NGO Information Management Suite

PROJECT PLAN

TEAM 16

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Version 1

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1. Overview

1.1. Origin of Problem

One of the biggest operational challenges faced by organizations today is information management. No matter what your organization does, you can't operate without collecting, storing, sharing, and archiving information. While it is an obvious choice for corporate organizations to employ high-tech equipment and software for their information management, due to lack of an educated and uniform workforce in most of the NGOs of our country, easily accessible and most handy (primitive) ways data collection and storage are preferred. The problem with pen/ pencil - paper type of data recording is its archiving, sharing and swift analysis. Each NGO tends to maintain a social map of their various centers and their progress in terms of the on-going projects, which they make on a paper. Thus there is a strong need of reliable, long lasting, software based, centralized data recording and management software for any NGO along with a functionality which would generate similar social maps for them, according to its special needs. Most of the NGOs don't even have a website to assert their identity in today's virtual world, so there is a need for an easily boot able and customizable website which would require the least effort to start-up as well as maintain.

1.2. Technical Relevance

If certain assumptions are made (realistically) we can justify the technological relevance of the proposed 3 part system. The fact of the telecom boom in India and that each day more and more feature phones, which have already reached almost every corner of India, are being replaced by more advanced and GPS enabled phones, enables us to think of a design which would be easily accessible through them**.** Thus an android application seemed to be an obvious choice for cost-effectiveness and user friendliness with the advent of the AAKASH TABLET and android phones. A computer which would work as a centralized server becomes essential for a non-profit as the amount of data they have to deal with is huge and it only makes sense to have at least one PC (which most of them do have.) Another thing which is important here is that most of the NGOs do not work independently, there is a man-made network that they are a part of which consists of other NGOs (with similar or related interests); thus in order to keep up with each other's activities and help activate exchange and access to each other's information they should have a database with a friendly GUI front end, which would update itself at real time.

1.3. National Status

A lot of productive work is being done by the NGOs but not archived in a manner that can be later used or referred to. Furthermore even the NGOs themselves face difficulty in self-evaluating themselves, the volunteers and the community they work with. Social Maps chalked out are inaccurate and don't serve any major purpose beyond letting the volunteer get acquainted with his/her area; people statistics, collection of data and mapping it at real time (rather than periodically) for easy view-ability has not been done so far. From what we have discovered is that most of the NGOs, especially those which work for the denotified and notified tribes of the remote parts of the country (which we are going to serve as our prospective client), record their work and information on paper and pass it on from person to person; the social maps are drawn roughly on paper with an estimation and volunteers feed in the information

centrally every month after going personally to the centre. This primitive way of working has been accepted as a norm and since none of the NGOs expect or ask for better (because of a lot of constraints like money or absence of required skills) hardly any work has been done on it by the government or any other software developers. Most of the existent software helps them either manage their finances and donations or the data that a server receives at the end of each month, there is no real time updating and mapping onto some real maps; and most importantly all these software are very generic and hence each NGO has to interpret inbuilt generic fields as one of their own. There is thus a need of a more personalized and specified structure which they themselves could create onto a platform that we will provide.

2. Goals and Scope

2.1 Project Goals

Goal: We aim to develop a web based information management system that takes care of the basic needs of cataloguing their work, evaluating the ngo's and its employee(and community) volunteer's performance and aid in creating social maps of the population and the area in which the volunteer is working. The IMS will be equipped with several relevant statistical analysis capabilities. The IMS is going to consist of 3 parts:

2.2 Included

1. Client application (which will be with the volunteers) for easy data collection and updating.

2. Server application (at main centre of the NGO) for database management and analysis of the collected data.

3. Generic public website (which will be test-implemented for the client NGO) to let public view their activities and their progress via social maps; the generic format of the website gives options to customize the settings and information displayed on the website according to an organization's specific needs. The following graphic will help to understand the target groups whose information will be taken care of.

2.3 Excluded

1. **Accounts facility**. The client at present uses dedicated software for managing its accounts. We have decided not to include this component owing to the kind of complexity it adds in addition to client scepticism of immediately porting to our product as well security threats that may arise since the IMS will be hosted on the web.

2.4 Project Scope

Present Scope

- Develop an android based application to facilitate a NGO volunteer to transmit local area information to the NGO office in real time, without sending personally any location details (auto detect by GPS).
- Develop an information management system for a NGO to help it in cataloguing its work in an efficient manner.
- Develop a public website for a NGO which can be customized and managed by an administrator of the NGO.

Future Scope

- The NGO information suite will cater to a NGO working for a particular cause (tribal NGO's for now). With time and the client's feedback we intend to make a general product which can provide an information management system for NGOs working for different causes. We can then integrate and connect various NGO's of the nation for better results and more beneficial social activity.
- Integrating the android application and website to have various regional languages to facilitate rural volunteers and NGO's.
- Connect the current website with payment facilities like PayPal, etc. to directly make payments and applications for ration cards online.
- Connecting the current website to PayPal for money transfer to NGO by donors across the nation.

3. Organization

3.1 Coordinating Team

Names	Roles	Responsibility
Aakash Solanki	Team Leader	• Project management. • Review Documents. • Delegate meetings and facilitate the proceedings. • Organize human resources and assign roles. • Monitor project progress. • Interface Designing • Risk analysis
Anshul Agrawal	Team Member	• Coding • Review documents • Interview • Requirement gathering • Feasibility study
Megha Tak	Team Member	• Documentation • Coding • Feasibility study • Cost estimation
Lalit Agarwal	Team Member	• Coding and database design • Test plan • User manuals
Palashi Vaghela	Team Member	• Interface design • User manuals • Interview

		• Design work
Parth Manvar	Team Member	• Coding and database design • Risk analysis • Testing
Jesal Janani	Team Member	• Documentation • User manual • Coding
Surbhi Agrawal	Team Member	• Documentation • Database design • User manual
Jatan Patel	Team Member	• Interface design • Design work

3.2 Receivers:

Vicharta Samuday Samarthan Manch, India has agreed to run a test-pilot however there is no formal contract pertaining to their actually using the software as of now.

4. Schedule and Budget

4.1 Schedule and Milestones

Sr.no	Tasks	Deliverables	Proposed Deadline
1.	Finalizing a project idea	Project Topic	12 Jan 2012
2.	Need of the project, feasibility analysis, Proposal	Feasibility report Technical proposal	15 Jan 2012
3.	Planning for the work to be done in course of project	Project Plan	18 Jan 2012
4.	Collecting user requirements in detail - Requirement documents		27 Jan 2012
5.	Revising feasibility as per requirements		29 Jan 2012
6.	SRS, Test Plan (for future)	SRS document	12 Feb 2012
7.	User Manual v1	User manual	15 Feb 2012
8.	System and Database design		20 Feb 2012
9.	Coding of individual modules	Unit tested modules	12 March 2012
10.	Integrating the modules	Integration testing report	26 March 2012
11.	Testing and final changes (User manual v2)	System testing report, user manual	4 April 2012
12.	Alpha and Beta Testing		8 April 2012

13.	Final	Final product along with relevant documentation	10 April 2012

4.2 Budget

The project requires: -

- The volunteers to be equipped with an android based mobile or low price Aakash tablets for sending information to the NGO.
- A basic computer in the NGO Centre will also be needed.
- There will be a need of an initial investment to host the public website.
- Some amount for project testing in real field.

Product	Approximate budget
Aakash Tablet (Ubislate)	Rs. 3000/ Tablet
Desktop/Laptop (Windows OS, Net facility-1 year)	Rs. 30,000
Hosting Website	Rs. 200 /month
Testing and Verification	Rs. 3000
TOTAL PROJECT COST	Rs. 3000 x No. of volunteers + Rs. 200 x No. of months the project is deployed + Rs. 33,000

5. Communication and Reporting

Type of Communication	Method / Tool	Frequency/ Schedule	Information	Participants / Responsibilities
Internal Communication:				
Project Meetings	Face to Face	2 days/week Approx	Project status, problems, future plans	Team Leader, Team members
Sharing of project data	Mailing list, VCS, cloud based document services.	When available	All project documentation and reports	Team Leader, Project Team Members
Milestone Meetings	Face to Face	Before milestones	Project status (progress)	Team Leader, Sub-group members
External Communication and Reporting:				
Meetings with TA	SEN LAB	Every Monday	Guidance	Team Leader, Team members
Product Testing with NGO	Face to Face	At the end of the Project	Test Phase.	Project Team.

6. Risk Management

Foreseeable Risks	Management Strategies
Insufficient Technological knowledge	Thorough study of books on technologies that we use and refer to internet for the same
Difficulty in meeting the deadlines	Running timely meetings and checking the updates of peers
Lack of experience in working with the NGO	Knowing the needs of the customer and meeting them often to know if any changes required
Inexperience in team work	The group leader's responsibility to keep the group together.
Underestimation of problem size	Revise the scope of the project very frequently
Firsthand experience of big projects	Keep check points and verifying whether we are up to date

Unrealistic Deadlines for deliverable s	Increase and reallocate resources. Identify parallel tasks and revise schedule in the plan to account for unforeseen events.
Unavailability of technical resources	Prior planning of the needed system tools and applications
NGO changes requirements	Constant touch with The NGO and updating the requirements
Inconsistent documentations and reviews	Regular checking of documents and maintaining the previous versions. Following a documentation standard.
Unexpected holidays and tours by members	Informing peers and make sure that his/her work is to be done by someone else

7. Project Monitoring and Quality Control

Management within the group: The project will be monitored by conducting timely meetings among the team members. Sub - groups will be allotted specific tasks which will arise in the development of the project. At the end of each module or phase, the progress will be evaluated and accordingly there will be proper planning.

Requirement Management: Requirement specification document will contain all the requirements specified in requirement phase. It will be closely monitored in every phase and will be updated according to the need of the project.

Quality Control: To maintain the quality of each deliverable, a review process will be followed foe each deliverable. During the requirement phase, to ensure the quality of SRS, there will be regular questionnaires and interviews. During the coding phase, proper coding conventions will be followed.