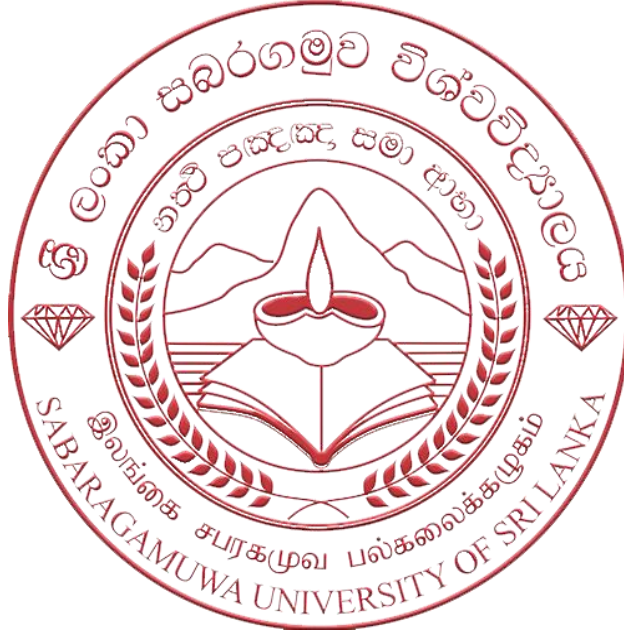


# IS2106 - System Analysis & Design



GNDMS - Grama Niladhari Division Management System

GROUP 36

Department of Computing & Information Systems

Faculty of Computing

Sabaragamuwa University of Sri Lanka

## Table of Contents

Introduction .....	3
Introduction: - .....	3
Admin Module:- .....	4
Purpose .....	5
Scope.....	6
Requirement Specification.....	7
Hardware Configuration:.....	7
Software Requirement: .....	7
Analysis and Design.....	10
Analysis:.....	10
Design Introduction: .....	10
Use Case Diagrams: .....	11
ER Diagram:.....	13
Data Flow Diagram: .....	14
Evaluation .....	18

## **Introduction**

### **Introduction: -**

“Grama Niladhari Division Management System” is web-based application which store the data of Grama Niladhari Divisions of Sri lanka. This system helps the people to view the details of Grama Niladhari Division online. The “Grama Niladhari Division Management System” can be entered using a username and password. It is accessible by a Grama Niladhari.

Grama Niladhari only they can add data into the database. The data can be retrieved easily. The data are well protected for personal use and makes the data processing very fast. This system objectives of easily & maintainable information.

In “Grama Niladhari Division Management System” we use PHP and MySQL database. This is the project which keeps records of Grama Niladhari Divisions “Grama Niladhari Division Management System” has one module i.e. admin.

## **Admin Module:-**

**Dashboard:** In this section admin can briefly view total number of listed populations and total number of community organizations and related analysis data.

**Population:** In this section, admin can manage the population (add/update/delete).

**Community ORG:** In this section, admin can manage community organizations (add/update/delete).

**Pages:** In this section, admin can manage the website pages.

**Account Setting:** In this section, admin can do following activity.

**Profile:** In this section admin can update his/her profile.

**Change Password:** In this section admin can change his/her own passwords

**Logout:** Through this button admin can logout.

**Note:** In this project MD5 encryption method used.

**Users:** Users can view the details of Grama Niladhari divisions.(announcements, contact details, important notices).

## **Purpose**

The goal of any system development is to develop and implement the system cost effectively; it most suited to the user's analysis is the heart of the process. Analysis is the study of the various operations performed by the system like as (add, update, delete Grama Niladhari Division details) and maintain relationship within through the system. During analysis, data collected on the files, decision points and transactions handled by the present system.

The Grama Niladhari Division Management System can be entered using a username and password. It is accessible by a Grama Niladhari.

Grama Niladhari only they can add data into the database. The data can be retrieved easily. The main purpose of the development of this system is to give the grama niladhari in Sri Lanka the ability to easily access the information they have. Through this, a more convenient and secure method was obtained instead of the method of collecting information by writing in documents. Another purpose for developing this application is to enable the people of Sri Lanka to easily access the information related to the Grama Niladhari Divisions.

## **Scope**

The “Grama Niladhari Division Management System” of the Sri Lanka is developed to overcome the most of the problems occurring in the manual system by computerizing the existing system. The features of the newly proposed computerized system are described in brief as below:

After computerizing the system, Grama Niladhari can finish their work in least amount of time and efforts. The computerized systems have many gains and efforts which the manual system can't give in any type of situations.

In any manual system if we take, the main problem arising is to maintain the number of records and finding a particular record.

**Some of the features of the proposed system are given below:**

- Maintaining the Data for Grama Niladhari Division details.
- Getting the information of Grama Niladhari Division.
- Removal of Data Redundancy.
- Data Consistency.

## Requirement Specification

### Hardware Configuration:

#### Client Side:

<b>RAM</b>	512 MB
<b>Hard disk</b>	10 GB
<b>Processor</b>	1.0 GHz

#### Server side:

<b>RAM</b>	1 GB
<b>Hard disk</b>	20 GB
<b>Processor</b>	2.0 GHz

### Software Requirement:

#### Client Side:

<b>Web Browser</b>	Google Chrome or any compatible browser
<b>Operating System</b>	Windows or any equivalent OS

## Server Side:

<b>Web Server</b>	APACHE
<b>Server side Language</b>	PHP5.6 or above version
<b>Database Server</b>	MYSQL
<b>Web Browser</b>	Google Chrome or any compatible browser
<b>Operating System</b>	Windows or any equivalent OS

## APACHE

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

The Apache HTTP Server ("httpd") was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015.



## **PHP**

- PHP stands for PHP: Hypertext Preprocessor.
- PHP is a server-side scripting language, like ASP.
- PHP scripts are executed on the server.
- PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.).
- PHP is an open source software.
- PHP is free to download and use.

## **MYSQL**

- MYSQL is a database server.
- MYSQL is ideal for both small and large applications.
- MYSQL supports standard SQL.
- MYSQL compiles on a number of platforms.
- MYSQL is free to download and use.

## **Analysis and Design**

### **Analysis:**

In present all Grama niladhari record work done on the paper. The whole Grama niladhari record is stored in the registers. We can't generate reports as per our requirements because its take more time to calculate the grama niladhari related report.

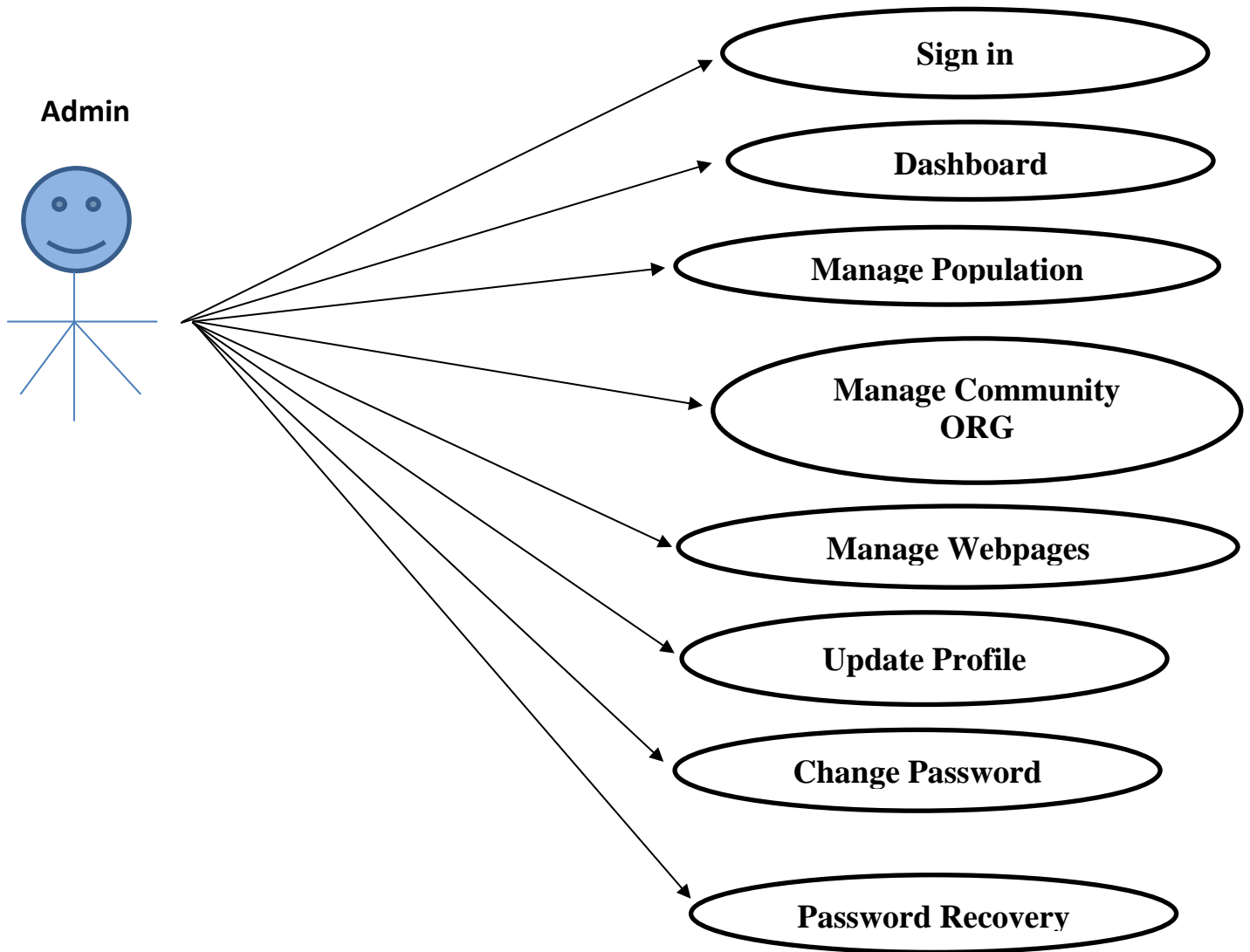
Disadvantage of present system:

- Not user friendly: The present system not user friendly because data is not stored in structure and proper format.
- Manual Control: All report calculation is done manually so there is a chance of error.
- Lots of paper work: Grama niladhari record maintain in the register so lots of paper require storing details.
- Time consuming

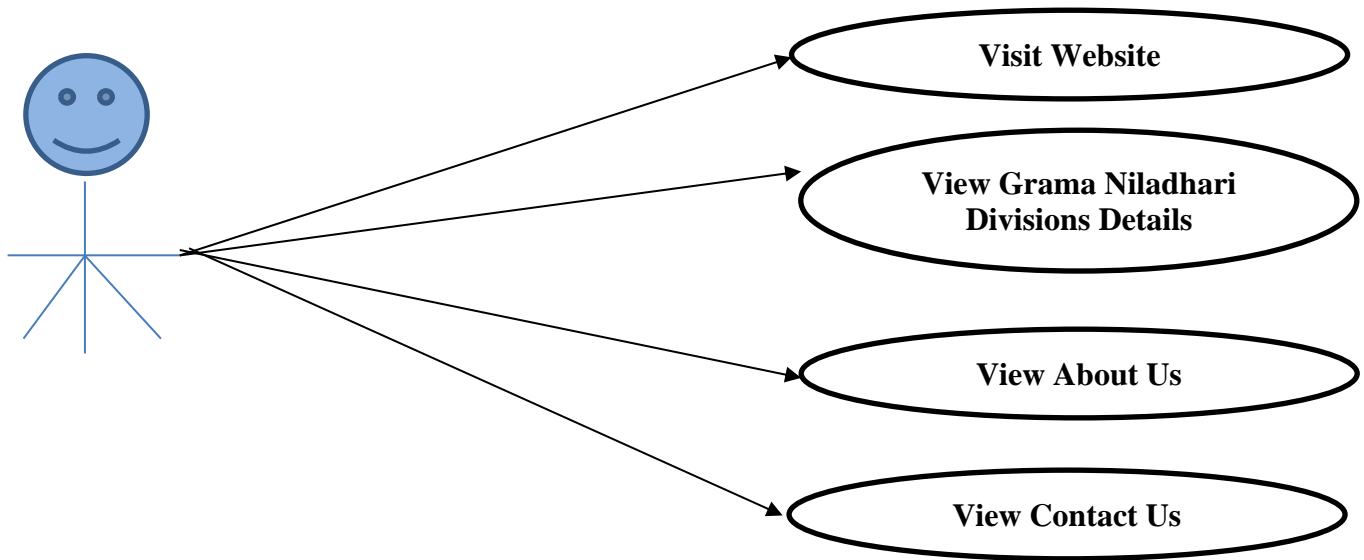
### **Design Introduction:**

Design is the first step in developing any device, process or system. The software design process involves three technical activities - design, coding, implementation and testing. Design decisions impact the success of the software implementation and its maintenance. Design translates customer's requirements into finished software or a system. Preliminary and detailed design are the two steps involved in software design.

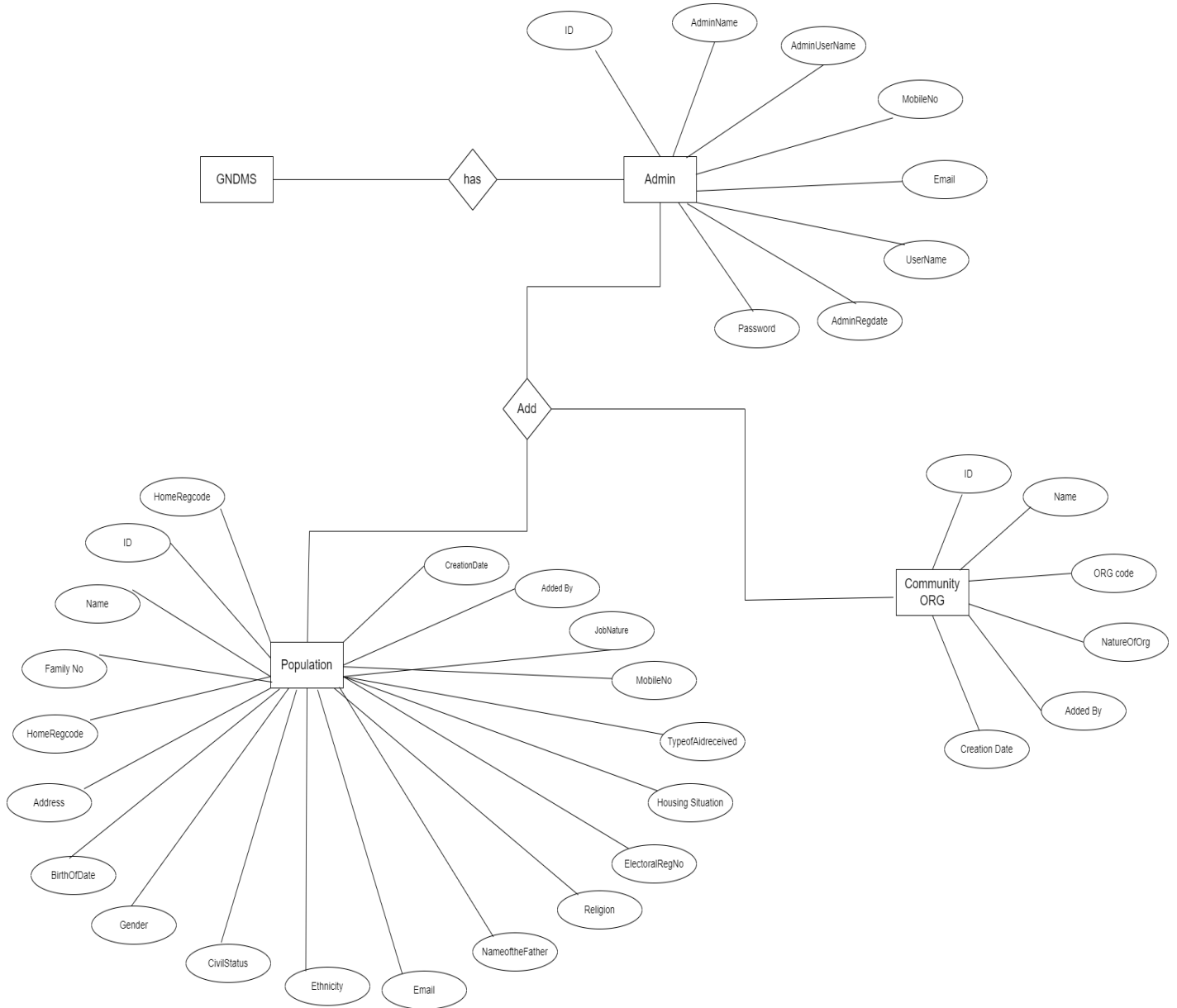
## Use Case Diagrams:



## Users

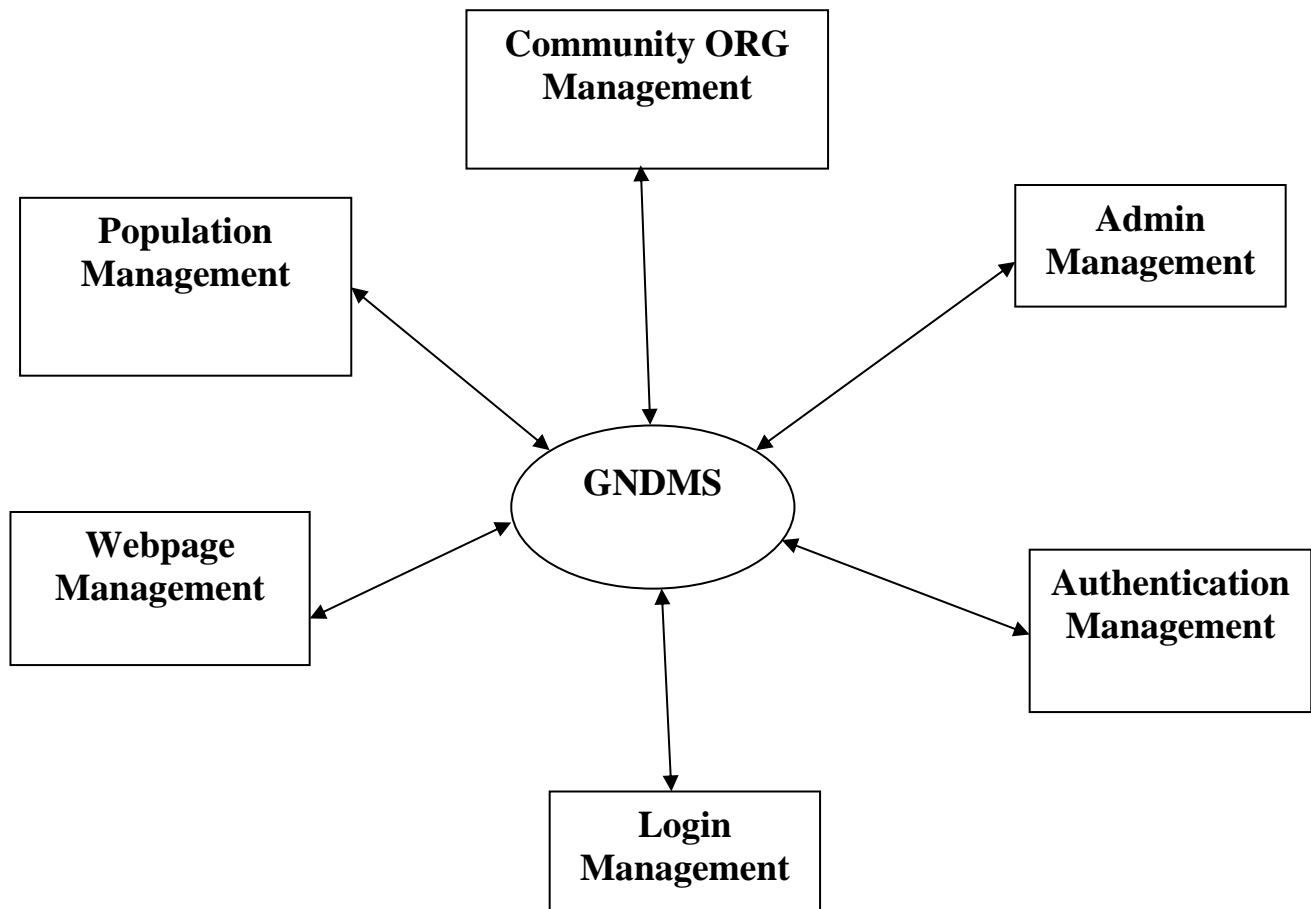


## **ER Diagram:**

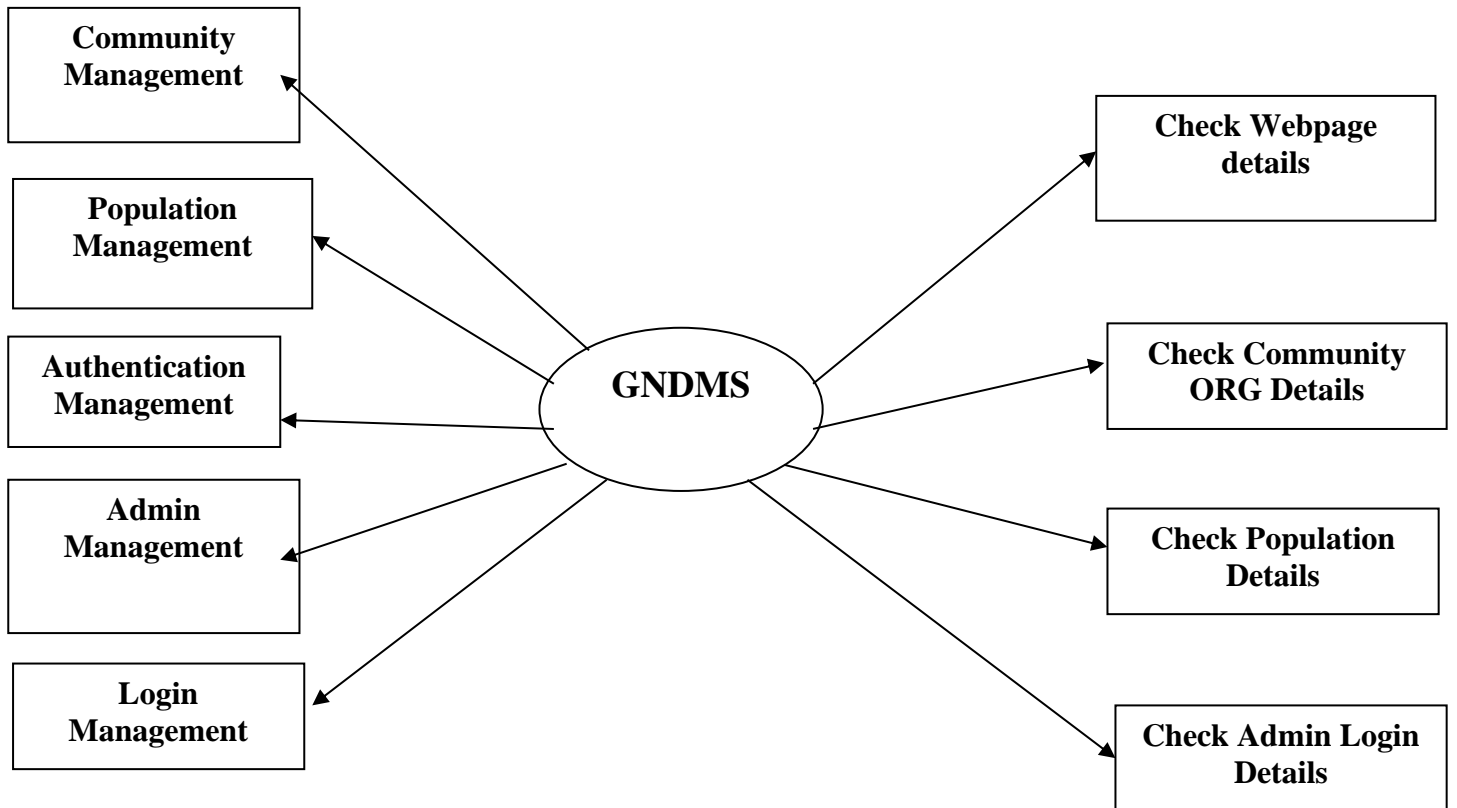


## Data Flow Diagram:

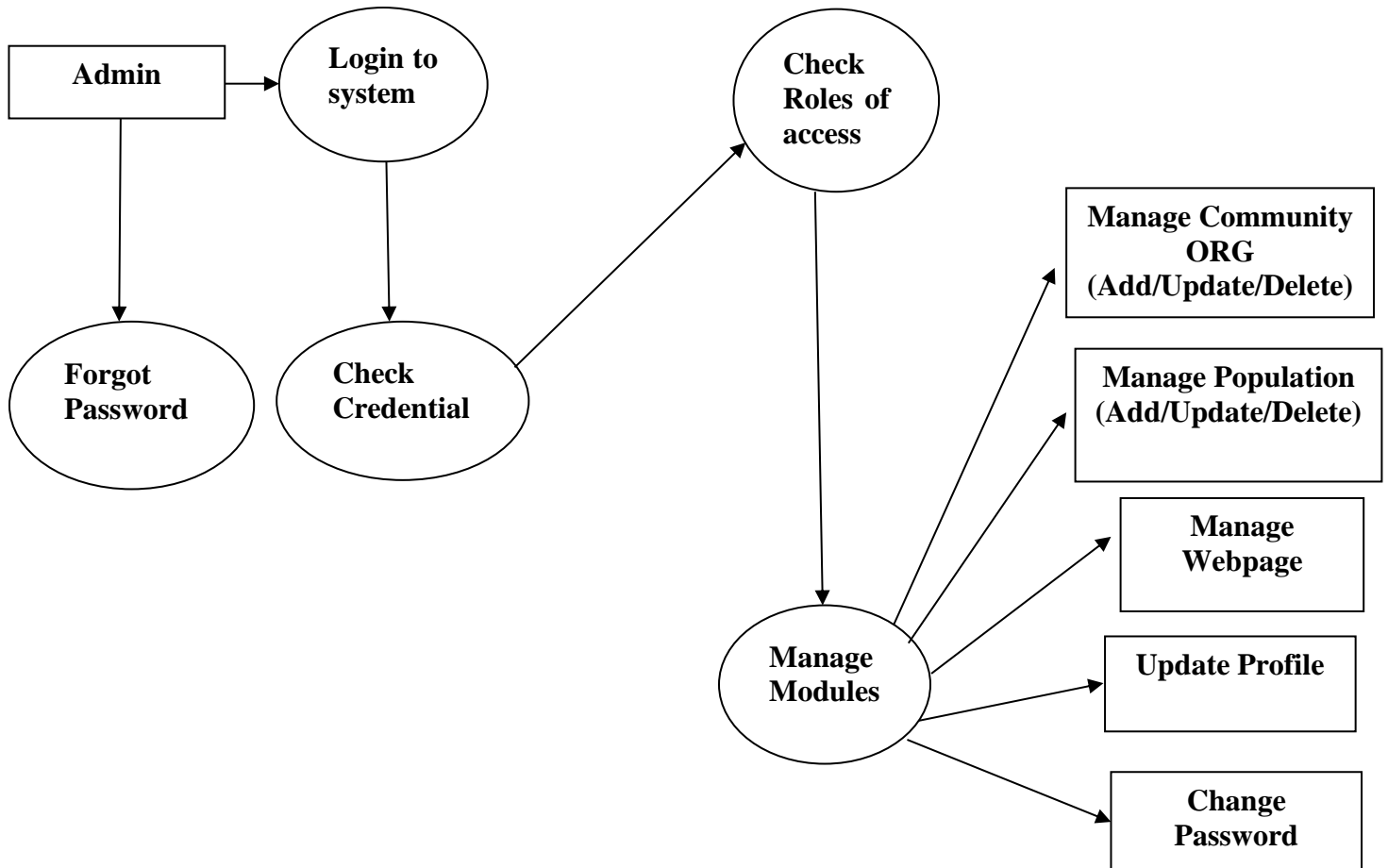
### Zero Level DFD



## First Level DFD

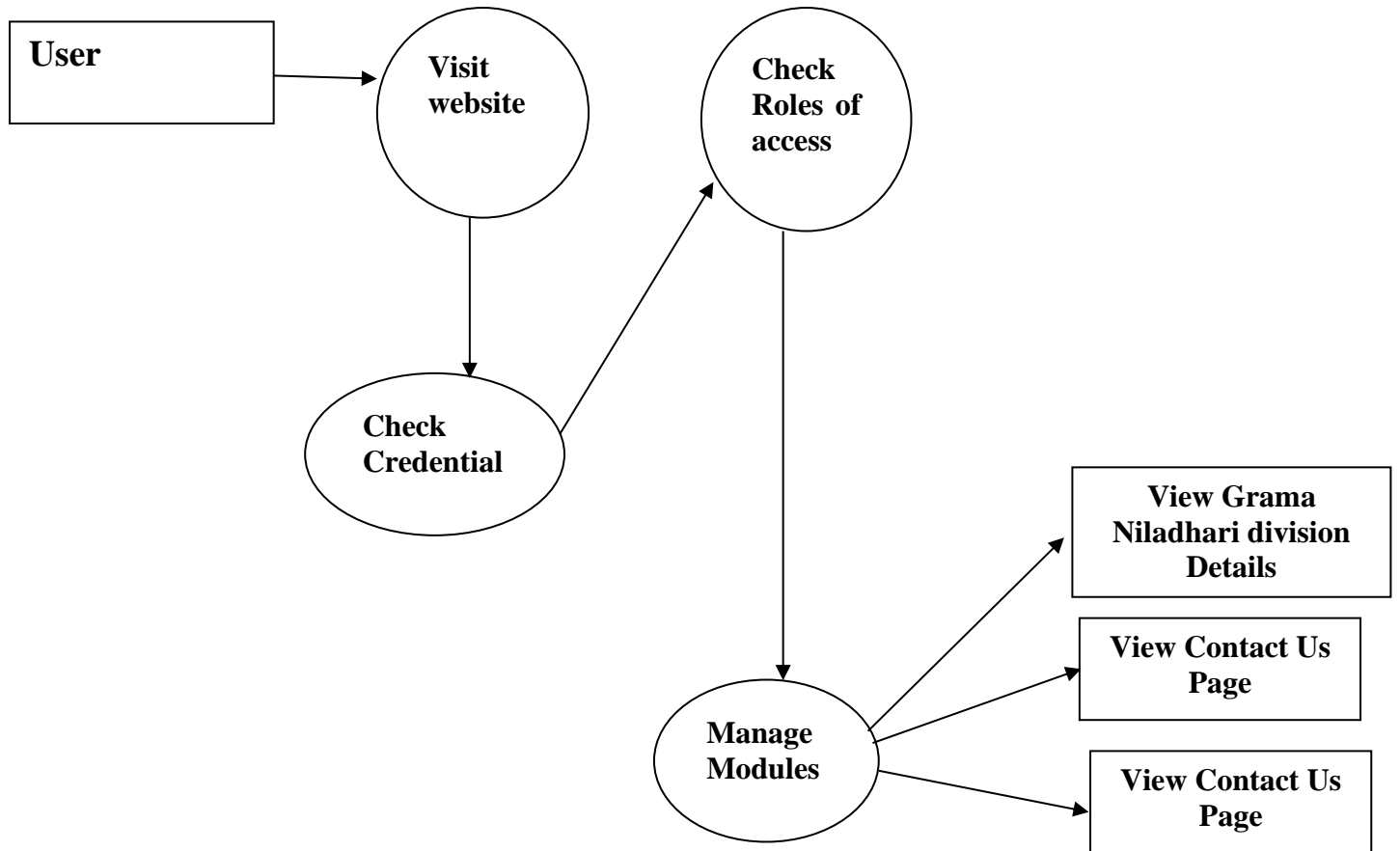


## Second Level DFD





## User



# Figma design for GNDM System



## About US

Welcome to our website dedicated to the Grama Niladharis, the grassroots-level government officers in Sri Lanka responsible for administrative and community development tasks within their respective divisions.

Welcome to our website dedicated to the Grama Niladharis, the grassroots-level government officers in Sri Lanka responsible for administrative and community development tasks within their respective divisions.

[LEARN MORE](#)



### About Us

Welcome to our website dedicated to the Grama Niladharis, the grassroots-level government officers in Sri Lanka responsible for administrative and community development tasks within their respective divisions.

### Information Links

[Home](#)  
[About us](#)  
[Division](#)  
[Contacts](#)  
[Admin](#)

### Contacts

[gramaniladhari@gmail.com](mailto:gramaniladhari@gmail.com)  
No.32.Baseline street,Colombo 7.  
+941123456789

## Divisions

**Geographical Coverage:** Sri Lanka is divided into administrative units known as Divisional Secretariat Divisions, each of which comprises multiple Grama Niladhari divisions.

**Number of Grama Niladhari Divisions:** As of my last update, Sri Lanka had a total of 14,022 Grama Niladhari divisions across the country.

**Population Distribution:** Grama Niladhari divisions vary in population size, with some divisions serving densely populated urban areas while others cover sparsely populated rural regions.

**Administrative Functions:** Each Grama Niladhari division is responsible for various administrative tasks, including maintaining vital records, issuing certificates, and facilitating government welfare programs at the grassroots level.

**Role in Governance:** Grama Niladhari divisions play a crucial role in local governance by acting as the primary interface between the government and the community. They help ensure the effective delivery of government services and programs to the people they serve.



LANKA DATTA SRI LANKA

### About Us

Welcome to our website dedicated to the Grama Niladharis, the grassroots-level government officers in Sri Lanka responsible for administrative and community development tasks within their respective divisions.

### Information Links

Home

About us

Division

Contacts

Admin

### Contacts

gramaniladhari@gmail.com

No.32.Baseline street,Colombo 7.

+941123456789

## Contacts

For more details contact us on !!!

gramaniladhari@gmail.com  
No.32,Baseline road, Colombo 7.  
+941123456789



### About Us

Welcome to our website dedicated to the Grama Niladharis, the grassroots-level government officers in Sri Lanka responsible for administrative and community development tasks within their respective divisions.

### Information Links

Home

About us

Division

Contacts

Admin

### Contacts

gramaniladhari@gmail.com

No.32.Baseline street,Colombo 7.

+941123456789

## Login

**ADMIN | GNDMS**

Sign in

[Forgot Password](#)

[Home](#)

## Reset Password

**ADMIN | GNDMS**

[Sign in](#)

Reset

GNDMS | Admin

Community ORG

☐ Add

☐ Manage

Population

☐ Add

☐ Manage

Pages

☐ About us

☐ Contact us

Account Settings

☐ Profile

☐ Change Password

☐ Logout

Home | Dashboard

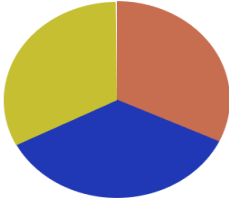
Dashboard

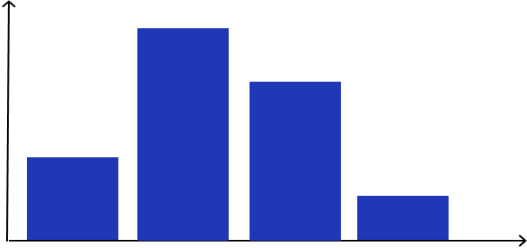
5  
Population

More Info >

5  
Community  
ORG

More Info >





GNDMS | Admin

Community ORG

☒ Add

☐ Manage

Population

☐ Add

☐ Manage

Pages

☐ About us

☐ Contact us

Account Settings

☐ Profile

☐ Change Password

☐ Logout

Dashboard | Add Community ORG

Add Community Organization

Add Division's details

Division Name

Division Code

Submit

## Manage Division

## Division Details

Search : 

#	Division name	Division Code	Added By	Created Date	Action

[Prev.](#)[Next](#)

## Add Population

## Fill the Information

Family Number

Name of the Head of Household

Address

Mobile Number

Number of Family members

[Submit](#)

Manage Population

- Community ORG ▼
  - ☐ Add
  - ☐ Manage
- Population ▼
  - ☐ Add
  - ☒ Manage
- Pages ▼
  - ☐ About us
  - ☐ Contact us
- Account Settings ▼
  - ☐ Profile
  - ☐ Change Password
  - ☐ Logout

Family Details

Search :

#	Family Number	Name of the head of household	Address	Mobile Number	# of the Family members

[Prev.](#) [Next](#)

About Us

- Community ORG ▼
  - ☐ Add
  - ☐ Manage
- Population ▼
  - ☐ Add
  - ☐ Manage
- Pages ▼
  - ☒ About us
  - ☐ Contact us
- Account Settings ▼
  - ☐ Profile
  - ☐ Change Password
  - ☐ Logout

Page Title

About Page

Page Description

## Contact Us

## Community ORG

- ☐ Add
- ☐ Manage

## Population

- ☐ Add
- ☐ Manage

## Pages

- ☐ About us
- ☒ Contact us

## Account Settings

- ☐ Profile
- ☐ Change Password
- ☐ Logout

## Page Title

## Page Description

## Email Address

## Mobile number

## My Profile

## Community ORG

- ☐ Add
- ☐ Manage

## Population

- ☐ Add
- ☐ Manage

## Pages

- ☐ About us
- ☐ Contact us

## Account Settings

- ☒ Profile
- ☐ Change Password
- ☐ Logout

## Username

## Full Name

## Email Address

## Mobile number

## Registration Date



## Change Password

Community ORG ▾

- ☐ Add
- ☐ Manage

Population ▾

- ☐ Add
- ☐ Manage

Pages ▾

- ☐ About us
- ☐ Contact us

Account Settings ▾

- ☐ Profile
- ☒ Change Password
- ☐ Logout

Current Password

New Password

Confirm Password

## Log Out

Community ORG ▾

- ☐ Add
- ☐ Manage

Population ▾

- ☐ Add
- ☐ Manage

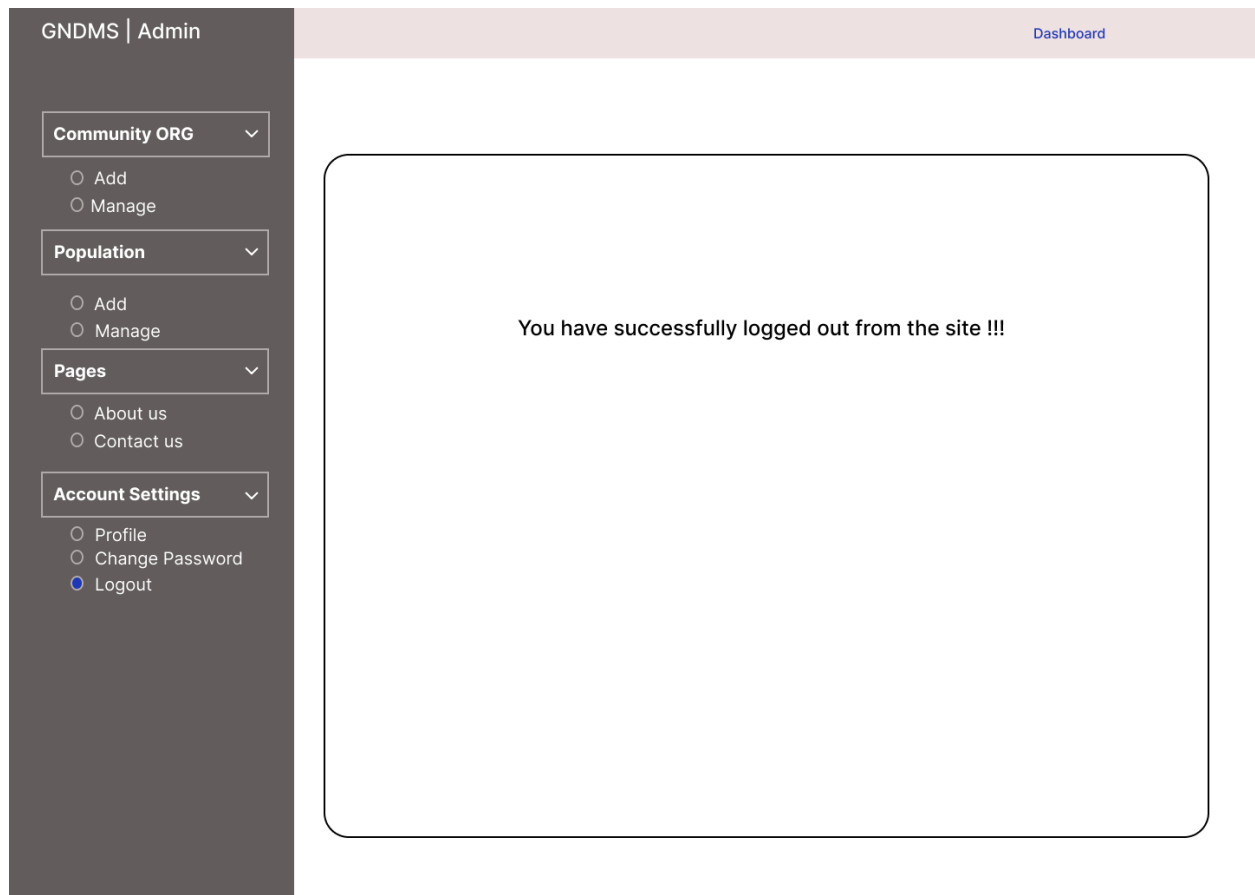
Pages ▾

- ☐ About us
- ☐ Contact us

Account Settings ▾

- ☐ Profile
- ☐ Change Password
- ☒ Logout

Are you sure want to log out from Site?



Prototype Link -: <https://www.figma.com/file/2t64YegOiAJisyjvDbiKsF/GDMS-Project?type=design&node-id=643%3A39&mode=design&t=ibnkDkSNJkoEe41H-1>