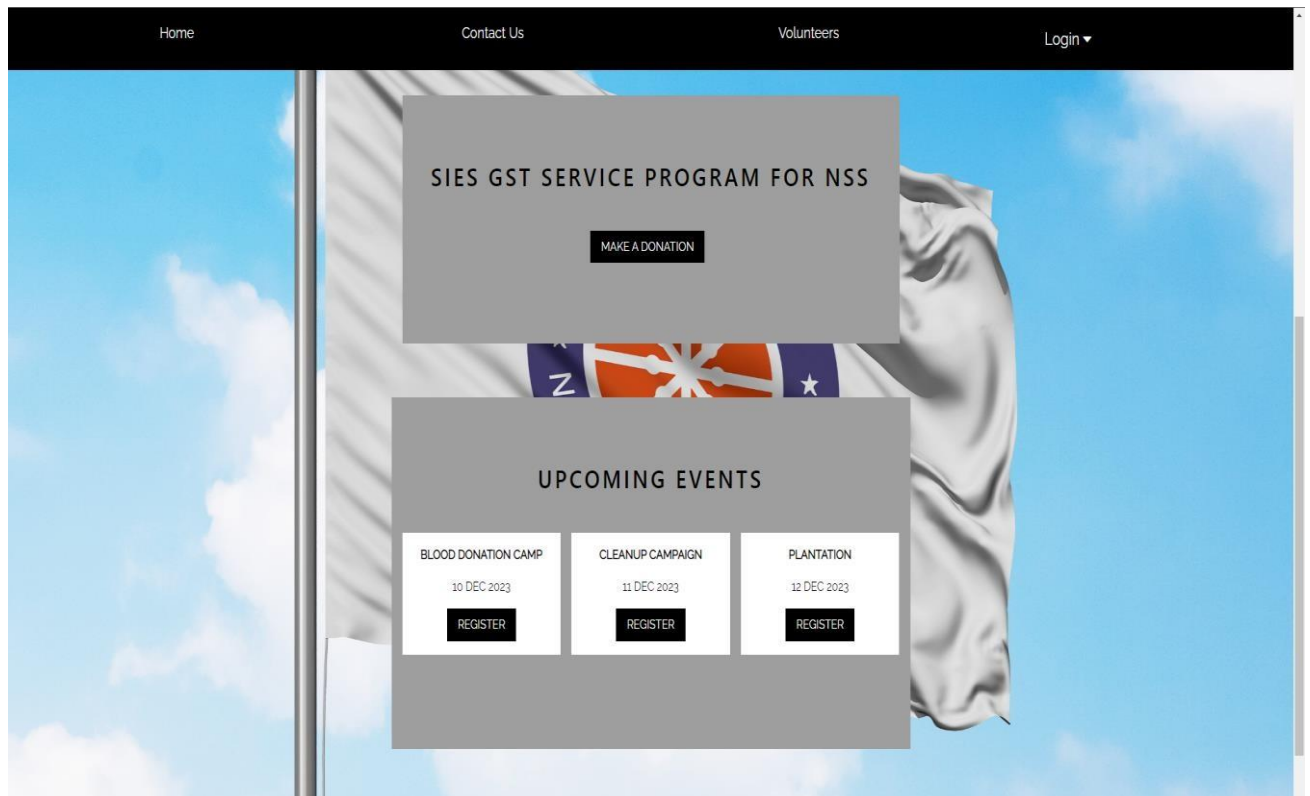
Data Layer: The data layer is responsible for storing and managing the website's data. It includes MYSQL, which is used for creating and managing the website's database. The data layer also includes PHP scripts for handling database operations such as querying, updating, and deleting data.



3.3 Algorithm and Process Design

The purpose of the system perspective is to provide a best environment for the application to be active and running. It is helpful to students, staff and other users in participating in NSS Activities. The users can access the Event Published, from the event section and check the information like event type, event date, photos of the event, city and description of the event. The users can also contact the co-ordinator by checking the details of event coordinator. The admin can add new user, event, staff and contact. The user can use the contact section to ask queries to the NSS Officer using gmail.

The following picture shows the interface portal and admin and login page.





3.5 Details of Hardware and Software

IDE Used: -

Visual Studio Code is a source-code editor that can be used with a variety of programming languages, including Java, JavaScript, Go, Node.js, Python, C++, C, Rust . It is based on the Electron framework, which is used to develop Node.js web applications that run on the Blink layout engine. Visual Studio Code employs the same editor component (codenamed "Monaco") used in Azure DevOps (formerly called Visual Studio Online and Visual Studio Team Services).

Out of the box, Visual Studio Code includes basic support for most common programming languages. This basic support includes syntax highlighting, bracket matching, code folding,

and configurable snippets. Visual Studio Code also ships with IntelliSense for JavaScript, TypeScript, JSON, CSS, and HTML, as well as debugging support for Node.js. Support for additional languages can be provided by freely available extensions on the VS Code Marketplace.

Instead of a project system, it allows users to open one or more directories, which can then be saved in workspaces for future reuse. This allows it to operate as a language-agnostic code editor for any language. It supports many programming languages and a set of features that differs per language. Unwanted files and folders can be excluded from the project tree via the settings. Many Visual Studio Code features are not exposed through menus or the user interface but can be accessed via the command palette.

Control Panel:-

XAMPP Control Panel is a management tool that offers to supervise the actions of individual components of XAMPP. It controls each component of the text server. The user can initiate or halt discrete modules by operating upon the buttons below the "Actions" column. Control panels efficiently manage all the components of the XAMPP package. One can use the Control Panel to determine whether Apache, MySQL, Mercury, etc. are currently in function or not. The development environment can only be used when Apache and MySQL are in running state. The XAMPP Control Panel icon exists in the system tray. It is an orange-colored icon that is visible when Panel is in running state.

Database:-

MySQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL).

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold the vast amounts of information in a corporate network. A relational database is a digital store collecting data and organizing it according to the relational model. In this model, tables consist of rows and columns, and relationships between data elements all follow a strict logical structure. An RDBMS is simply the set of software tools used to actually implement, manage, and query such a database.

MySQL is integral to many of the most popular software stacks for building and

maintaining everything from customer-facing web applications to powerful, data-driven B2B services. Its open-source nature, stability, and rich feature set, paired with ongoing development and support from Oracle, have meant that internet-critical organizations such as Facebook, Flickr, Twitter, Wikipedia, and YouTube all employ MySQL backends.

Languages:-

Web Page: A web page is a document which is commonly written in HTML and translated by a web browser. A web page can be identified by entering an URL. A Web page can be of the static or dynamic type. With the help of HTML only, we can create static web pages.

Hence, HTML is a markup language which is used for creating attractive web pages with the help of styling, and which looks in a nice format on a web browser. An HTML document is made of many HTML tags and each HTML tag contains different content.

CSS stands for Cascading Style Sheets. It is a style sheet language which is used to describe the look and formatting of a document written in markup language. It provides an additional feature to HTML. It is generally used with HTML to change the style of web pages and user interfaces. It can also be used with any kind of XML documents including plain XML, SVG and XUL.

CSS is used along with HTML and JavaScript in most websites to create user interfaces for web applications and user interfaces for many mobile applications.

PHP stands for Hypertext Preprocessor. PHP is an interpreted language, i.e., there is no need for compilation. PHP is faster than other scripting languages, for example, ASP and JSP.

PHP is a server-side scripting language, which is used to manage the dynamic content of the website. PHP can be embedded into HTML. PHP is an object-oriented language. PHP is an open-source scripting language. PHP is simple and easy to learn language.

3.5 Experiment and Results

Results: -

1. Keeps records of past activities performed within the last years.
2. Displaying all the necessary information about the volunteers such as their name,

department, and their profile.

3. We generate reports so no need for paper works to store the data.
4. The admin can add events in the portal, So Students can join their interested events.

Output of Project:-

Your Profile

BLOOD DONATION DRIVE REGISTREES:

ID	Name	Age
1	prem	20

ID	Name	Age
3	satyam	20

ID	Name	Age
11	D	30

Your Profile

CLEANUP DRIVE REGISTREES:

ID	Name	Age
1	prem	20

ID	Name	Age
3	satyam	20

Your Profile

PLANTATION REGISTREES :

ID	Name	Age
1	prem	20
ID	Name	Age
4	teju	20
ID	Name	Age
12	tanu	22

Your Profile

INDIVIDUAL DONATORS:

ID	Name	Latest Donation	Total Donations
1	prem	10	260
ID	Name	Latest Donation	Total Donations
4	teju	10	70

Your Profile

ALL PROFILES:

ID	Name	Age	Latest Donation	Total Donations	Password
1	prem	20	10	260	prem123
ID	Name	Age	Latest Donation	Total Donations	Password
2	premraj	20	0	0	prem123
ID	Name	Age	Latest Donation	Total Donations	Password
3	satyam	20	0	0	satyam123

Your Profile

PAST ACTIVITIES:

Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
1	21/6/2022	International Yoga Day	46	26	72	4	120
Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
2	23/7/2022	Tree Planatation at Sardar Vallabh bhai patel Garden	30	22	52	4	67
Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
3	10/8/2022	Independece Day Preparation Day-1	40	26	66	4	66
Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
4	11/8/2022	Independece Day Preparation Day-2	42	23	65	4	65

Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
6	15/8/2022	Independence Day Social Awareness Skit-2(Food Wastage)	15	9	24	4	250
Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
7	15/8/2022	Independence Day Social Awareness Skit-3(Army officer's post-traumatic stress disorder(PTSD))	15	9	24	4	250
Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
8	15/9/2022	Blood Donation Publicity Day-1	38	25	63	7	250
Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
9	17/9/2022	Blood Donation at Panvel Railway Station	46	26	72	6	500
Sr.No.	Date	Name of Activity	Male Volunteers	Female Volunteers	Total Volunteers	No of Work Hours	No. of Beneficiaries
10	19/9/2022	Blood Donation Publicity Day-2	35	25	60	7	115

3.6 Conclusion and Future Scope

Conclusion:-

College students participate in NSS to service the society and help the needy, activities like educating the poor, cleaning the surroundings, plantation, yoga, blood donation camp and other events will be conducted by the NSS team. Generally the information will be shared to the students by conducting a meeting, it will not reach every student as some might not be able to attend the meeting. If the information is available on the Internet to all the students they will get an update on the current situation and ongoing events, with the help of this project students can login to a web application and check all the available information like events, organizers date of the event and the location of the event.

Through the Internet the information will be shared faster compared to offline meetings. The idea is to create a web application where students can login and check the available information about activities, contact the organizers or contribute funds to the society.

Future Scope:-

Integrating a payment gateway to the NSS college unit website can be a great way to accept online donations from supporters across the world. A payment gateway is a third-party service that authorizes payments for online businesses, and it can accept payments from various sources such as credit cards, debit cards, net banking, and e-wallets. By integrating a payment gateway to the website, the NSS college unit can accept donations from supporters worldwide, without any geographical barriers.

Here are some advantages of integrating a payment gateway on the NSS college unit website:

Secure Transactions: Payment gateways are designed to provide secure and encrypted transactions, which ensure the safety of sensitive data such as credit card details. This helps in building trust among donors and ensures that their donations are safe and secure.

Increased Donations: Integrating a payment gateway can make it easier for supporters to donate to the NSS college unit. The convenience of online donations can encourage more people to donate, resulting in increased donations.

REFERENCES

- <https://www.grin.com/document/1280789>
- <https://jpinfotech.org/nss-management-system/>
- <https://nssdu.ac.in/>
- www.stackoverflow.com
- <https://ieeexplore.ieee.org/abstract/document/5661595>