Introduction

In the event of natural disasters such as floods, earthquakes, hurricanes, or wildfires, it is crucial to have a rapid and efficient response system to ensure the safety of those affected. In the aftermath of natural disasters, there is often a shortage of trained NCC/NSS cadets who can provide immediate assistance to those affected. During natural disasters, it can be difficult to locate and reach people who need assistance, especially in remote or inaccessible areas. In many cases, natural disasters can cause significant damage to critical infrastructure, making it difficult to coordinate response efforts. To overcome these problems, this system will provide a reliable and centralized system for mobilizing ex-servicemen and trained NCC/NSS cadets to disaster sites, who are nearby the disaster site and reducing the reliance on centralized infrastructure.

Problem Statement

During the time of disaster, it becomes very difficult for the NDRF to connect with trained NCC/NSS volunteers because of various reasons that they are not involved with community or change of contact numbers etc. There is a requirement to create a system/software where these all volunteers can be enrolled NDRF is carrying out various awareness programs since its inception which involves the NCC/NSS volunteers. After a certain period, the contact with these volunteers is lost thus making the efforts futile.

Issues and Solution

Issues :-

Accessibility: When a natural disaster strikes, it may be difficult for NDRF personnel to get to the impacted regions because of destroyed infrastructure, flooded roads, or landslides.

Communication: Networks may be down or overburdened during a crisis, making it challenging for NDRF teams to get in touch with one another or with other organisations helping with the response.

Resource shortages: NDRF teams may have resource shortages during disaster response, such as a lack of staff, supplies, or equipment.

Solutions :-

Accessibility: To address the difficulty of accessibility, NDRF can pre-position its volunteers and equipped them in high-risk regions after a disaster strikes, so they are ready to respond swiftly.

Communication: To ensure effective communication during a disaster, local volunteers can set up a reliable communication network with numerous channels and backup systems.

Resource shortages: The volunteers can work with locals who involved in the disaster site to resolve resource limitations. authorities in the area, additional emergency personnel, and aid organisations.

Tools and Methods:

We are using stacks like

Flutter for Frontend

NodeJS for Backend

Firebase for Database and real time message sending

We can create and deploy scalable, portable, and simple to manage software applications using containerization solutions like Docker.

The aim of our project is to create a smartphone application that alerts volunteers so they can quickly gather there and help them too quickly.

Functional Description

1. On a click of a Button, all connects can be activated.
2. They can also be informed about various programs and periodical material can also be shared with all of them.
3. These activities will keep them connected, interested, and involved.
4. These resources can be used in any eventuality. These will be registered District wise, thus making them available in every district

Future scope

By utilizing the latest technology available, this system will provide fastest service possible to the victims affected by natural disaster.

Conclusion

We have developed a software which provide ex-servicemen and Trained NCC/NSS cadets to natural disaster sites by GPS and SMS alert message which has great potential to improve the effectiveness and efficiency of disaster response and management. By utilizing GPS technology and leveraging the skills and experience of ex-servicemen trained NCC/NSS cadets, this software can provide a rapid and reliable response to natural disasters, potentially saving lives and reducing the impact of disasters on affected communities.