

Team 16

NGO Information Management Suite 1.0

Installation Guide & User Manual

Overview

This is the user manual for NIMS, an information management suite for an NGO.

The first part gives a brief description of this document. The second part is the overview of this platform. The third part is the system overview which covers information regarding the application environment and the hardware and software requirements. The fourth part contains comprehensive guidelines for installing and using the platform.

Target Audience

This user manual is intended for our client **Vicharata Samuday Samarthan Manch (VSSM)** for which this platform is being developed which would help them get acquainted with using the platform.

Version Control History

Version	Primary Author(s)	Description of Version	Reviewed By	Date Completed
1.0	Lalit, Anshul, Aakash, Jesal	User Manual for Phase 1	Surbhi, Parth	23 rd Feb, 2012

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1. Introduction

1.1 Purpose

The purpose of this document is to provide the administrators, coordinator and other employees of the NGO **Vicharata Samuday Samarthan Manch (VSSM)** with a comprehensive guide to use the NGO information management suite in an organised manner.

Its main purpose is to –

- Provide the administrator of the NGO with a guideline on using the NIMS for visualising and analysing the collected data in an efficient way.
- Provide the coordinator of the NGO with a guideline on using the NIMS to collect and update information in a planned manner.

1.2 Document Overview

This document is organized into the following sections:

- Introduction: Provides information related to this document.
- Product Description- This section will give a brief description of the various functionalities of the platform.
- System Specifications- Provides a detailed overview of the system specification and the operating environment.
- Installing and using the platform- This section will give the coordinators and the administrators a step by step guideline on installing and using this platform.

1.3 Scope

The user manual contains all the essential information which would help the NGO administrator, coordinators and other employees to make full use of the information management system. This manual includes a description of the system functions and capabilities, contingencies and alternate modes of operation, and step-by-step procedures for system access and use.

1.4 References

- System Requirement Specifications Document
- High Level Design Document
- Low Level Design Document

1.5 Methodology, Tools, Techniques

- Microsoft Word
- Microsoft Paint
- Adobe Photoshop

1.6 Intended Audience

This user manual is intended for our client **Vicharata Samuday Samarthan Manch (VSSM)** for which this platform is being developed and also for other NGO who wish to use our application. It has been written in an easy-to-read language which will make the task of understanding the application easy and the experience enjoyable.

1.7 Primary Business Functions

The NGO VSSM maintains all its data by far, on paper which takes time for it to reach to NGO from coordinators working in remote locations. Also, the form in which the data comes is very complex (as people there don't have much knowledge of providing information). To solve this problem we develop an android application, which takes data in very tabular form, as to be filled on server side database and transfers it in real time to NGO server PC.

1.8 Authorized Use permissions

Usage of this software is limited to its owner and the development team. NIMS is being developed for the NGO **Vicharata Samuday Samarthan Manch (VSSM)**. However, any NGO willing to use this platform may contact the development team for further information.

1.9 Contact Information

For additional information and any queries, the software engineering team can be contacted through any of the team members at *sen16@googlegroups.com*.

2. Product Description

2.1 Product Perspective

NIMS aims to provide a web-based information management system that will help the NGO in cataloguing their work in various fields in an efficient computerized manner rather than the manual, paper-based work style that they are using now. This will help the NGO in proper management of the data collected with the help of server based system and analysing the data for future use.

The product will provide the NGO with social mapping capabilities which helps in visualizing the work done in different fields and area by the NGO and other basic information needed by NGO.

2.2 Product Functions

This product provides following main functions to the client and user of the product:

- An interactive android application for the coordinator of the NGO who visits various families and organizations for collection of basic data.
- Server based information management system which organizes and analyses the data collected by the coordinators in computerized manner.
- This management system will also allow the coordinators of the NGO to better understand the work in progress and tasks at hand in an organized and statistical manner.
- Social maps which will give an explicit idea to the NGO about various tasks carried on and to be done in various areas on a visualized map.

2.3 Main user classes of the product

- Coordinators: They will use the ANDROID app on their respective tabs or phones for collection and assessment of the families of the areas they are assigned to work in.
- NGO Admin: They will have full access to the server side system and the website and will be in control of all the information collected at their side. They will be able to organize the work to the coordinators on the basis of the analysed data and social maps at server side.

3. System Specifications

3.1 System Overview

The information management system (IMS) will take care of the basic needs of cataloguing their work, evaluating the NGO and its employee (and community) and coordinator's performance and aid in creating social maps of the population and the area in which the coordinator is working. The IMS will be equipped with several relevant statistical analysis capabilities.

The IMS is going to consist of 3 parts (both software and hardware wise):

1. Client application (which will be at the coordinator's end) for easy data collection and updation.
2. Server application (at main centre of the NGO) for database management and analysis of the collected data.

3.2 Operating Environment

We will be using the HTML, JavaScript, and CSS for the generic website development and front end coding. We will be using android software development libraries in the IDE named Eclipse based on Java for android application development. This application will be later tested on an android emulator and a real android phone as well. The back end coding of the server side information management system will be done in PHP. The social mapping will be made available using Google maps API/ jquery plugin or openstreetmap api. The main database creation is done on MySQL and querying will be executed through PHP.

3.3 System Features

The interfaces for the server side (controlled by the NGO admin), the client side (used by the coordinators on their Android based mobile devices) and the general public website of the NGO are all different according to their varied needs.

3.3.1 for NGO Coordinators:

- Login: On their Android devices, the coordinators can login and access and update the database.

- View/Update Campaign: Coordinators can view the information about campaigns stored in the database and can also update and input data about new campaigns.
- View/Update Family Profile: Coordinators can view and update family profiles that are stored in the database. The family profiles give information regarding the identity cards held by each of the family members and other general information about the families.
- View/Update Social Maps: Coordinators will update the database with information about the location and general information for social mapping.

3.3.2 for NGO Admin:

- Login: NGO administration personnel can login to access the database server for information pertaining to the functioning of the NGO on the field as well as off it.
- View/Update Coordinator Profile: NGO admin officials can view and update information about the coordinators employed by the NGO. A coordinator profile contains information like the coordinator's assigned locations and their work record. They can also register a new coordinator on the database.
- View Coordinator Location: The NGO admin personnel can view each coordinator's location on the field via the GPS system on the coordinator's Android based mobile device.
- View/Update Campaigns: The NGO admin can view and modify information about the various campaigns run by the NGO.
- View/Update Social Maps: The organization can view and update information related to social maps.

3.4 System Requirements

3.4.1 Hardware Requirements

The project would require a basic android device (due to inbuilt GPS) and a personal computer with Windows operating system. The android device would be required for NGO coordinators and personal computer for the NGO to run a server.

3.4.2 Software Requirements

The project would require an Eclipse IDE to build the Android app later tested on the Android Emulator plugin within Eclipse, PHP for server side programming, MySQL to maintain and manage database at server side, WAMP server to provide a local server for running and testing PHP scripts at sever side and Google Map API or

Jquery plugins like Craftman or openstreetmap api to implement the social mapping feature on the public website of the NGO. The project would require a domain to make the NGO server live. Only then the coordinator would be able to submit his forms into the NGO server database.

3.5 Safety requirements:

- The information that is being removed can be accessed indirectly, user can either maintain his/her own log book or can refer to the log file associated with the system.
- The coordinators and administrators have a unique user-name and passwords to view or edit pages depending on their permissions to access the data, so that there is no false or ambiguous data entry from any random person who is not a part of the organization.
- It is assumed that the computers must be well protected from viruses and other Internet-based threats in order to avoid crashing of server system, as it is the most crucial of all the components. Database should be secured with appropriate passwords and data backup options.

3.6 Security Requirements:

Security will be inbuilt in the system, which will not allow unauthorized access to the system database. Moreover, it'll be insured that a user is tightly bounded to the permissions/ restrictions of his domain and in any case is not able to violate it.

If any user logs out, then the session is said to be closed and he has to login again to use the software i.e. he/she cannot go back with simply using 'Back' button of the web-based interface or application.

In case the application shuts down abruptly, the system logs off the user automatically. In order to regain entry to the system, the user must log back in.

For security reasons, the Web-based application logs off the user after a certain duration of inactivity. In order to regain entry to the system, the user must log back in.

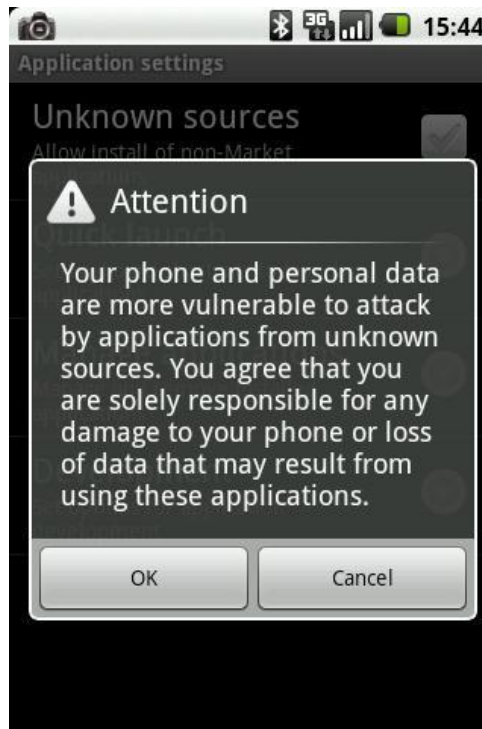
4. Getting Started

4.1 Installation

4.1.1 Coordinators

Installing the application on an Android phone:-

- On the Application Settings screen you'll see an item titled "Unknown sources" which allows you to install non-Market applications. If you're still sure you want to do this, tap the checkbox.



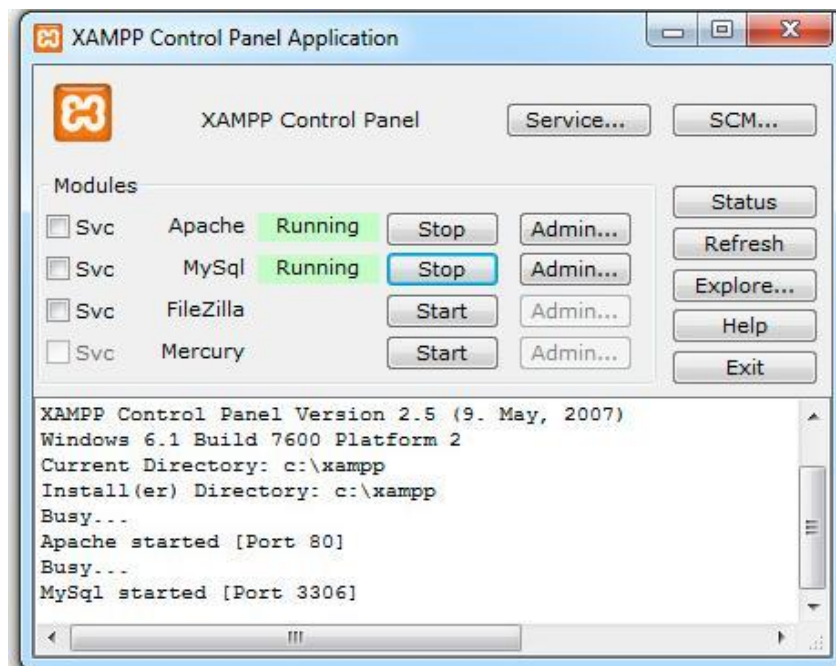
- At this point you're given one more chance to back out. If you want to continue, read the dialog and tap OK.
- You are now able to install non-Market apps, but the app you wanted to install hasn't been installed yet. You'll need to restart the installation process for that app, but it should succeed now.
- In your computer, download the **.apk** file to your Dropbox folder. Let it finish syncing. In your phone, open the Dropbox app, navigate to the folder where you keep the .apk file, click on it. Dropbox will then download the apk file. The usual installation follows.

4.1.1 Administrator

1. Download the package depending on the server OS
2. For **Linux** users- After downloading, type in the following commands:
 - Go to a Linux shell and login as the system administrator root:
su
 - Extract the downloaded archive file to /opt:
tar xvfz xampp-linux-1.7.4.tar.gz -C /opt
 - To start XAMPP simply call this command:
/opt/lampp/lampp start
 - To test type the following command and you should be able to see a start page of XAMPP
/opt/lampp/lampp start
 - If you are having problems go to: <http://www.apachefriends.org/en/xampp-linux.html>

For **Windows** Users:

- Simply download and run the installer. After installation go to Start->programs->XAMPP. Go to XAMPP Control Panel and click on start/stop to enable or disable a service. Here is a screenshot which illustrates the above step.



- After installing XAMPP paste all the website files in htdocs folder.

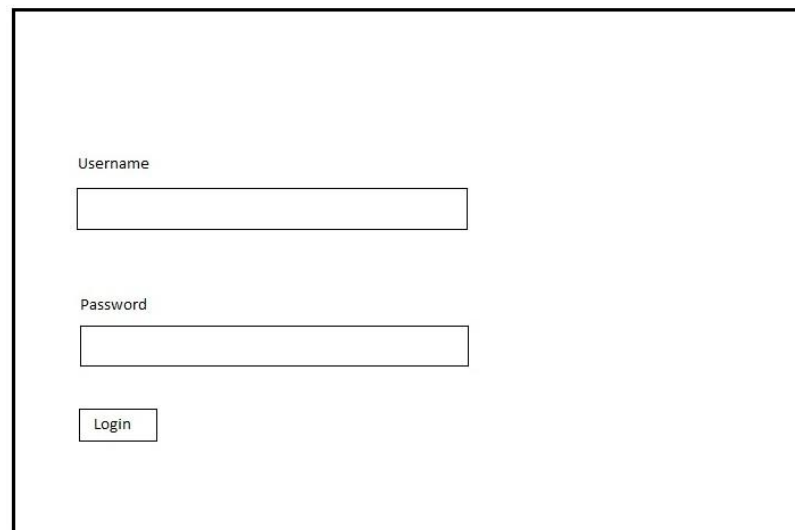
4.2 Using NIMS

4.2.1 Coordinators

The coordinators who will be using the android application will have the follow functionalities:-

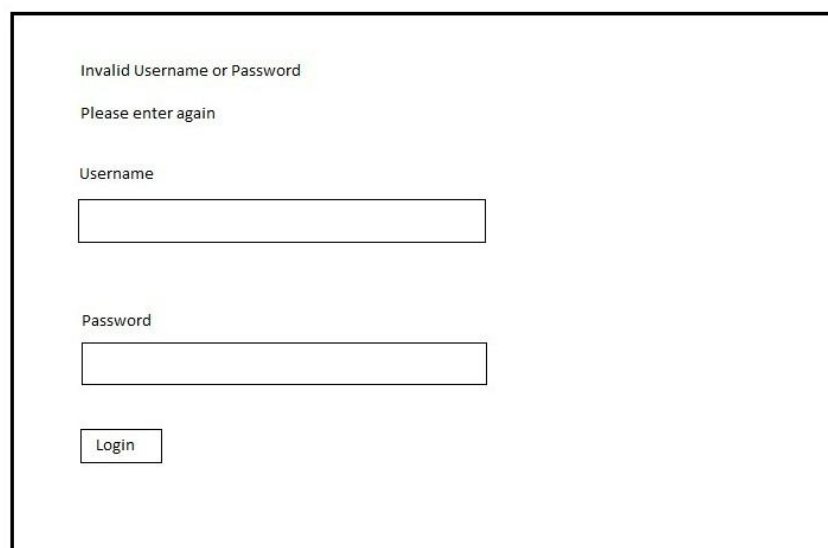
- Login View: - The coordinator can login with his/her username and password. Upon validation, the coordinator will move on to the Campaign view, otherwise h/she will have to re-enter the username and password.

Coordinator Login View



A screenshot of the Coordinator Login View. It features a white background with a black border. At the top, the text "Coordinator Login View" is displayed. Below this, there are two input fields: "Username" and "Password". Each field is represented by a rectangular box with a thin black border. Below the "Password" field, there is a "Login" button, which is a rectangular box with a thin black border and the text "Login" inside.

Invalid Login View



A screenshot of the Invalid Login View. It features a white background with a black border. At the top, the text "Invalid Username or Password" is displayed. Below this, there is a message "Please enter again". Below the message, there are two input fields: "Username" and "Password". Each field is represented by a rectangular box with a thin black border. Below the "Password" field, there is a "Login" button, which is a rectangular box with a thin black border and the text "Login" inside.

- Campaign View: - The coordinator depending on the village/ settlement to be covered can select either to start a new campaign or continue an existing one. In order to start a new campaign, he/she will provide the relevant information for that campaign. Once the campaign is selected, the coordinator can select the project he/she wishes to work on for that campaign.

Campaign View

The screenshot shows the 'Campaign View' interface. At the top right, there is a 'Username' label followed by two buttons: 'Change Password' and 'Logout'. In the center, there is a breadcrumb trail: 'Login' followed by a right-pointing arrow and 'Campaign'. Below this, there are two buttons: 'Start New Campaign' and 'Continue Existing Campaign'.

New Campaign View

The screenshot shows the 'New Campaign View' interface. At the top right, there is a 'Username' label followed by two buttons: 'Change Password' and 'Logout'. In the center, there is a breadcrumb trail: 'Login' followed by a right-pointing arrow, 'Campaign' followed by a right-pointing arrow, and 'New Campaign'. Below this, there are three text input fields labeled 'Village Name :', 'Taluka :', and 'State :'. At the bottom right, there is a 'Submit' button.

Continue Existing Campaign View

Username

Change Password

Logout

Login ⇌ Campaign ⇌ Continue Existing Campaign

Enter Village Name :

Start Date :

Calendar Button

Submit

OR

Select from existing Campaigns :

Campaign 1

Campaign 2

Campaign 3

List of Campaigns View

Username

Change Password

Logout

Login ⇌ Campaign ⇌ List of Campaigns

Keyword :

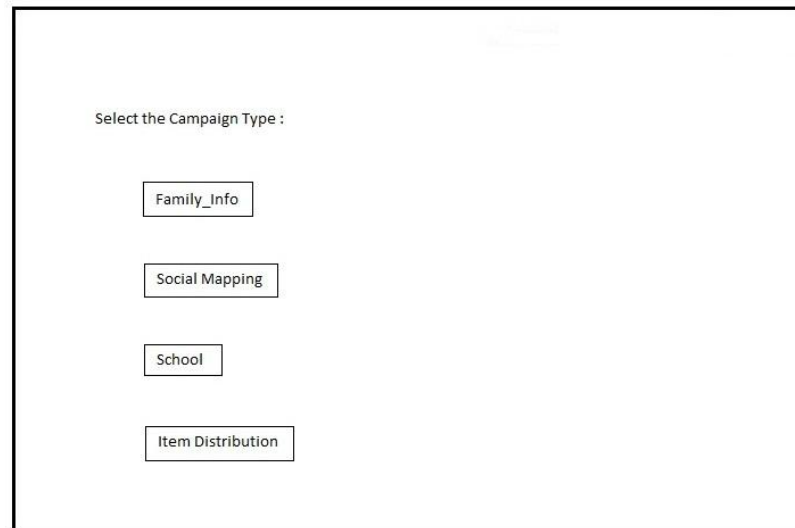
Search

List of Campaigns :

Village Name	Start Date	Last Activity Date

- **Project View:** - The coordinator can select any of the projects among the list of projects displayed which he/she wants to work with.

Coordinator Select Campaign Type View



Coordinator Select Campaign Type View

Select the Campaign Type :

Family_Info

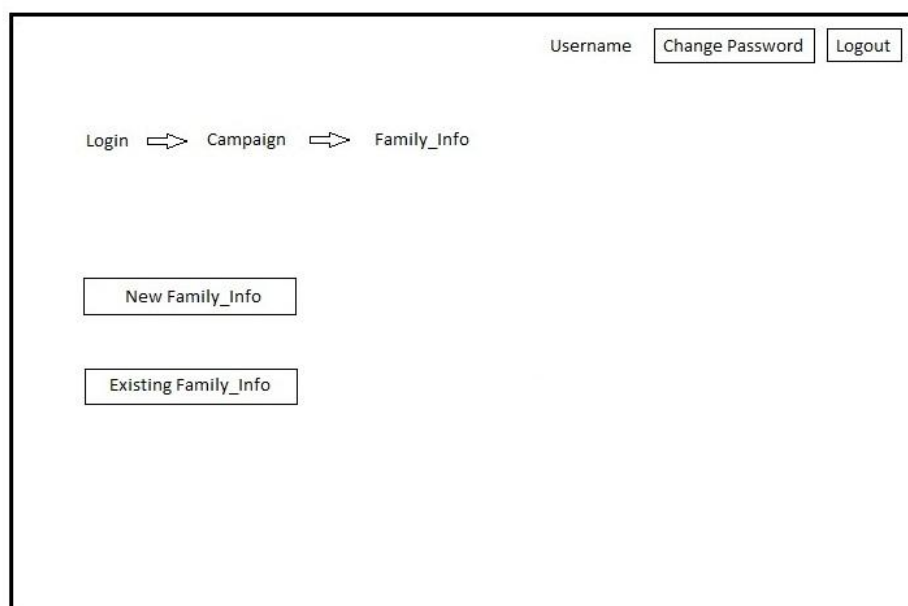
Social Mapping

School

Item Distribution

- **Family_info View:** - In case the coordinator selects the Family_info project, then the Family_info will be displayed. The coordinator depending on whether the family of which the data is being collected already exists in the database or not, selects either the specific family from the list of families already in the database or add a new entry into the database with the information of the new family. Once the family is selected, the coordinator can then update the information regarding their identity cards in the identity card view.

Family_Info View



Family_Info View

Username Change Password Logout

Login > Campaign > Family_Info

New Family_Info

Existing Family_Info

New Family_Info View

Username

Login ➞ Campaign ➞ Family_Info ➞ New Family_Info

Enter New Family_Info :

Family Head Name:

Last Migrated from: No. of Members:

Traditional Occupation: No. of Children in family:

Settlement Date: No. of Children in school:

Daily Income:

New Family_Info View

Username

Login ➞ Campaign ➞ Family_Info ➞ New Family_Info

Enter New Member info: -

Member Name:

Gender:

Relation to family head

Birth Year

Occupation

Existing Family_Info View

Username

Change Password

Logout

Login ➡ Campaign ➡ Family_Info ➡ Existing Family_Info

Enter Existing Family_Info :

Family Head :

OR

Family ID :

OR

Family Member :

Submit

Identity Cards View

Username

Change Password

Logout

Login ➡ Campaign ➡ Family_Info ➡ Family_info_menu

View Family_Info ↓

Identity Cards ↓

General Family Information ↓

Identity Cards View

Username

Change Password

Logout

Login ➞ Campaign ➞ Family_Info ➞ Family_info_menu

View Family_Info ➞

Family Head Name:

Jesal Janani

Last Migrated from:

Mumbai

No. of Members:

6

Traditional Occupation:

Business

No. of Children in family:

3

Settlement Date:

12/2/2009

No. of Children in school:

2

Daily Income:

Rs.

400

Edit

Identity Cards ➞

Voter_ID Card

☒

Ration Card

☒

Plot Card

☒

General Family Information ➞

Electricity access:

☒

Water Connection:

☒

Housing support Scheme:

☒

Toilet Access:

☒

Janni support Scheme:

☒

Loan Application:

☒

Vraddh Pension Scheme:

☒

No. of Handicapped:

Widow Pension Scheme:

☒

- Identity Card View: - The coordinator can update the database according to the availability of a particular identity card with a family. In case the card has not been issued to the family the coordinator will inquire if any application has already been filed by the family and will apply manually in case the family has not yet applied for the card and update the database accordingly.

Card Issued View

The screenshot shows a web application interface for the 'Card Issued View'. At the top right, there is a 'Username' label and two buttons: 'Change Password' and 'Logout'. Below this, a horizontal breadcrumb trail reads: 'Login' followed by a right-pointing arrow, 'Campaign' followed by a right-pointing arrow, 'Family_Info' followed by a right-pointing arrow, 'Identity Cards' followed by a right-pointing arrow, and finally 'Ration Card'. The main content area is titled 'Ration Card Issued ?'. Below this title, there are two options: 'Yes' followed by an empty square checkbox, and 'No' followed by an empty square checkbox.

Card Applied View

The screenshot shows a web application interface for the 'Card Applied View'. At the top right, there is a 'Username' label and two buttons: 'Change Password' and 'Logout'. Below this, a horizontal breadcrumb trail reads: 'Login' followed by a right-pointing arrow, 'Campaign' followed by a right-pointing arrow, 'Family_Info' followed by a right-pointing arrow, 'Identity Cards' followed by a right-pointing arrow, and finally 'Ration Card'. The main content area is titled 'Type of Ration Card issued/applied for:'. Below this title, there are three radio button options: 'APL' with a selected radio button (indicated by a black dot), 'BPL' with an unselected radio button, and 'Antyoday' with an unselected radio button.

Card Applied View

Username

Change Password

Logout

Login ➞ Campaign ➞ Family_Info ➞ Identity Cards ➞ Ration Card

Applied for Ration Card ?

Yes ☐ No ☐

Apply for Card View

Username

Change Password

Logout

Login ➞ Campaign ➞ Family_Info ➞ Identity Cards ➞ Ration Card

Apply for this Card .

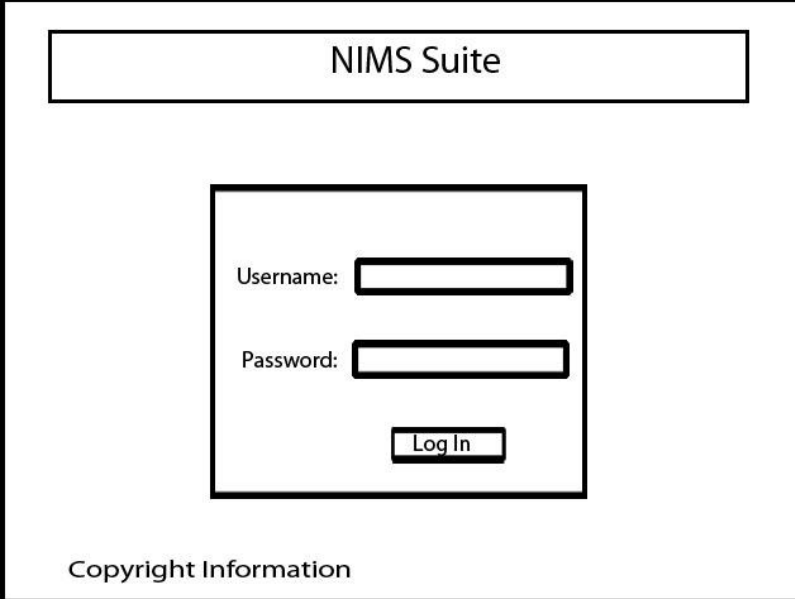
Message :

Submit

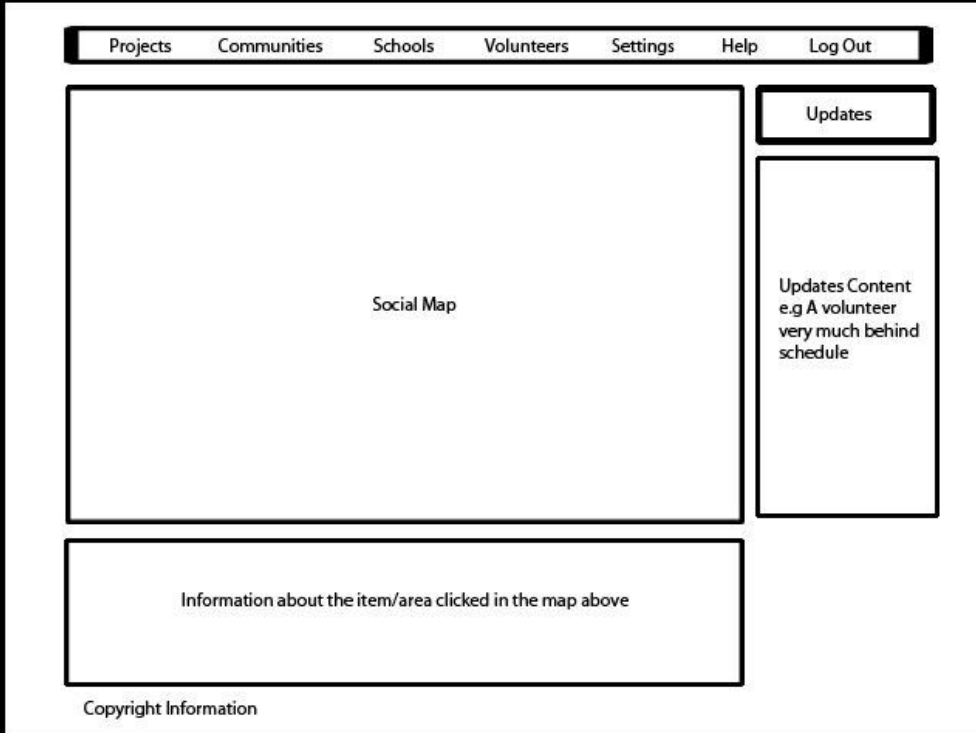
4.2.1 Administrator

The administrator who will be using the android application will have the follow functionalities:-

- Log in-Logout
 1. Go to the url
 2. Enter username and password in the spaces provided and clicks on Log In or press enter.

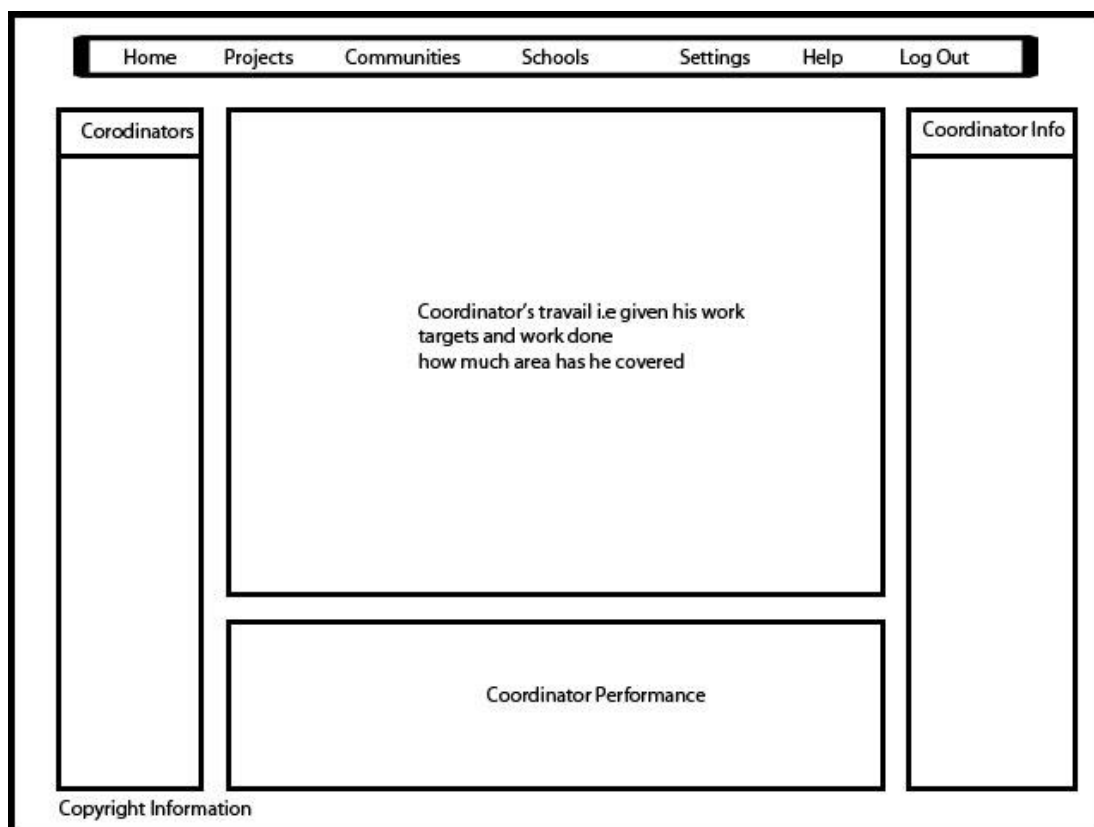


The login screen for the NIMS Suite application. It features a title bar at the top labeled "NIMS Suite". Below this, there is a central box containing the login fields: a "Username:" label followed by a text input field, a "Password:" label followed by a text input field, and a "Log In" button positioned below the password field. At the bottom of the main container, there is a section labeled "Copyright Information".



The main dashboard of the NIMS Suite application. It has a top navigation bar with links for "Projects", "Communities", "Schools", "Volunteers", "Settings", "Help", and "Log Out". The main area is divided into three sections: a large "Social Map" on the left, an "Updates" section on the right containing the text "Updates Content e.g A volunteer very much behind schedule", and a bottom section labeled "Information about the item/area clicked in the map above". A "Copyright Information" section is located at the very bottom of the dashboard.

- Coordinators Page
 1. Coordinators List
 - List of the NGO coordinators that are currently working for the NGO. Click on one of the “names” and correspondingly the views in the other 3 panes i.e. map, info and performance will change.
 2. Coordinators Info
 - On clicking a particular item on the list in the Coordinators pane, this pane will display his/her basic information
 3. Coordinators Performance
 - On clicking a particular item on the list in the Coordinators pane, this pane will display his/her performance i.e. display how much work he/she has done so far in the month, year and how much target was he set in the month
 4. Coordinators Map
 - On clicking a particular item on the list in the Coordinators pane, this pane will show how much area coordinator has covered in the month geographically on the basis of the work he was given.



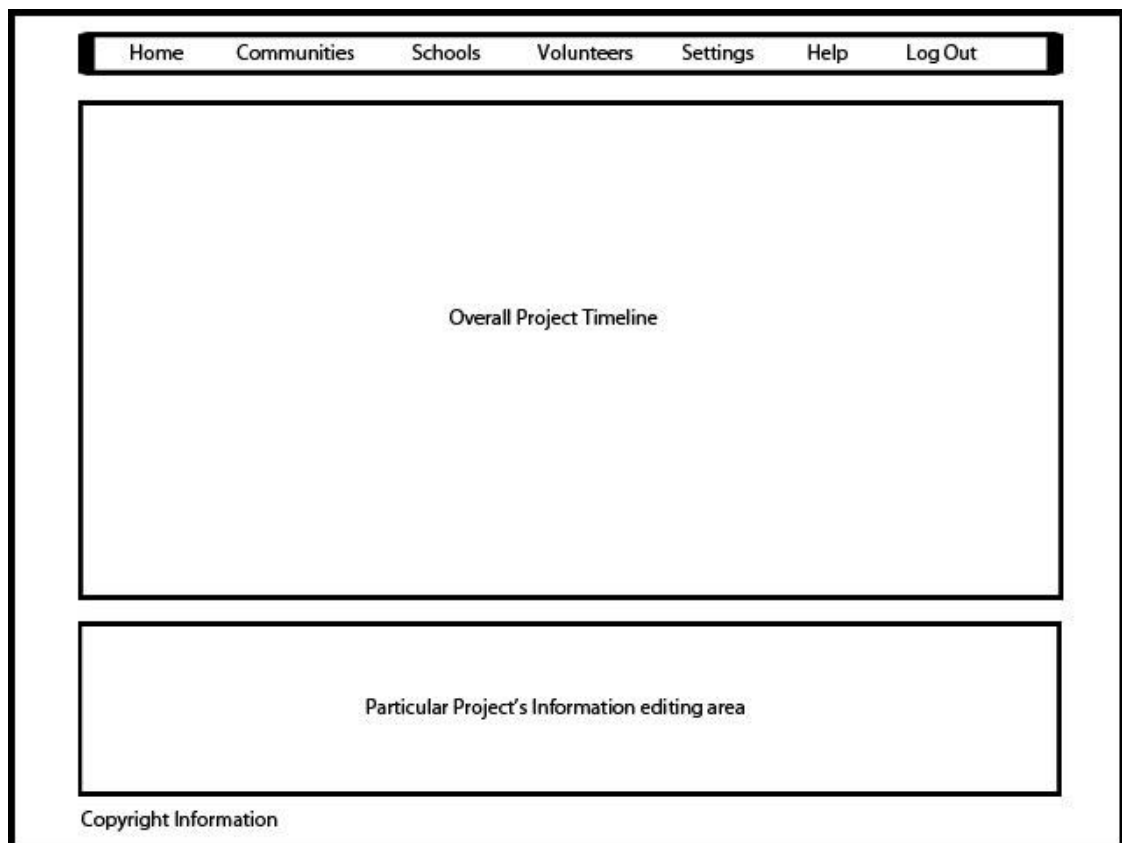
- Projects Page

1. Project Timeline

-This pane will show the overall projects timeline that the NGO has undertaken so far. All on-going, shelved projects will be graphically displayed with milestones achieved versus time in addition the supporting/involved 3rd party organizations.

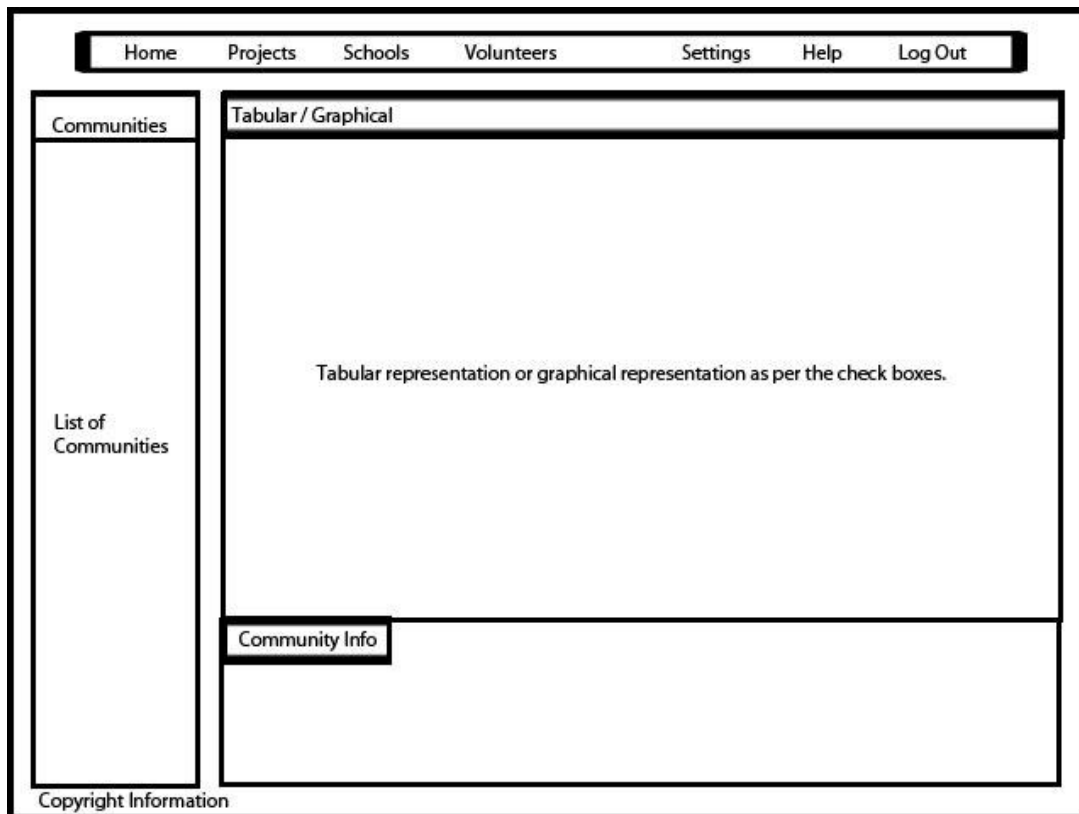
2. Edit area

- On this pane, the NGO admin can edit a particular project's info. For example, in case of a delay the dates set for milestones can be changed, project duration can be extended et al.



- Communities Page

This view will list down all the communities available in the database. The administrator can either do a tabular or a graphical analysis of a particular community. The graphical analysis will be in the form of pie charts, bar graphs etc. while the tabular analysis will present the data available in a tabular form.



5. Frequently asked questions

5.1 What is NIMS?

A project to enable a NGO to carry out efficient information collection, visualization and interactive mapping in order to make well informed decisions and give out efficient work results.

5.2 Who is behind NIMS?

NIMS is being developed by Team 16: -

Aakash Solanki

Lalit Agarwal

Anshul Agrawal

Megha Tak

Parth Manvar

Palashi Vaghela

Surbhi Agarwal

Jesal Janani

Jatan Patel

5.3 I would like to see a new feature in NIMS.

Send us an email requesting the feature at sen16@googlegroups.com and we might consider adding it.