



GRAMA NILADHARI E-CERTIFICATE

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1.Introduction

This introduction provides a clear overview of the project purpose, scope, definitions, and references used in the SRS document. It also defines the core functionalities and scope of the web system, laying the foundation for detailed requirement specifications in the following sections.

1.1 Purpose

The document aims to collect and design all ideas that have come up to define the system. Its requirements concern users and stakeholders. This document includes all the requirements for the Grama Niladhari E-certificate project. This web application is designed to automate the collection of user information and generate electronic certificates (e-certificates).

1.2 Scope

This Grama Niladhari E-certificate web service provides a service to take a Grama Niladhari certificate anytime and anywhere it's needed. The web service is completely free. People should register for this service in front of the Grama Niladhari. People's information is saved on the server, and it includes information about the places where the person lives and personal information. Those details must be confirmed by Grama Niladhari. Every registered user can get the certificate from Grama Niladhari by providing the **NIC** number. Grama Niladhari will be able to get online request updates in their area and they can check the details and issue the certificate online.

1.3 Definitions, Acronyms, and Abbreviations

Table 1 definitions

People	Sri Lankan citizens.
NIC	National identity card number
Users	People or institutes who register for the system
Administration	System administrator who is given specific permission for managing and controlling the system.
Stakeholders	Any person who has interaction with the system who does not work as a developer.

2. Overall Description

This section will provide an overall description of this web service. The Grama Niladhari e-Certificate Project consists of a web-based system. It aims to simplify the process of obtaining certificates issued by Grama Niladharis in Sri Lanka. This section includes an overview of the system's perspective, functions, user characteristics, its interactions with stakeholders, constraints, assumptions and dependencies.

2.1 Product Perspective

The system consists of a single web-based platform. It is accessible to Sri Lankan citizens and Grama Niladharis. It allows users to register for the service and request certificates. Grama Niladharis have to verify user information and issue certificates online. Government or Private Institutions can also obtain certificates when they need with their specific code.

2.2 Production Functions

The system facilitates user registration and certificate requests processes for citizens while streamlining the process of obtaining certificates. Grama Niladharis can efficiently manage certificate requests online. Grama Niladhari can also verify user information by ensuring accurate and timely issuance of certificates.

2.3 User Characteristics

There are three types of users interacting with the system.

1. Citizens - Citizens use the system to register for the service and to request certificates online.
2. Grama Niladharis - Responsible for verifying user information and issuing of the certificates online.
3. Government or Private Institutions - They can use the system to request Grama Niladhari certificates for their official purposes.
4. Administration – They are responsible for the system development and implementation.

2.4 Constraints

The system figures on secure internet connectivity for data transmission and communication between citizens, Government or Private Organizations, and Grama Niladhari.

Strict resource limitations apply to the responsive web design, ensuring optimal performance within defined memory and storage constraints.

2.5 Assumptions and Dependencies

Assumptions regarding consistent internet access and hardware compatibility ensure the system's usability across different devices and platforms.

Dependencies on reliable server infrastructure and secure data transmission are essential for maintaining system integrity and user privacy.

3. Specific Requirements

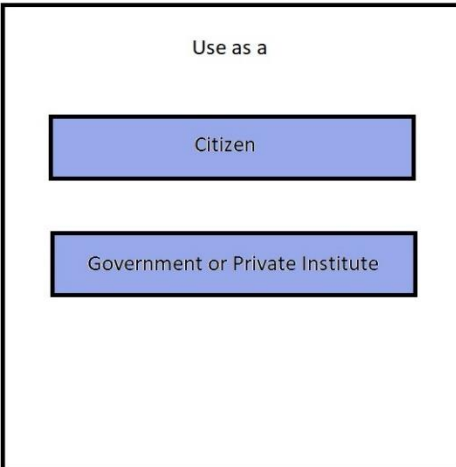
This section includes the details of all the functions and the requirements of the E-certification online service.

3.1 User Interfaces

The first time using this website, they can see a simple login page for different users. On that page, the user can select the relevant page.

After select as a citizen, it shows an application to fill out and submit. It includes filling in the NIC number, email address, phone number, address, selecting a Grama Niladhari division, the purpose for applying, and entering a generated passcode that provide by Grama Niladhari in registration. Then, the user can apply for the certificate or clear this form.

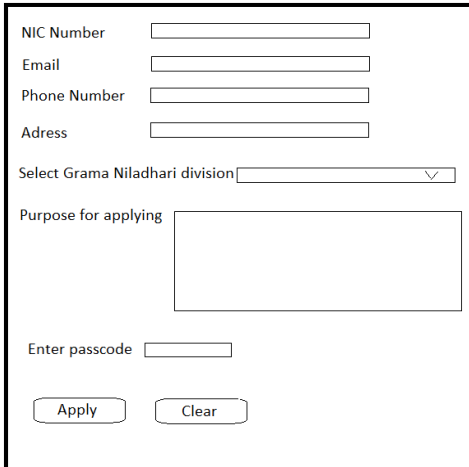
Home page



The home page features a white background with a black border. At the top, it says 'Use as a'. Below this, there are two blue rectangular buttons with black text. The first button is labeled 'Citizen' and the second button is labeled 'Government or Private Institute'.

Figure 2 – Home page

If select citizen



The citizen form has a white background with a black border. It contains several input fields: 'NIC Number', 'Email', 'Phone Number', and 'Adress' (note the spelling). Below these is a dropdown menu labeled 'Select Grama Niladhari division'. There is a large text area for 'Purpose for applying'. At the bottom, there is an 'Enter passcode' field and two buttons labeled 'Apply' and 'Clear'.

Figure 3 – Citizen form

If you select a government or private institute, it shows another form to fill out to submit a request. It includes the institute name, email, institute registration number, secret code for using this service, specific person's NIC number, select box for choosing Grama Niladhari division, the purpose for applying.

Grama Niladhari has a different interface. To enter the database, Grama Niladhari first needs to login to the system. To log in, it appears as a simple login page. It includes Grama Niladhari's registration number, email, password, and login button. Then, it appears on another page to enter the person's NIC number, and passcode and search the data in the database.

After entering the correct NIC number and passcode, Grama Niladhari can find the details about the person. If there are no details it shows an error. Otherwise, all details are shown and there is space to enter the issue date and purpose for the issue. At the bottom of the page, there is a button to generate and download the Grama Niladhari certificate.

If select government or private institute

Institute name	<input type="text"/>
Email	<input type="text"/>
Institute registration number	<input type="text"/>
Secrete code	<input type="text"/>
Person's NIC number	<input type="text"/>
Select Grama Niladhari division	<input type="text" value="v"/>
Purpose for applying	<input type="text"/>

Figure 4 – Institute Form

Grama Niladhari login to database

Grama Niladhari Reg.No	<input type="text"/>
Password	<input type="text"/>

Figure 5 – Grama Niladhari Login

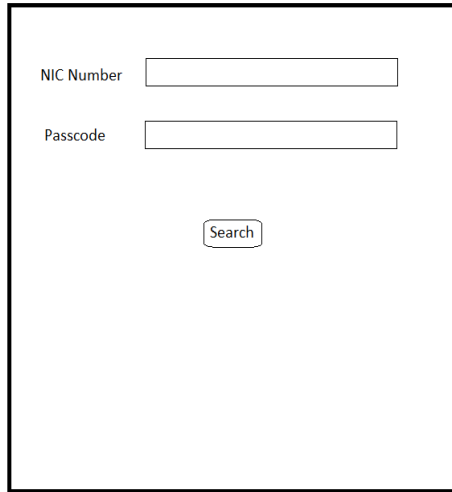
3.2 Functional Requirements

3.2.1 Grama Niladhari Interface

Grama Niladhari has specific permission to log in to the database. To log in to the database, Grama Niladhari should enter the registration number and password. The password will be provided by the administration.

Figure 6 – Grama Niladhri Search

In the database



NIC Number

Passcode

3.2.2 Core Functionalities

Home Page – First User has to select one option from two. (Use as a citizen or as a Government/Private institute.)

Citizen Form/institute Form – The user must correctly fill out the form and submit the details by clicking the apply button. If the user wants to clear out the form, it also could be done by clicking clear button.

Grama Niladhari Home page – In the system, Grama Niladhari has two options. They are to enter the data into the database and retrieve data from the database.

Form to enter data into the database – Grama Niladhari has permission to enter the data to the database using the particular form. It includes all the data that need to generate the Grama Niladhari e-certificate. In that time Grama Niladhari provides the passcode for the citizen.

Retrieving data – Grama Niladhari can retrieve the information of the citizen by entering the NIC number and passcode by clicking the search button.

Generate the certificate – After retrieving the information, Grama Niladhari can generate a certificate using the generate button at the bottom of the data form.

4. System Features

4.1 Use case

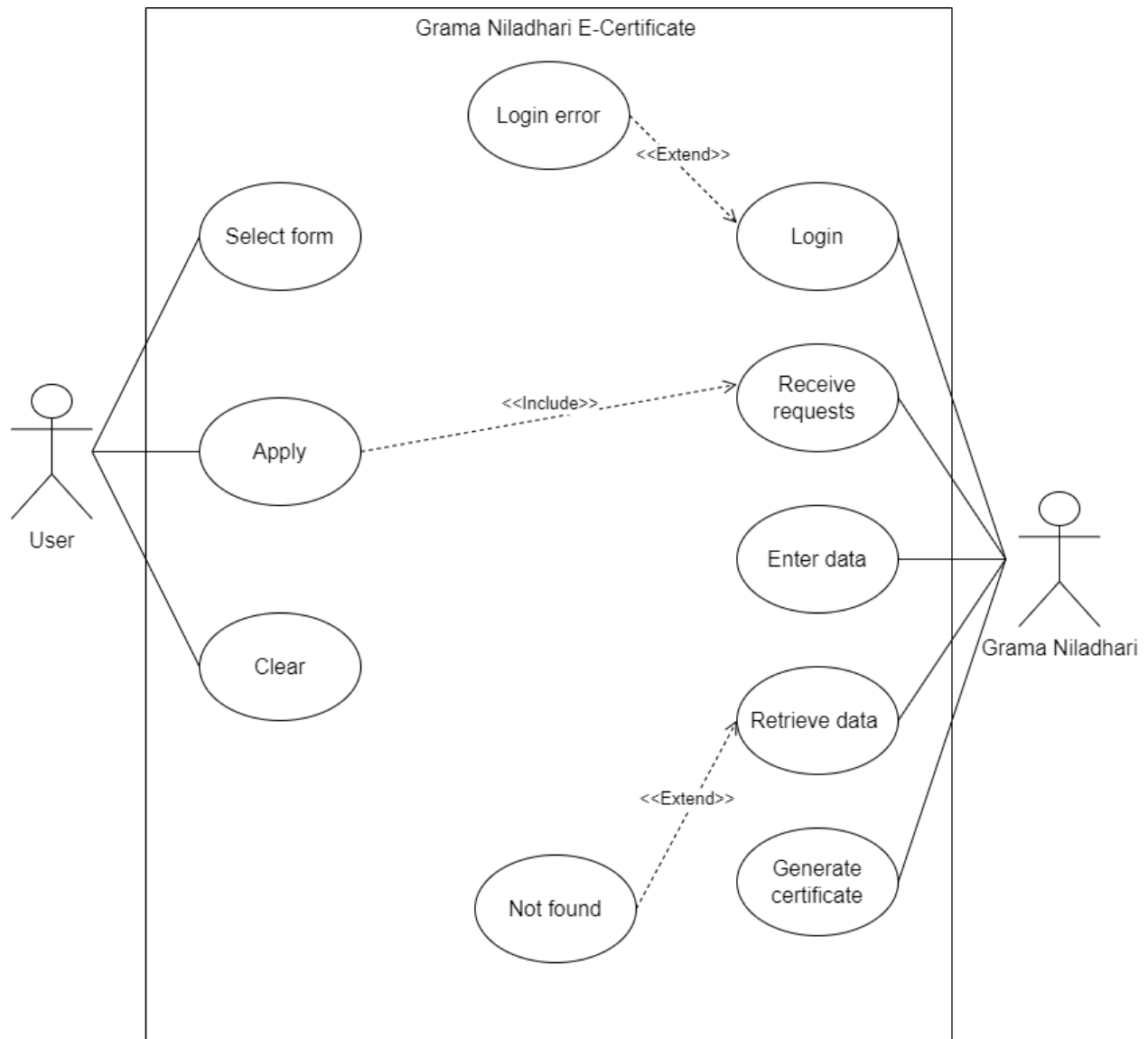


Figure 7 – Use case diagram

4.2 Entity Relationship Diagram

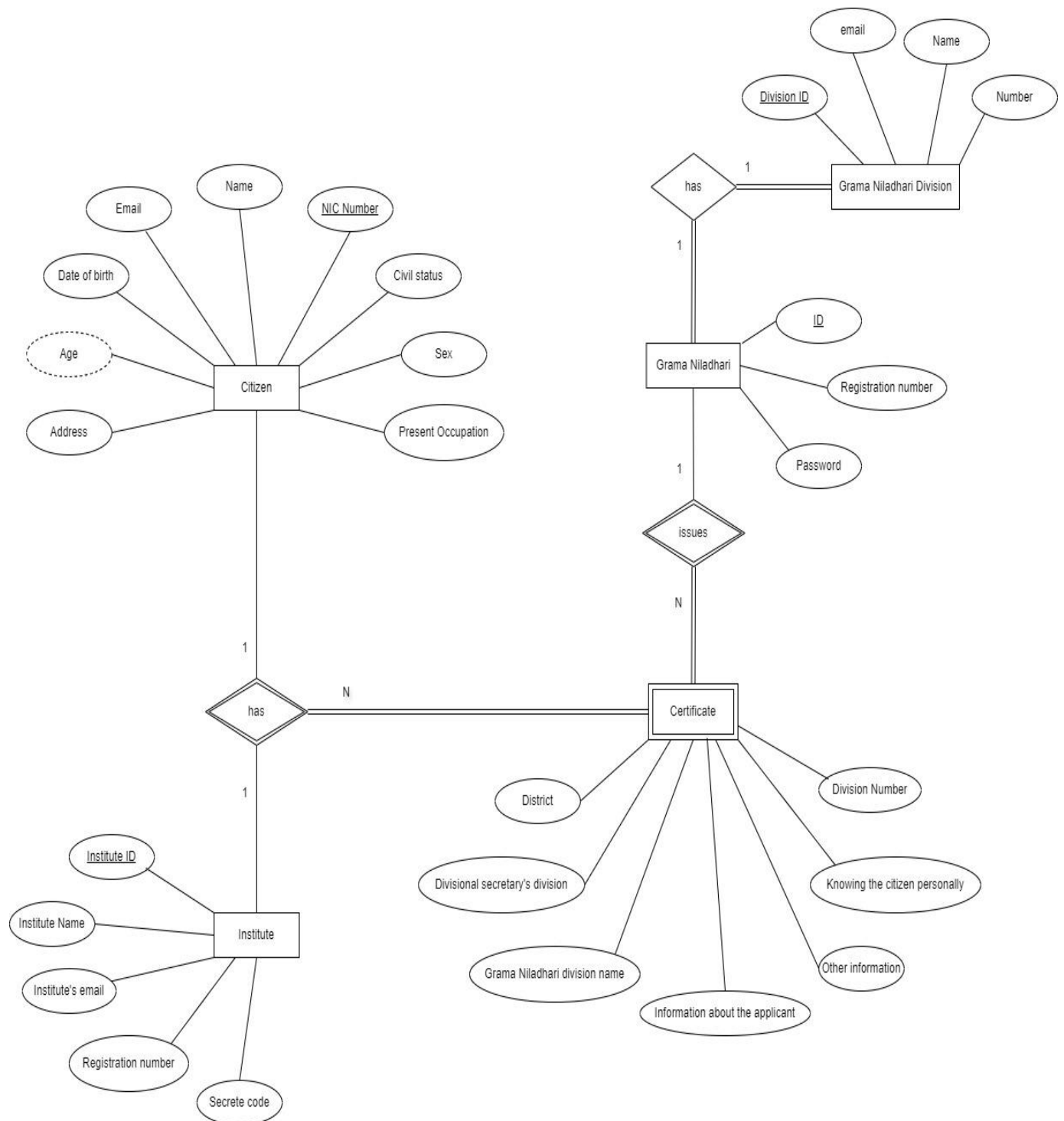
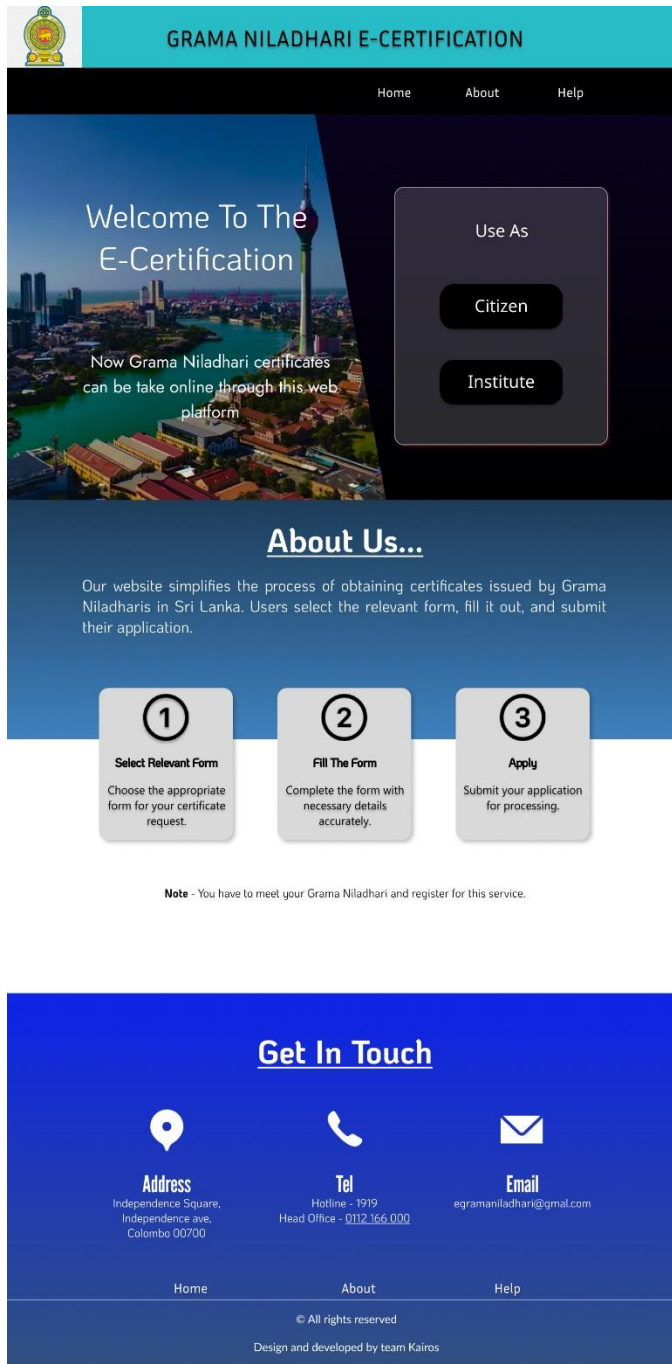


Figure 8 – Entity relationship diagram

5. User Interfaces

5.1 Website Interface



A citizen or institute can apply for Grama Niladhari e-certificate via this webpage. For applying user can select the corresponding form

Figure 9 – Website

Citizen form

<p>NIC Number</p> <input type="text" value="200326052453"/>	<p>Tel No.</p> <input type="text" value="0716502253"/>
<p>Email</p> <input type="text" value="abc@gmail.com"/>	<p>Address</p> <input type="text" value="Home address"/>
<p>Select Your Grama Niladhari Division</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> Select Division ▼ </div>	<p>Passcode</p> <input type="password" value="*****"/>
<p>Reason</p> <div style="border: 1px solid #ccc; padding: 10px; min-height: 60px;"> <p style="text-align: center; color: #ccc;">Describe your purpose for applying this certificate.</p> </div>	
<div style="display: flex; justify-content: center; gap: 10px; margin-top: 10px;"> Apply Clear Back </div>	

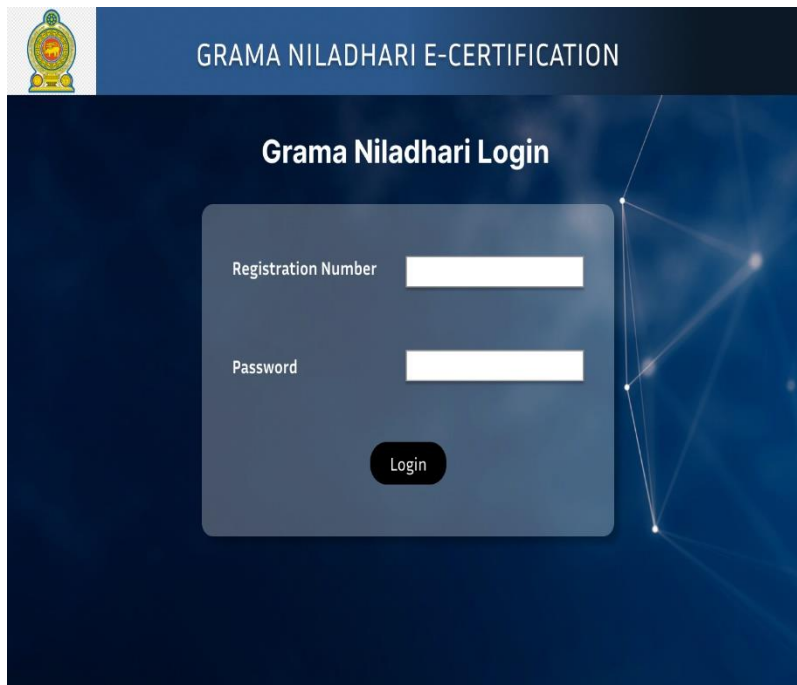
Figure 10 – Citizen application

Institute form

<p>Institute Name</p> <input type="text" value="abc company pvt(Ltd)"/>	<p>Institute Registration No.</p> <input type="text" value="Company Registration"/>
<p>Email</p> <input type="text" value="abc@gmail.com"/>	<p>Secrete Code</p> <input type="text" value="Secrete code for use this service"/>
<p>Select Your Grama Niladhari Division</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> Select Division ▼ </div>	<p>Person's NIC No.</p> <input type="text" value="200326052453"/>
<p>Reason</p> <div style="border: 1px solid #ccc; padding: 10px; min-height: 60px;"> <p style="text-align: center; color: #ccc;">Describe your purpose for applying this certificate.</p> </div>	
<div style="display: flex; justify-content: center; gap: 10px; margin-top: 10px;"> Apply Clear Back </div>	

Figure 11 – Institution application

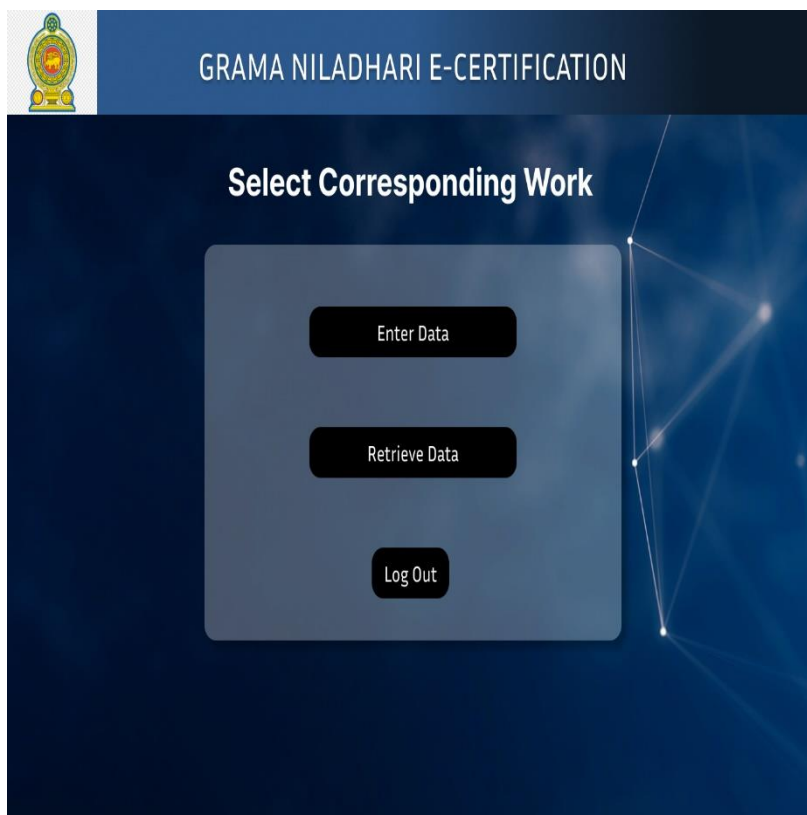
5.2 Grama Niladhari Working Interface



The screenshot shows the 'GRAMA NILADHARI E-CERTIFICATION' header with a logo on the left. Below the header, the title 'Grama Niladhari Login' is centered. The login form consists of two input fields: 'Registration Number' and 'Password', each followed by a white text box. Below these fields is a black button labeled 'Login'.

Here, Grama Niladhari should enter his registration number and password to enter the database from his end.

Figure 12 – Grama Niladhari system login



The screenshot shows the 'GRAMA NILADHARI E-CERTIFICATION' header with a logo on the left. Below the header, the title 'Select Corresponding Work' is centered. The work selection form consists of three black buttons: 'Enter Data', 'Retrieve Data', and 'Log Out', arranged vertically.

After entering the system, Grama Niladhari officer should select the relevant tasks. Entering new personal data into the system or searching data related to issuing certificates should be selected according to the task.

Figure 13 – Grama Niladhari work selection

Data Enter Form

Division and divisional secretary office <input type="text"/>		Grama Niladhari division and number <input type="text"/>	
Applicant is personally known <input type="text"/>	If so, since when <input type="text"/>	Sex <input type="text"/>	Age <input type="text"/>
Applicant's name with address <input type="text"/>		Civil status <input type="text"/>	Religion <input type="text"/>
Is Sri Lankan citizen <input type="text"/>	Present occupation <input type="text"/>	Period of resident village <input type="text"/>	Period of resident division <input type="text"/>
NIC Number <input type="text"/>	ID Issue date <input type="text"/>	Father's name and address <input type="text"/>	
Evidence for residence <input type="text"/>	Convicted by court of law <input type="text"/>	Community works <input type="text"/>	
His/her Character <input type="text"/>	Other informations <input type="text"/>		
Electoral register details <input type="text"/>	Upload a png of signature <input type="text"/>		

Personal data can be entered into the system by filling this form

Figure 14 – Form for enter personal data to system

GRAMA NILADHARI E-CERTIFICATION

Search Personal Data


NIC Number

Passcode

This page can be used to search for personal data. The person's filled data form can be accessed using the NIC number and passcode given in registration.

Figure 15 – Search interface

Personal Data

Division and divisional secretary office		Grama Niladhari division and number	
<input type="text" value="Gampha, Kadawatha"/>		<input type="text" value="181 Kadwatha"/>	
Applicant is personally known	If so, since when	Sex	Age
<input type="text" value="Yes"/>	<input type="text" value="2 Years"/>	<input type="text" value="Male"/>	<input type="text" value="23 Years"/>
Applicant's name with address		Civil status	Religion
<input type="text" value="ABC Perera No:45, ABC road, Kadwatha"/>		<input type="text" value="Single"/>	<input type="text" value="Catholic"/>
Is Sri Lankan citizen	Present occupation	Period of resident village	Period of resident division
<input type="text" value="Yes"/>	<input type="text" value="Teacher"/>	<input type="text" value="23 Years"/>	<input type="text" value="23 Years"/>
NIC Number	ID Issue date	Father's name and address	
<input type="text" value="2001255803744"/>	<input type="text" value="4/05/2018"/>	<input type="text" value="NM Perera. No:45, ABC road, Kadwatha."/>	
Evidence for residence	Convicted by court of law	Community works	
<input type="text" value="Have"/>	<input type="text" value="No"/>	<input type="text" value="Good"/>	
His/her Character	Other informations		
<input type="text" value="Very good"/>	<input type="text" value="Include if have"/>		
Electoral register details		Reason for applying	
<input type="text" value="Registered for 2018"/>		<input type="text" value="To the applying job"/>	
Person's signature			
			

[<Back](#)

After providing the correct details of the registered person, the personal data file in the system will appear. It can automatically prepare Grama Niladhari e-certificate.

Figure 16 – Personal data form

You can access to the Figma UI using this link -

<https://www.figma.com/file/79EhUTawrjylnAisAgU2KZ/Grama-Niladhari?type=design&node-id=0%3A1&mode=design&t=pVmHcSV1JZy6C2H0-1>