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**A CROSS-PLATFORM APPLICATION TO ENHANCE NGO AND SOCIETY
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ABSTRACT

In today's modern world connectivity is an important aspect in all fields. When it comes to Non-Governmental Organization (NGO), there is lack of connectivity in between them as well as the common man who is willing to do some good. Fortunately, the technology of handheld devices has solved many problems in past years.

This system provides a common platform for NGO and Society to make use of connectivity for social services, information management and also promote major social events of the government. This platform majorly serves a common base for collaboration among organizations and every other common man. This system will also ensure safe and trusted use of donations by organizations and maintaining transparency in its operations.

KEYWORDS: .

INTRODUCTION

Today our society have number of NGOs that are striving to improvise the society and help the needy once in every possible way. But, the activities or events carried out by NGOs have very less exposure to the public as they tend to reach out to the people at a physical level. If these NGOs are provided with an online platform to create awareness for the events being held nearby or anywhere, it will enormously affect the participation of people in a positive way helping to create a visible impact on the society.

One of its basic objectives is to bridge the communication gap between the NGOs and Society. Moreover, collaboration of multiple NGOs to support collective events and also sharing resources among them is yet another important feature of this online platform. Also aspects such as transparency about NGOs activities will be maintained and available for users at any point of time, thus encouraging more and more people to be a helping hand and be a part of good positive change in the society.

MATERIALS AND METHODS**System Introduction**

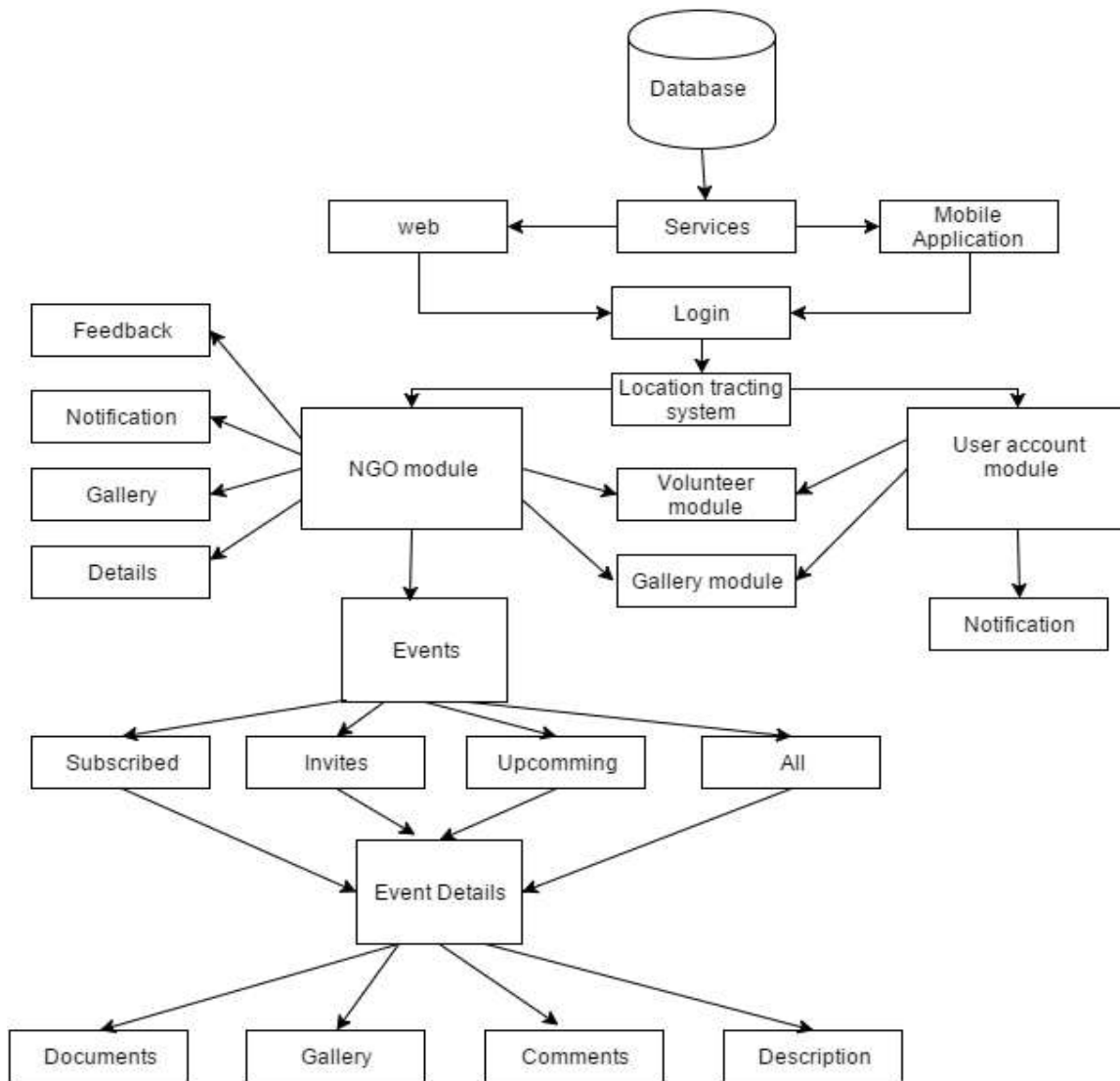
In the world of Internet where everything is going online, few areas are still left behind. One of them are NGOs. NGOs have very less online scope due to which they have to manage activities like creating awareness, promoting events and many more at physical level. This puts a lot of limitations on them like being restricted to specific area, lower response to the events and even though there are many people interested for social events NGOs aren't able to reach them.

To overcome all these circumstances and we propose an online platform which will focus on collaboration between them. As today Internet is in everyone reach, it will help reach out to people. Thus, will increase the online scope of the NGOs.

Using this platform NGOs will be able to notify the users about each and every events as well as activities on real time basis. The system will also facilitate a communication platform for NGOs among themselves too. So, the NGOs can collaborate their resources together to make an event large enough to create a visible impact on the society with ease.

In this architecture, it shows that the user will login into the system. Then the system will track its current location and will show activities going around based on its location. Also the user can use different modules like events, NGO, gallery etc as per its need. A user can act as NGO admin also to maintain NGO profile and work.

Figure:



System Architecture

Implementation

The whole functionality of this application is discovering the exact location of the passenger when he starts with the application. We use GPS and Google map to find the users precise location. Using the extracted location information, application will look for any services registered. Also application will track whether NGO is nearby who are registered with YugenSpark. In this application, location shown by GPS is going to be optimized so that user will know the precise position.

The Haversine is an equation important in navigation, giving great-circle distances between two points on a sphere from their longitudes and latitudes. It is a special case of a more general formula in spherical trigonometry, the

law of Haversine, relating the sides and angles of spherical "triangles".
It calculated by Haversine formula:

$$\Delta\lambda = \text{longitude2} - \text{longitude1}$$

$$\Delta\phi = \text{latitude2} - \text{latitude1}$$

$$a = \sin^2(\Delta\phi/2) + \cos(\phi_1) \times \cos(\phi_2) \times \sin^2(\Delta\lambda/2)$$

$$c = 2. \text{atan2}(\sqrt{a}, \sqrt{(1-a)})$$

$$d = R \times c$$

Where R is radius of earth (6371 KM)

Algorithm:

```
select @dLat1InRad = @Lat1 * (select PI() / 180.0);
select @dLong1InRad = @Long1 * (select PI() / 180.0);
select @dLat2InRad = @Lat2 * (select PI() / 180.0);
select @dLong2InRad = @Long2 * (select PI() / 180.0);
select @dLongitude = @dLong2InRad - @dLong1InRad;
select @dLatitude = @dLat2InRad - @dLat1InRad;
-- Intermediate result a.
select @a = Power(Sin(@dLatitude / 2.0), 2.0) +
Cos(@dLat1InRad) * Cos(@dLat2InRad) *
Power(Sin(@dLongitude / 2.0), 2.0);
-- Intermediate result c (great circle distance in Radians).
select @c = 2.0 * Asin(Sqrt(@a));
select @kEarthRadiusKms = 6376.5;
select @dDistance = @kEarthRadiusKms * @c;
return @dDistance;
```

RESULTS AND DISCUSSION

- Event Module will maintain event information and also online registration.
- Volunteer Module will give user access to one touch registrations.
- User Module will show activities of subscribed organizations and events.
- NGO Module will handle Organization activities and maintaining their profile.

CONCLUSION

The reach of Internet these days has given us opportunity to use it for social work. Thus the use of this online application will bridge down the gap between the NGOs and the society leading to more participation to various social causes.

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