

## Department of Information Technology NBA Accredited

A.P. Shah Institute of Technology

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#### A Project Report on

#### Janasevakam: Web Framework For NGO's Outreach

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Bachelor of Engineering(Sem-8)

in

#### **INFORMATION TECHNOLOGY**

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# 1.Project Conception and Initiation

#### 1.1 Abstract

- In India, Non-Governmental Organizations are seen to have a significant role in community development practice. NGO's are established with a vision by a group of like-minded people committed for community development, uplift of poor people.
- Importance of NGO's in various fields and the excellent work is done by NGO's in specific fields is
  no doubt a good task that has helped to meet the changing needs of the today's world full of crisis.
  But, now a days, many NGO's in India is facing various problems and challenges which are creating
  barriers in the implementation of various developmental programs.
- In this context efforts have been made through this study to focus on the major problems or challenges faced by Indian NGO's. The result of the study shows that NGO's are facing financial problems, HR related challenges, administrative and social problems in the implementation of various social developmental programs.

#### 1.2 Objectives

- To design and implement website cum installable progressive web app where society helping organization can collaborate with efficiency.
- To design a common platform where all the NGO's can collaborate with each other and can share their experience, knowledge by contacting each other.
- To build a recommendation system using machine learning which will automatically suggest new NGO's and new social activities based on user past social activities.

#### 1.3 Literature Review

- In literature [1] The author has discussed on the performance of development non-governmental organizations (NGO's) has increased. The author has described an international structured literature review, and explored the salient characteristics of NGO performance research. We have demonstrated that understanding NGO performance is a multifaceted arena in which many issues are explored by academics, NGO practitioners, donors, governments and policymakers. Notwithstanding the modest number of studies (31) that fully met the inclusion criteria, emergent evidence supports three key conclusions and recommendations with research, practice and policy implications.
- In literature [2] The author has discussed The Role of NGOs in Promoting Empowerment for Sustainable Community Development. NGOs are professionally-staffed organizations aiming at contributing to the reduction of human suffering and to the development of poor countries. They do thisin various ways, e.g. by funding projects, engaging in service provision and capacity building, contributing to awareness, and promoting the self-organization of various groups. These services help the people to achieve their ability, skill and knowledge, and take control over their own lives and finally become empowered. This paper demonstrated the importance of NGOs in achieving sustainable community development through micro-finance, capacity building and self-reliance.

#### 1.4 Problem Definition

- The problem that we have faced in now days that there are many NGO's at small scale doing great work but they are facing problems like lack of funds, lack of public awareness about their NGO's, people who are actually interested in donation they could not reach this small NGOs.
- Also there is lack of communication gap between the small NGO's and the NGO's who are doing great job from last couple of years.
- So we are Design and implementing website cum installable progressive web app wheresociety helping organization can collaborate with efficiency. And also the large NGO's get the details about NGO's who are at starting phase.

## 1.5 Scope

- Can be used in the betterment of society.
- Can be useful for small NGOs who need help.
- Can be used by everyone across the country

#### 1.6 Technology stack

- React In our project we have used React to implement UI. It has also been used to develop SPA.
- Bootstrap In our project it gave us the ability to easily create responsive designs.
- TensorFlow It is used in our project to implement social work recommendation system. \*\* Update \*\*
- MongoDB In our project it has been used to store and retrieve data quickly and easily. \*\*Update\*\*

## 1.7 Benefits for environment & Society

 Common platform where all the NGO's can collaborate with each other and can share their experience.

# 2. Project Design

#### 2.1 Proposed System

- We are implementing front-end using ReactJS and back-end using MongoDB.
- For the front end we are implementing a plethora of features like searching, tagsetc.
- We are recommending posts using the TensorFlow library.
- We are using CSS frameworks like bootstrap to make the website responsive.
- We are making our website a progressive web app which is also known as PWA in short.
- This makes our website work like a native app and can be installed on any platform like IOS, android, windows, Linux etc.
- Using ReactJS we will be making our user interface more interactive and user friendly.

### 2.1 Proposed System

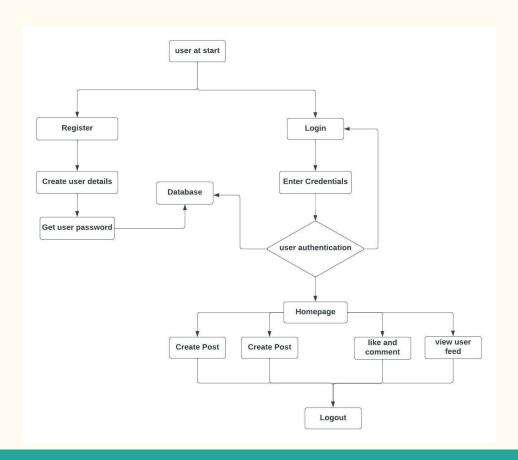
- Volunteer
  - To be able to see social work.
  - To interact with posts.
- NGO
  - To create posts on social work
  - To interact with posts.
- Feed generation process
  - Feed generation will be done with ML based on past activity.

## 2.1 Proposed System

- Authentication
  - To ensure the our service is personalized to each user.
- Post Recommendation
  - Post recommendation will work on previous interactions
  - To integrate ml algorithm for this purpose.

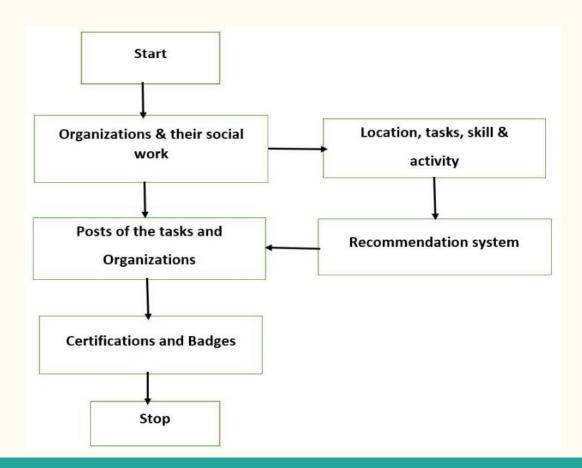
#### 2.2 Design(Flow Of Modules)

1. User flow

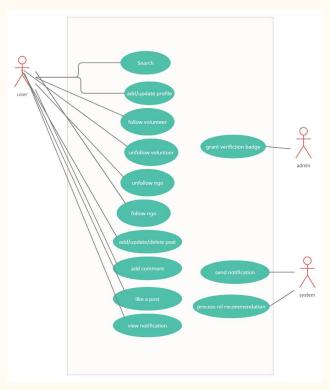


#### 2.2 Design(Flow Of Modules)

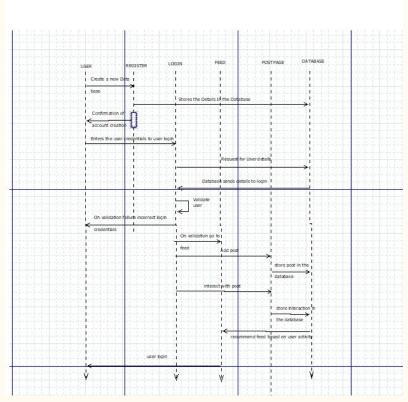
2. website flow



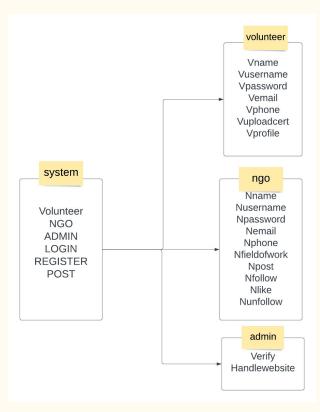
## 2.3 Description Of Use Case



2.4 Activity diagram



## 2.5 Class Diagram



# 3. Implementation

# 4. Testing

# 5. Result

# 6. Conclusion and Future Scope

#### References

- Inamdar, N. R. (1987). Role of Voluntarism in Development, The Indian Journal of Public Administration, 333, Pp. 420-432.
- Lawani, B.T. (1999). NGO's in Development (case study of Solapur-District), Rawat Publications, Jaipur.
- Chowdhry, D.P. (1987). Critical appraisal of Voluntary Effect in Social Welfare and Development since Independence, The Indian Journal of Public Administration, 333, Pp. 492-500.

# Paper Publication

# Thank You