

# VACCINATION CARE

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## UNDERGRADUATE PROJECT

Submitted in partial fulfillment of the requirements of software

Engineering project for the degree of

B.Sc Engg. in CSE

By

UNDER SUPERVISION OF:

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BANGLADESH UNIVERSITY OF BUSINESS

&

TECHNOLOGY(BUBT)

Dhaka-1216

November 2020

# VACCINATION CARE

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# Declaration of Authorship

We, **Md.Hafizuddin Raju, Md.Imriaz Uddin, Shajnin Hossain** declare that this project titled, "**Vaccination Care**" and the work presented in it our own. We confirm that:

- This work was done wholly or mainly while in candidature for a B.Sc Engineering in CSE degree at this University.
- Where any part of this software development project has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
- Where we have consulted the published work of others, this is always clearly attributed.
- Where we have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely our own work.
- We have acknowledged all main sources of help.
- Where the thesis is based on work done by us, We have made clear exactly what was done by us.

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# Certificate

This is to certify that the project entitled," Vaccination Care" and submitted by **Md.Hafizuddin Raju,Md.Imriaz Uddin, Shajnin Hossain** ID No. 17182103178,17182103147, 17182103171 in partial fulfillment of the requirements of   embodies the work done by them under my supervision.

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## **Dedication**

*Dedicated to our parents for all their love and inspiration.*

## *Abstract*

The Vaccination Care deals with all kinds of vaccine details to help a people/a children guardians to find his/her children's vaccine date some place of vaccination center. It's has also a reminder types website for update guardian time to time vaccine date by sending notification manual call to the guardians.

# *Acknowledgements*

First of all, we are thankful and expressing our gratefulness to Almighty Allah who offers us His divine blessing, patient, mental and physical strength to complete this project work.

We are deeply indebted to our project supervisor Dr. Kamruddin Md. Nur, Associate Professor and Chairman, Department of Computer Science and Engineering (CSE), Bangladesh University of Business and Technology (BUBT). His scholarly guidance, important suggestions, work for going through our drafts and correcting them, and generating courage from the beginning to the end of the research work has made the completion of this thesis possible.

A very special gratitude goes out to all our friends for their support and help to implement our works. The discussions with them on various topics of our works have been very helpful for us to enrich our knowledge and conception regarding the work.

Last but not the least; we are highly grateful to our parents and family members for supporting us spiritually throughout writing this thesis and our life in general.

# *Approval*

This project “**Vaccination Care**” Submitted by **Md. Hafizuddin Raju , Md. Imriaz Uddin, Shajnin Hossain**

ID:**17182103178, 17182103147, 17182103171** Department of Computer Science and Engineering (CSE), Bangladesh University of Business and Technology (BUBT) under the supervision of **Dr. Kamruddin Md. Nur** Associate Professor and Chairman Department of Computer Science and Engineering has been accepted as satisfactory for the partial fulfillment of the requirement for the degree of Bachelor of Science (B.Sc. Engg.) in Computer Science and Engineering and approved as to its style and contents.

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# Chapter 1

## Introduction

### 1.1 Introduction

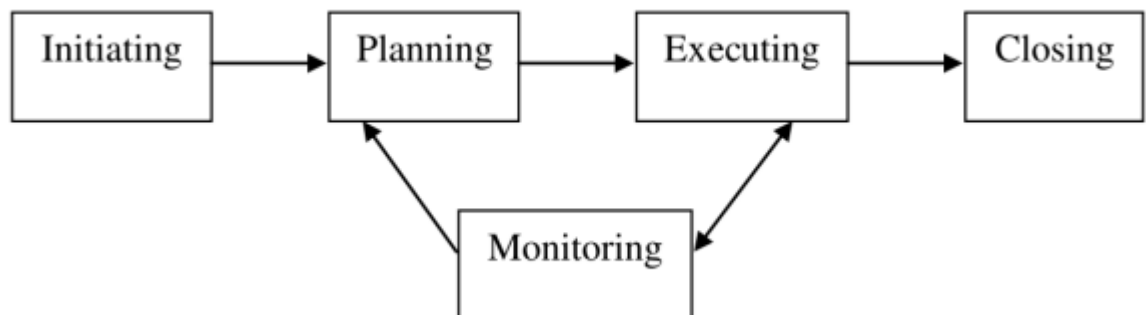
In a common problem to our guardian, they somehow forget about their children's vaccination time that's why we want to make a website based software which is reminder our parents about their children's vaccination time suggests them the nearest healthcare place vaccinate their children. We always remind them to send a reminder SMS to the guardian's mobile number.

## Chapter 2

# Project Review

### 2.1 Project Database

Project management skills are put to good use for this project. Having gone through project management modules in Time Series Analysis, Optimization and with two interns Project Management for Business and IT respectively, they enhanced my knowledge on managing a project. Project management focuses on achieving the objectives by applying five processes presented in Figure below.



---

FIGURE 2.1: Project Development Phases

### 2.2 Vaccination Care

There are many websites about Vaccination but the maximum is promotional systems that's why we create a website about all types of vaccine help for a Child. The Vaccination care deals with all kinds of Vaccination activity to help a Child from Guardian.

## 2.3 Vaccination Database and Database Management System

A database is an integrated collection of data, usually so large that it has to be stored on secondary storage devices such as disks or tapes. This data can be maintained as a collection of operating system files, or stored in a DMS (database management system). A Database Management System (DMS) is computer software designed for the purpose of managing databases based on a variety of data models. A DMS is a complex set of software programs that controls the organization, storage, management, and retrieval of data in a database. DBMS are categorized according to their data structures or types, sometime DMS is also known as Database Manager. It is a set of pre written programs that are used to store, update and retrieve a Database. When a DMS is used, information systems can be changed much more easily as the organization's information requirements change. New categories of data can be added to the database without disruption to the existing system. Organizations may use one kind of DMS for daily transaction processing and then move the detail onto another computer that uses another DMS better suited for random inquiries and analysis.

### Advantages of DMS

- Improved strategic use of corporate data
- Reduced complexity of the organization's information systems environment
- Reduced data redundancy and inconsistency
- Enhanced data integrity
- Application-data independence
- Improved security
- Reduced application development and maintenance costs
- Improved flexibility of information system
- Increased access and availability of data and information
- Logical Physical data independence
- Concurrent access anomalies.
- Facilitate atomized problem.
- Provides central control on the system through DBA.

## 2.4 Vaccination Records/Data Management

### **ER-Diagrams Definition:**

They provide a way to pictorially depict the entities, attributes and relationships.

These are also called semantic networks. There are three elements of the ER-Diagram –Entities are represented by labeled rectangles. The label is the name of the entity.

Attributes are represented by oval boxes and contain the name of the entity.

Relationships are represented by a diamond connected to the two entities using solid lines (cardinality of many is represented by an infinity sign, cardinality of 1 is represented by a 1)

Weak entities are represented by a rectangle curved at the corners and the relationship triangle curved at the corners.

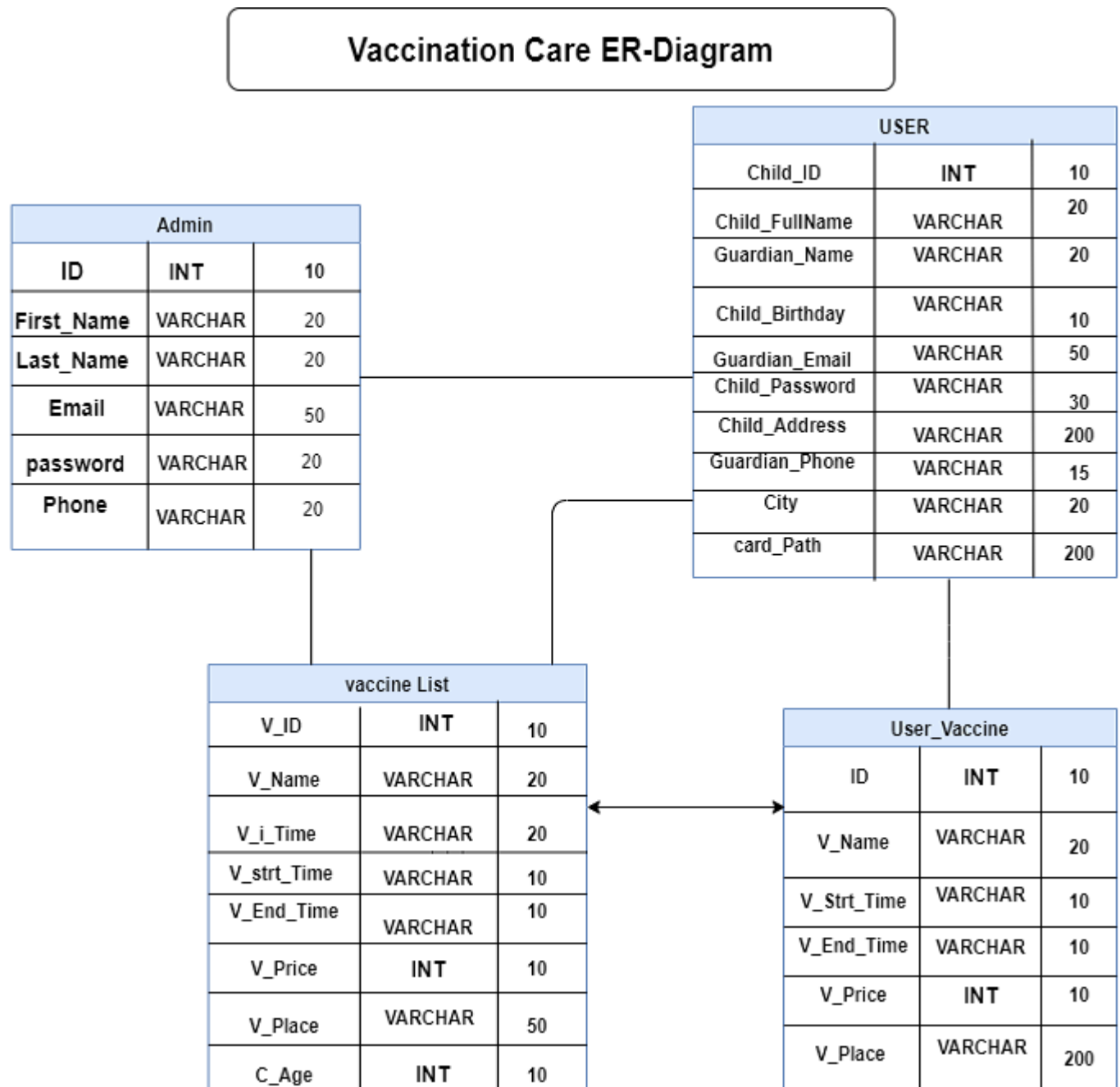


FIGURE 2.2: E-R Diagrams

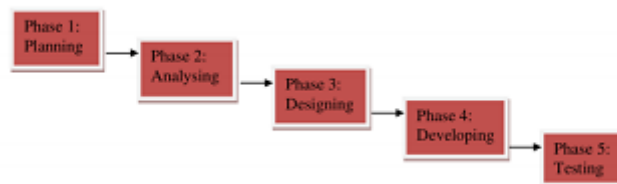


## Chapter 3

# Resources

### 3.1 System Development lyfe cycle

Systems Development Life Cycle (SDLC) is the most common process adopted to develop a project and not surprisingly, this project is following this model too. To be precise, waterfall model is being applied. Waterfall model is a sequential model process where the input of a phase actually results from the previous phase.



---

FIGURE 3.1: SDLC Phases

There are five phases in this model and the first phase is the planning stage. The planning stage determines the objectives of the project and whether the project should be given the green light to proceed. This is where the proposal submission comes into picture. After obtaining the approval, the next phase is analysis. Gathering and analysing the system and user requirements is essential for entry to the design step.

With the user requirements gathering completed, there is a need to prepare the resources for the project. Be it software or hardware components, careful consideration and selection is to be taken care at this stage. The decision on the appropriate resources to be used is further elaborated under the subsections below. The next step is to design the system and database structure.

Results from the analysis and preparation that were concluded from the previous stage are put into action. With the user requirements in mind, the flow of the system is planned and the user interface is designed to suit their easy navigation needs. In addition, the number of tables, attributes, primary and unique keys of the database is listed.

After completing the design, actual coding begins. Database is created and codes are written. Some of the codes required amendments and improvement to it so these are being developed at this fourth stage of the waterfall model. With the development completed, testing will begin. The codes and database are tested to ensure the results obtained are as intended. More time is spent on both development and testing stages because it is inevitable to have errors and issues and buffer time is allocated for troubleshooting.

**You will get the complete details of methodology and scripting language that we use to develop the project in chapter 4.**

# Chapter 4

## Methodology

### 4.1 Technology Tools

#### 4.1.1 Hardware Technology:

- Computer
- Processor: Intel Pentium dual-core or more
- RAM: 2GB(minimum)
- Hard disk: 128GB(minimum)

#### 4.1.2 Software Technology:

- Operating system: windows 7 or more
- VS Code
- Xampp
- My SQL

#### 4.1.3 Tools:

- Internet Browser
- Designing Tools: HTML, CSS, Bootstrap, PHP, JS

## 4.2 Model Diagram

### 4.2.1 User Requirements

- Laptop/Desktop
- Internet
- Internet Browser
- 512mb ram or higher
- Operating System(Linux,Windows,Mac)

### 4.2.2 Use Case Diagram

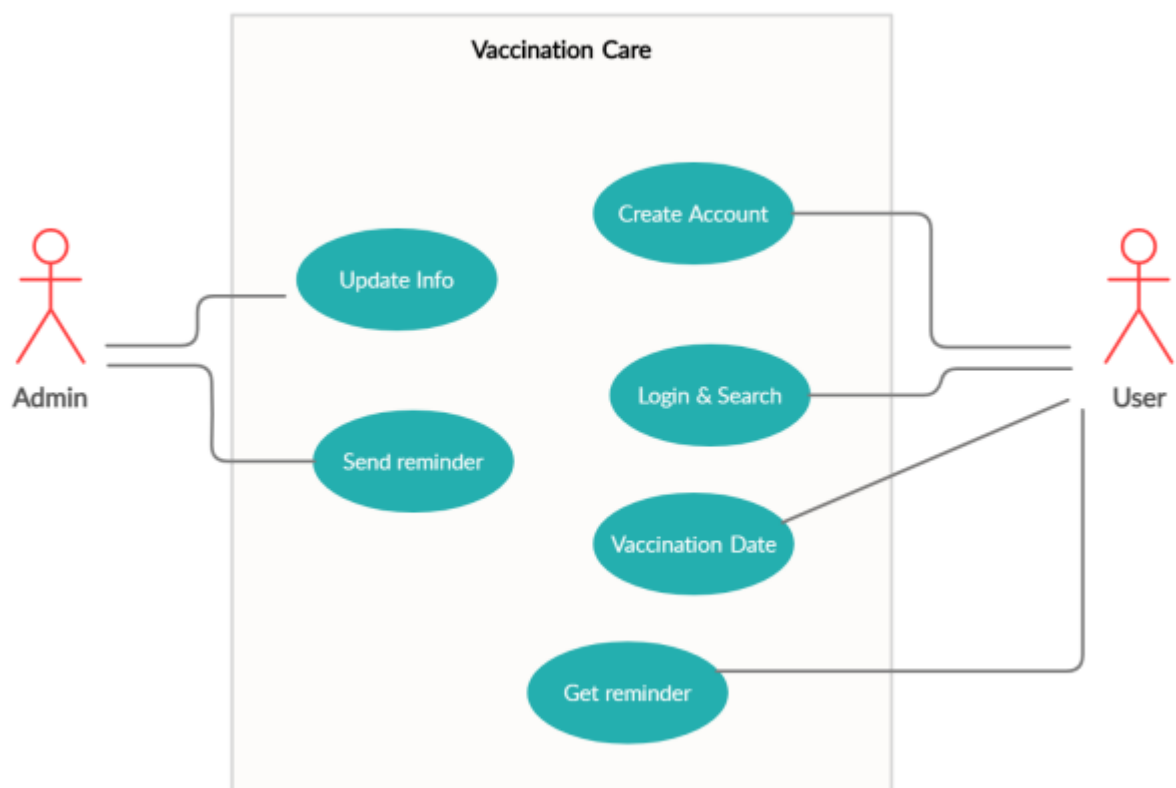


FIGURE 4.1: Use Case Diagram

## 4.3 Database Schema

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> admin	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16 KiB	-
<input type="checkbox"/> child	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16 KiB	-
<input type="checkbox"/> feedback	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16 KiB	-
<input type="checkbox"/> user_vaccine	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	32 KiB	-
<input type="checkbox"/> vaccinelist	★ Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_general_ci	16 KiB	-
5 tables	Sum	8	InnoDB	utf8mb4_general_ci	96 KiB	0 B

FIGURE 4.2: Design of Database

+ Options							
		ID	FirstName	LastName	Email	Password	Phone
<input type="checkbox"/>	Edit Copy Delete	1	Hafiz	Raju	hafizraju.cse.bubt@gmail.com	raju	01721882758
<input type="checkbox"/>	Edit Copy Delete	2	Md. Imriaz	Uddin	imriaz.cse.bubt@gmail.com	imriaz	01521227844
<input type="checkbox"/>	Edit Copy Delete	3	Shajnin	Hossain	shajnin@gmail.com	shajnin	01627302009
<input type="checkbox"/> Check all    With selected:    Edit    Copy    Delete    Export							

FIGURE 4.3: Design of Admin Database

child_ID	child_FullName	Guardian_Name	child_birthday	Guardian_Email	child_Password	child_Address	Guardian_Phone	child_city
0	Shaj	Shajnin Hossain	2020-10-13	shajnin@gmail.com	shajnin	Gopalganj	+8801627302009	Gopalganj
10001	Eman	Md. Imriaz	04-10-2030	md.imriaz@gmail.com	imriaz	Mukim Sarang Bari, Gachbaria, Mirsarai, Chittagong	+8801647446111	Chittagong
0	Hafizuudin	Raju	2020-11-03	hafizraju@gmail.com	raju	Barishal	+8801754844595	Barishal
0	Saikot	Saifullah Mansur	2020-10-30	saikot@gmail.com	saikot	Kustia	+880874545580	Kustia

FIGURE 4.4: Design of Child Database

V_ID	V_name	Guardian_Phone	V_strt_time	V_Dose	V_price	V_place
1	Hepa-B	+8801647446111	2020-11-09	2	500	mirpur10
2	Polio Vaccination	+8801754844595	2020-09-03	1	0	Barishal
3	Polio Vaccination	+8801754844595	2020-11-09	2	0	Dhaka
4	Yellow Fever	+8801874545580	2020-11-08	1	500	Kustia

FIGURE 4.5: Design of User Vaccine Database

+ Options									
← T →		V_ID	V_name	V_i_time	V_e_time	V_price	V_place	V_dose	
<input type="checkbox"/>	Edit  Copy  Delete	0	Cholera	2	4	500	Dhaka, Chittagong, Barishal	2	
<input type="checkbox"/>	Edit  Copy  Delete	0	Hepa-B	30	70	1000	Dhaka, Barishal, Savar	5	
<input type="checkbox"/>	Edit  Copy  Delete	0	Influenza	1	2	100	Dhaka, Barishal, Savar	2	
<input type="checkbox"/>	Edit  Copy  Delete	0	Polio Vaccination	2 month	6 Year	0	Dhaka, Chittagong, Barishal, Gopalganj	4	
<input type="checkbox"/>	Edit  Copy  Delete	0	Yellow Fever	1	2	500	Dhaka, Barishal, Savar	2	
↑	<input type="checkbox"/> Check all	With selected:		Edit	Copy	Delete	Export		

FIGURE 4.6: Design of Vaccine List Database

## Chapter 5

# System Analysis & Architectural Design

### 5.1 System User Analysis

The **Vaccination care** has One types of user and they can access the system.

- Administrator.

#### 5.1.1 ADMINISTRATOR:

Like another system in this system administrator also can access all modules.They can create record,view all child record and update or modify record.But create,update and delete options access is only under them.Any second party couldn't get access this options.

### 5.2 Architectural Design

The VC is system which has major components such as CREATE RECORD,SHOW Child RECORD, CREATE ADMIN USER, SEARCH RECORD and Others detail. Perform specific statement for specific user, Admin can create child On, add their Disease . The administrator has automatic access right to manage and maintain Child detail.

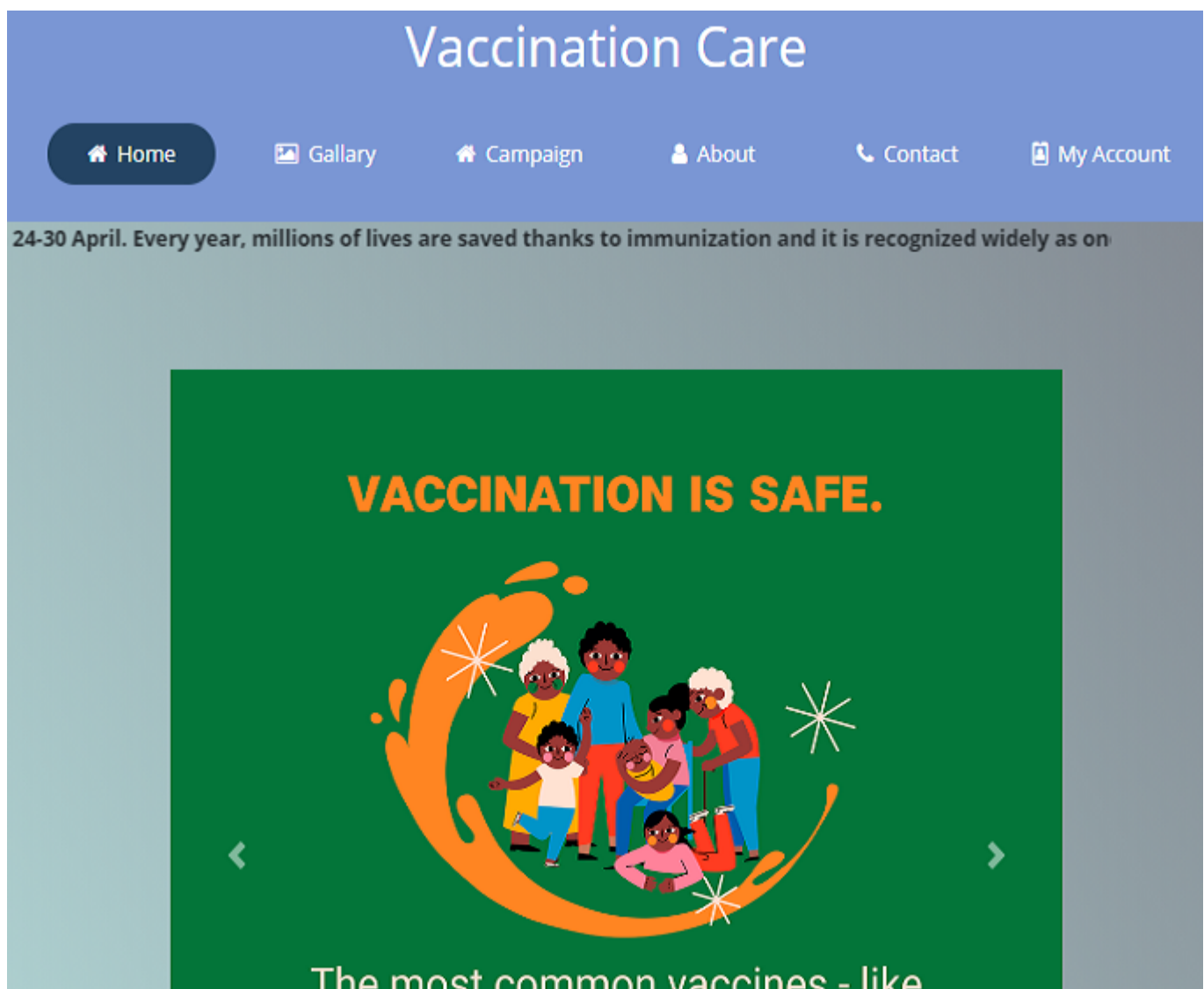


FIGURE 5.1: Design of Home page



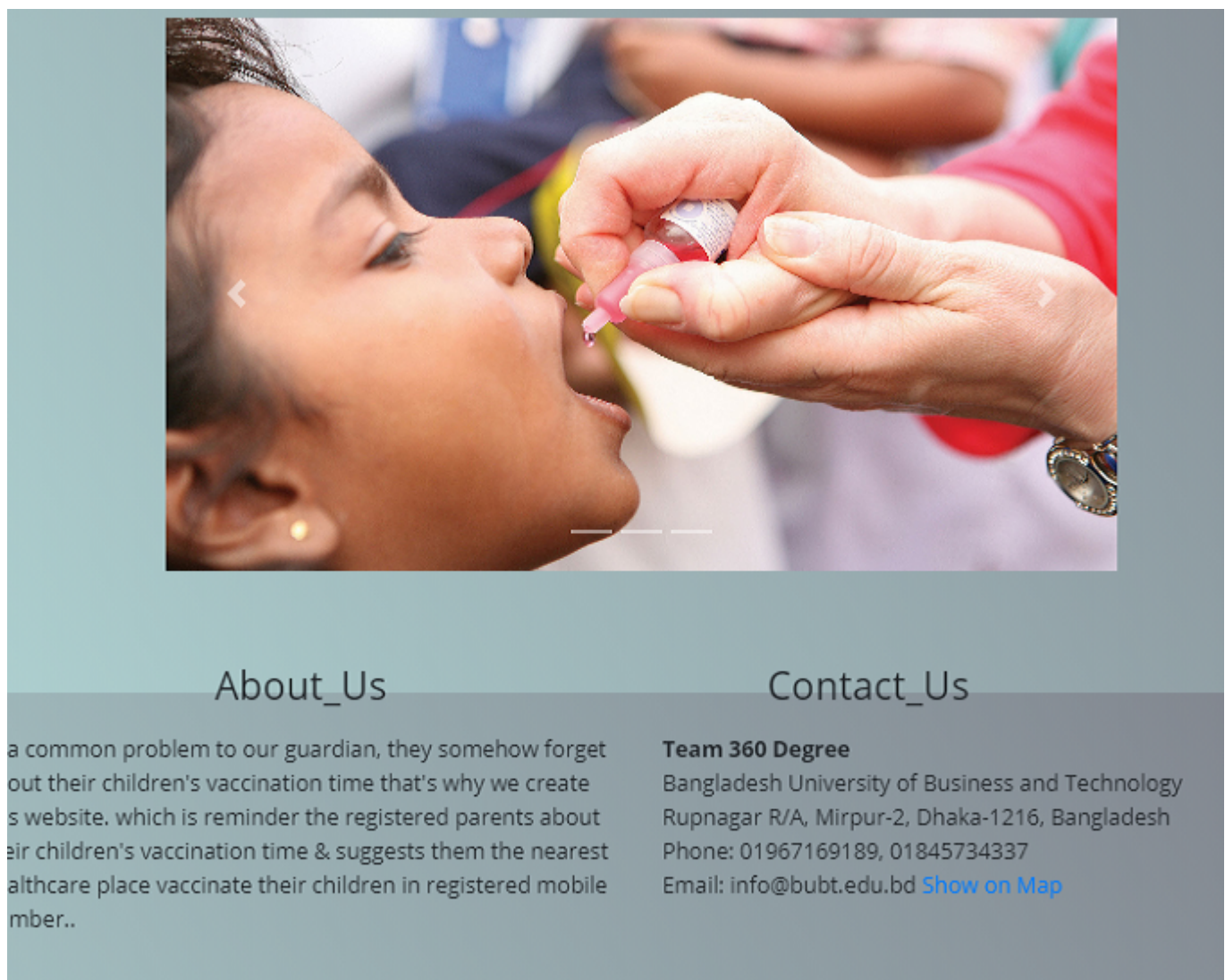
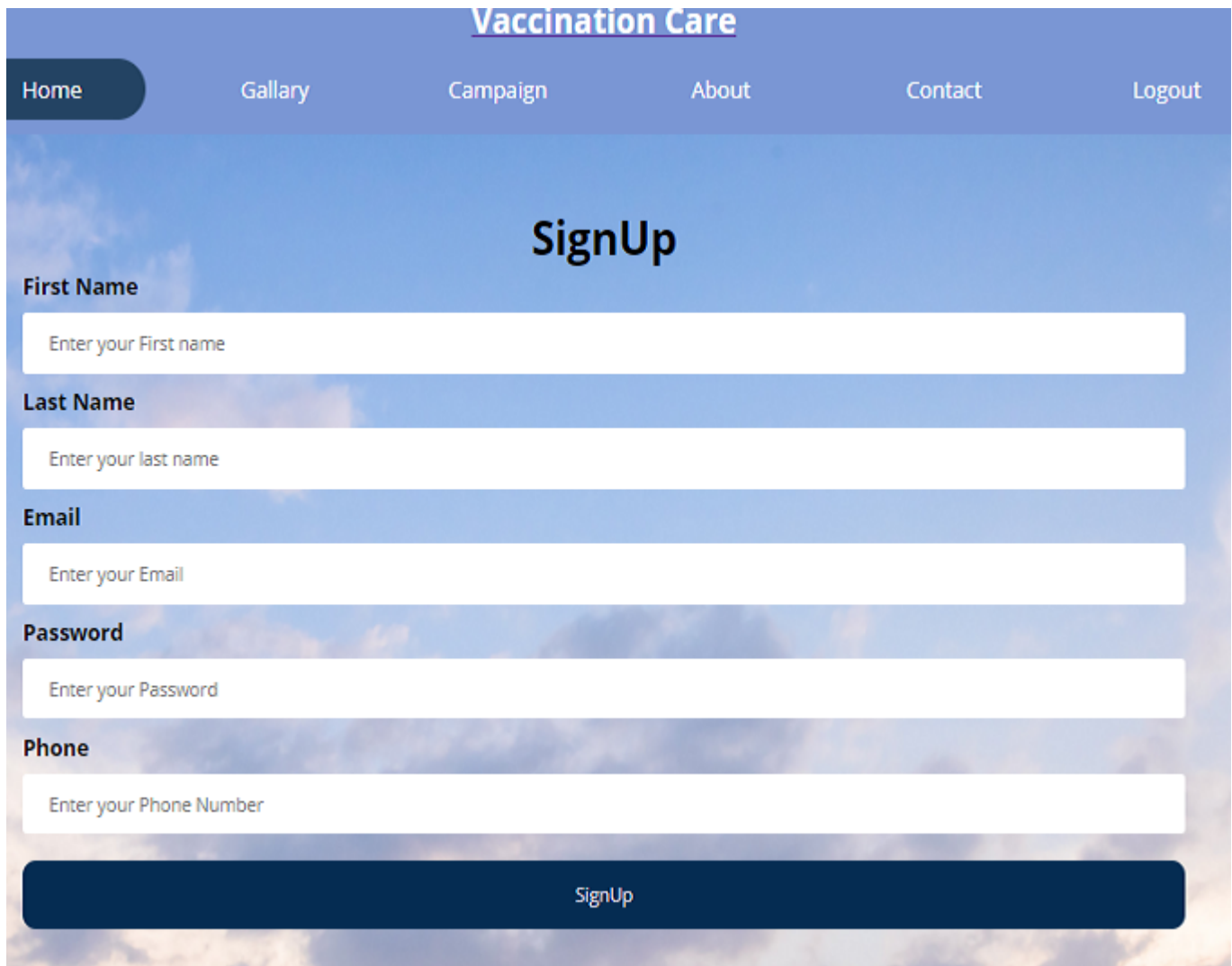


FIGURE 5.2: Design of Home page



The image shows a web form titled "SignUp" for an application called "Vaccination Care". The form is set against a background of a blue sky with white clouds. At the top, there is a dark blue navigation bar with the text "Vaccination Care" in white, underlined. Below this bar is a horizontal menu with six items: "Home", "Gallary", "Campaign", "About", "Contact", and "Logout". The "Home" item is highlighted with a dark blue background. The main content area has a large "SignUp" title in bold black text. Below the title are five input fields, each with a label in bold black text and a placeholder text in gray: "First Name" (placeholder: "Enter your First name"), "Last Name" (placeholder: "Enter your last name"), "Email" (placeholder: "Enter your Email"), "Password" (placeholder: "Enter your Password"), and "Phone" (placeholder: "Enter your Phone Number"). At the bottom of the form is a dark blue button with the text "SignUp" in white.

**Vaccination Care**

Home Gallary Campaign About Contact Logout

## SignUp

**First Name**  
Enter your First name

**Last Name**  
Enter your last name

**Email**  
Enter your Email

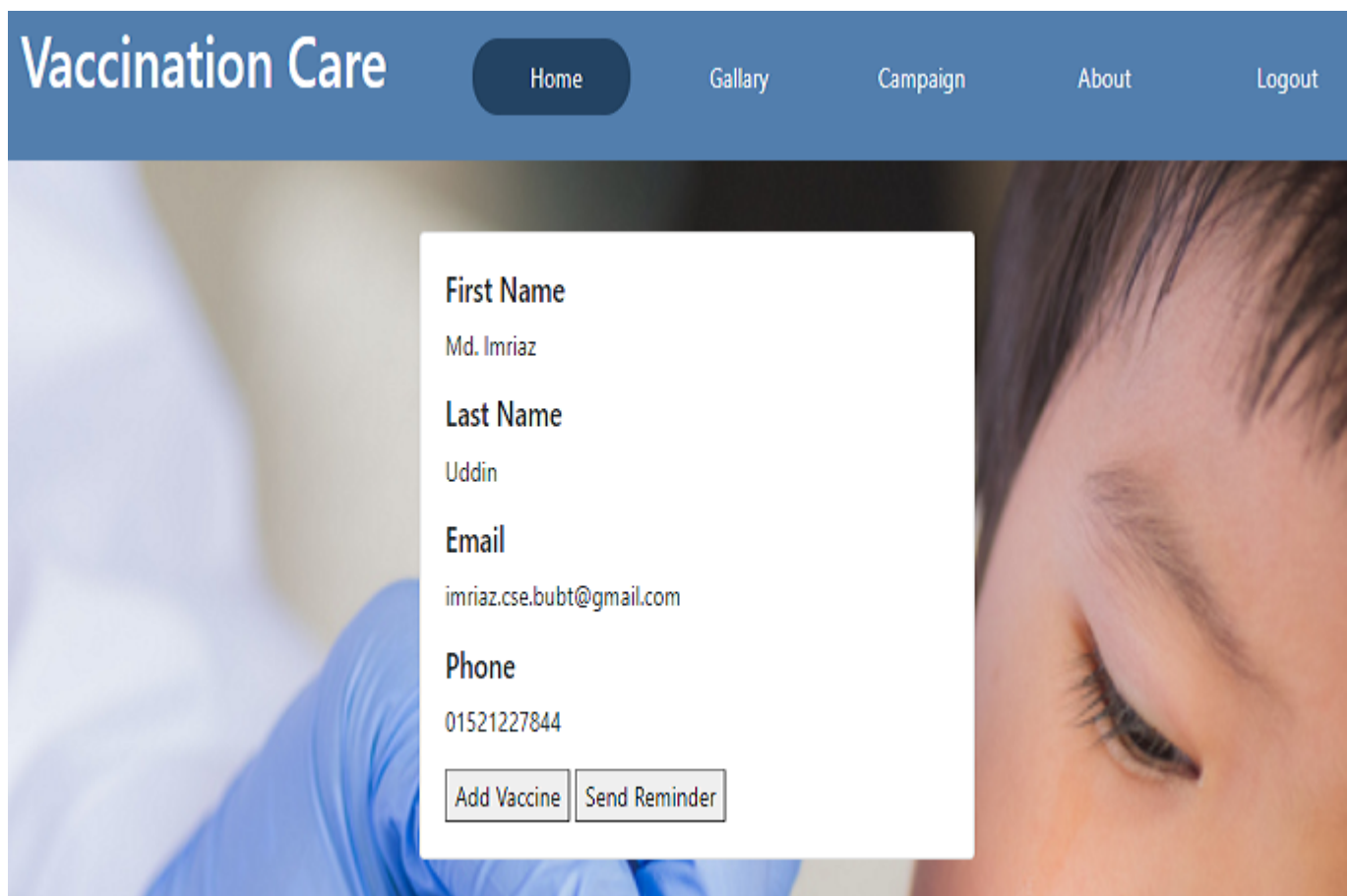
**Password**  
Enter your Password

**Phone**  
Enter your Phone Number

SignUp

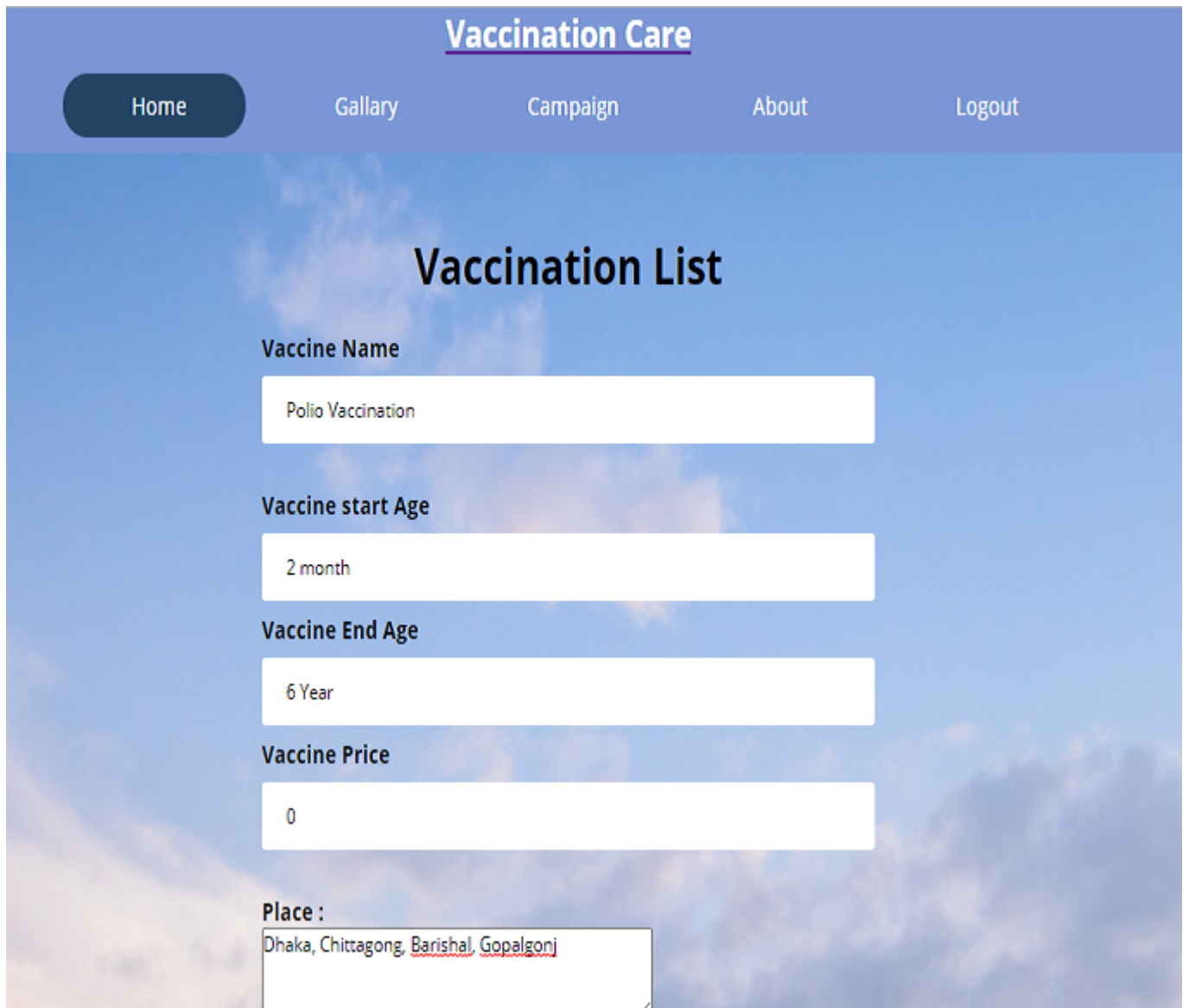
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FIGURE 5.3: Design of Admin Sign Up



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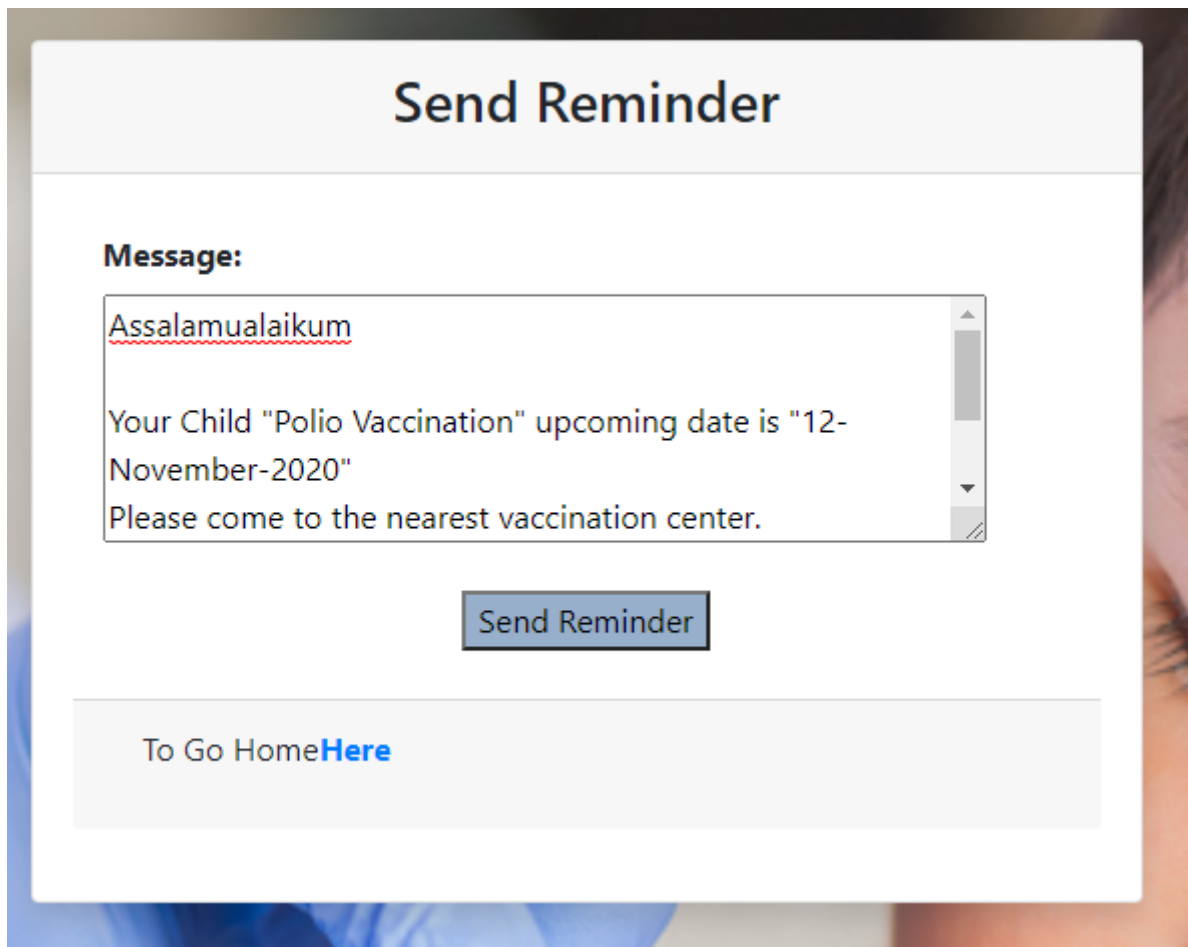
FIGURE 5.4: Design of Admin Login Profile



The screenshot displays a web application titled "Vaccination Care" with a navigation bar containing links for Home, Gallery, Campaign, About, and Logout. The main content area, titled "Vaccination List", contains a form for updating vaccine information. The form fields are as follows:

Field Label	Value
Vaccine Name	Polio Vaccination
Vaccine start Age	2 month
Vaccine End Age	6 Year
Vaccine Price	0
Place :	Dhaka, Chittagong, Barishal, Gopalganj

FIGURE 5.5: Design of Admin Vaccine Update

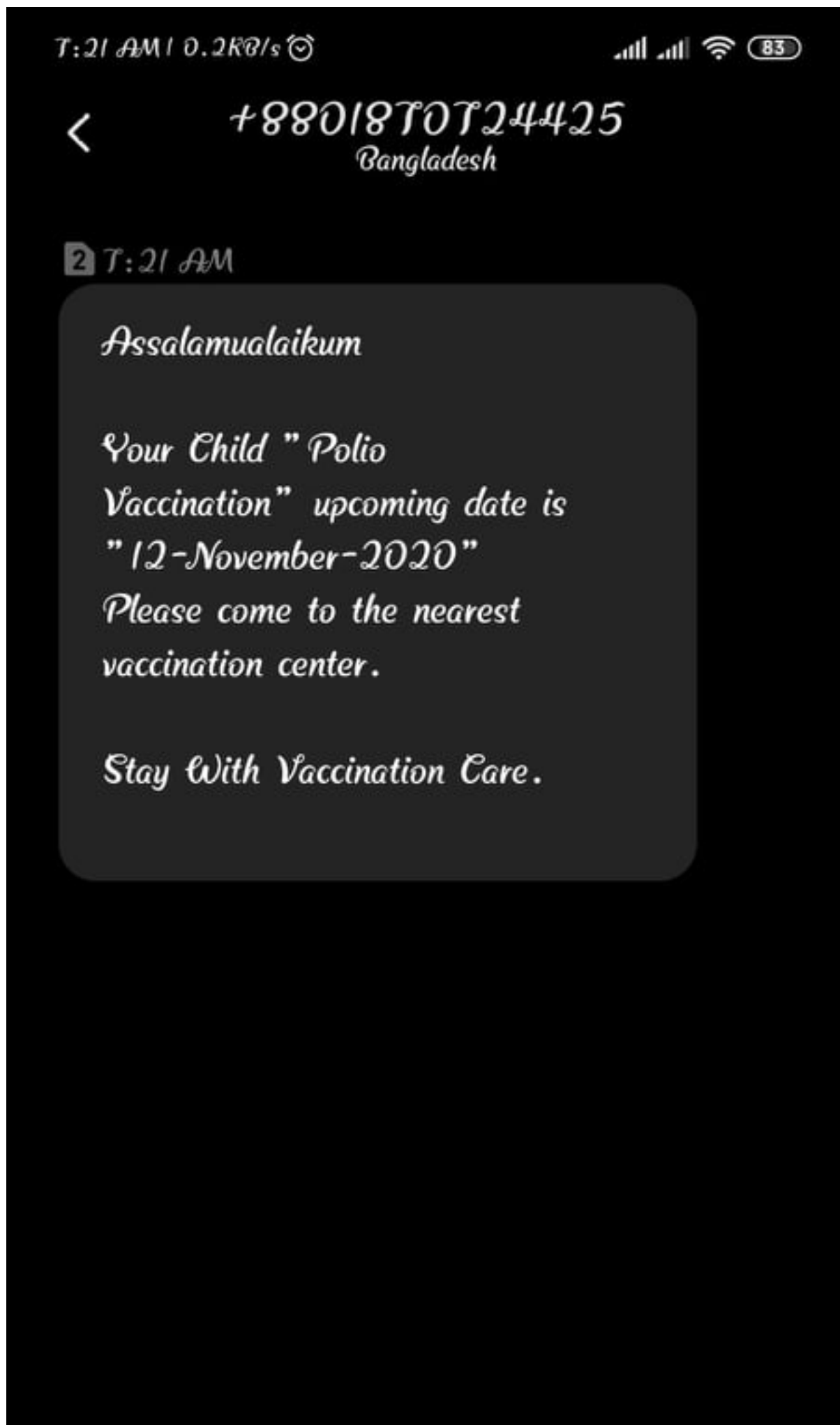


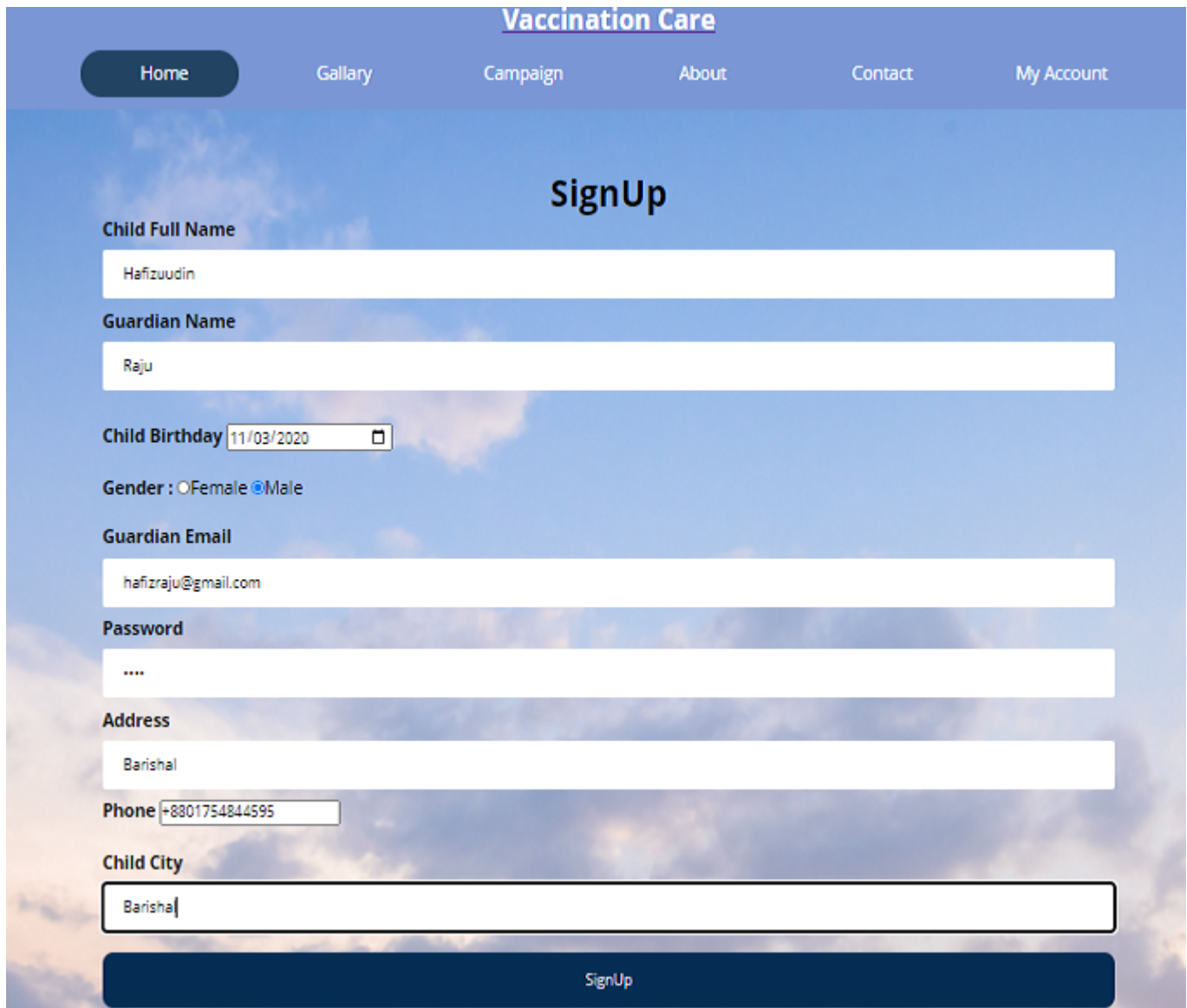
The screenshot shows a web form titled "Send Reminder". It features a "Message:" label above a text area containing the text: "Assalamualaikum  
Your Child "Polio Vaccination" upcoming date is "12-November-2020"  
Please come to the nearest vaccination center." Below the text area is a "Send Reminder" button. At the bottom, there is a link "To Go Home [Here](#)".

FIGURE 5.6: Design of Admin Send Reminder

Ok: SMS Sent Successfully To +8801874545580  
Ok: SMS Sent Successfully To +8801754844595  
Ok: SMS Sent Successfully To +8801647446111  
Ok: SMS Sent Successfully To +8801627302009

FIGURE 5.7: Design of Send Reminder





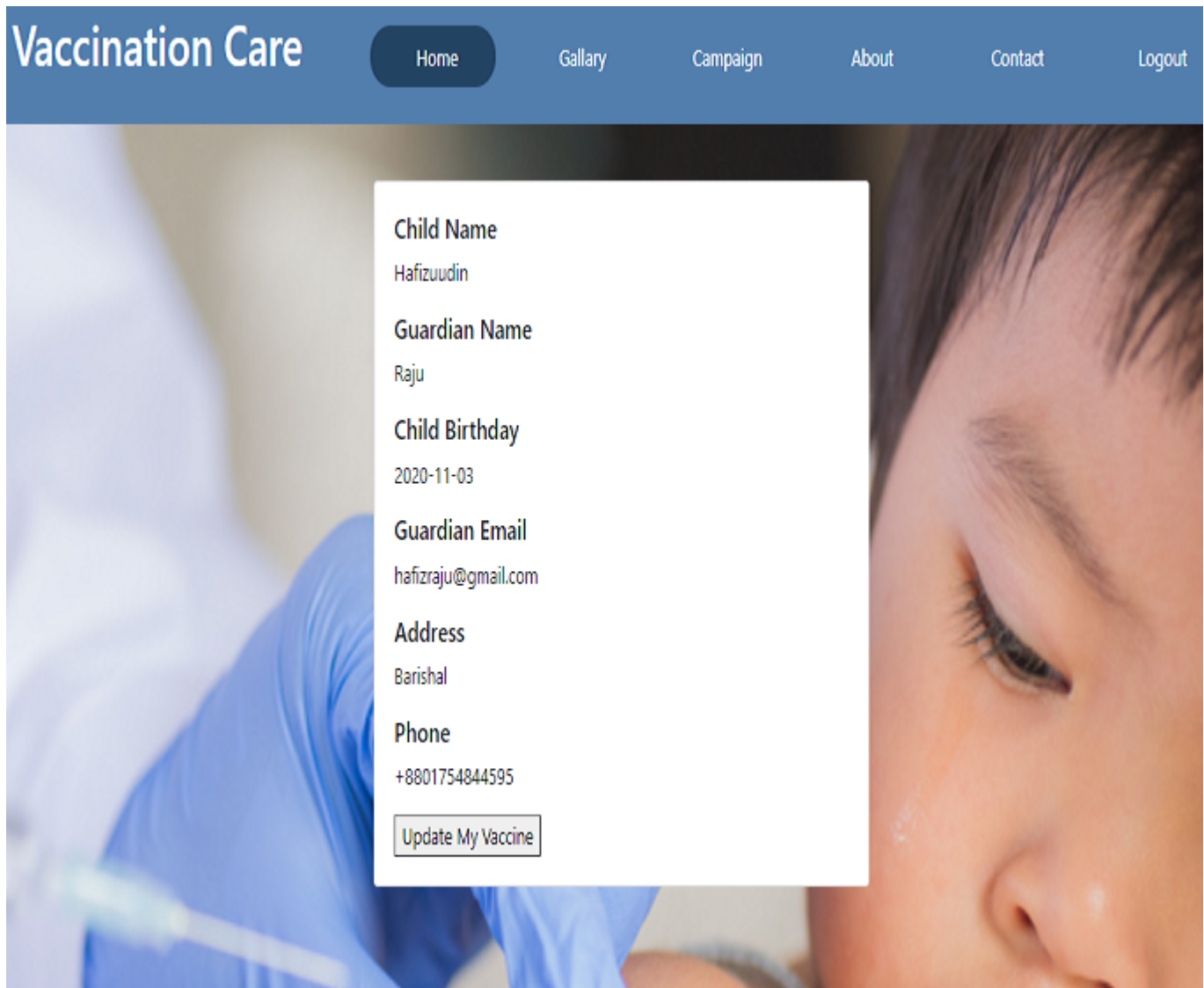
The image shows a web form titled "Vaccination Care" with a navigation bar containing links: Home, Gallery, Campaign, About, Contact, and My Account. The main heading is "SignUp". The form fields are as follows:

Field Label	Value
Child Full Name	Hafizuudin
Guardian Name	Raju
Child Birthday	11/03/2020
Gender	Female (selected), Male
Guardian Email	hafizraju@gmail.com
Password	****
Address	Barishal
Phone	+8801754844595
Child City	Barisha

A "SignUp" button is located at the bottom of the form.

FIGURE 5.9: Design of Child Sign Up





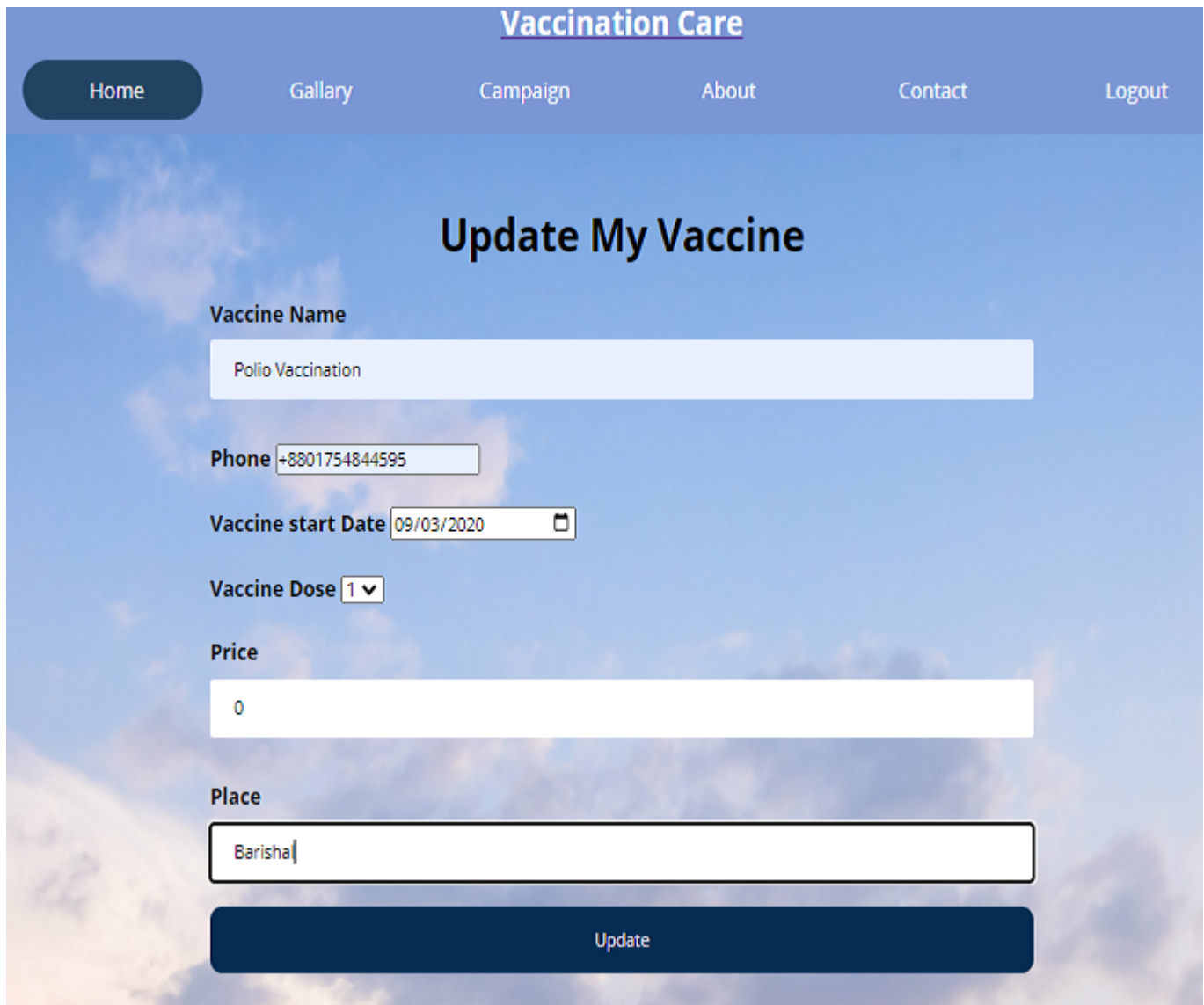
The screenshot shows a web application titled "Vaccination Care". The navigation bar includes links for Home, Gallery, Campaign, About, Contact, and Logout. The main content area features a user profile form overlaid on a background image of a child's face and a medical professional in blue gloves. The form contains the following fields:

Field Label	Value
Child Name	Hafizuudin
Guardian Name	Raju
Child Birthday	2020-11-03
Guardian Email	hafizraju@gmail.com
Address	Barishal
Phone	+8801754844595

At the bottom of the form is a button labeled "Update My Vaccine".

FIGURE 5.10: Design of User Profile





The image shows a web application interface for updating vaccine information. At the top, there is a dark blue navigation bar with the title "Vaccination Care" in white. Below the title, there are six navigation buttons: "Home", "Gallery", "Campaign", "About", "Contact", and "Logout". The main content area has a light blue background with a subtle cloud pattern. The title "Update My Vaccine" is centered in a large, bold, black font. Below the title, there are several form fields: "Vaccine Name" with a light blue input field containing "Polio Vaccination"; "Phone" with a light blue input field containing "+8801754844595"; "Vaccine start Date" with a light blue input field containing "09/03/2020" and a calendar icon; "Vaccine Dose" with a dropdown menu showing "1"; "Price" with a light blue input field containing "0"; and "Place" with a light blue input field containing "Barisha". At the bottom, there is a dark blue button labeled "Update".

**Vaccination Care**

Home Gallery Campaign About Contact Logout

## Update My Vaccine

**Vaccine Name**

Polio Vaccination

**Phone** +8801754844595

**Vaccine start Date** 09/03/2020

**Vaccine Dose** 1

**Price**

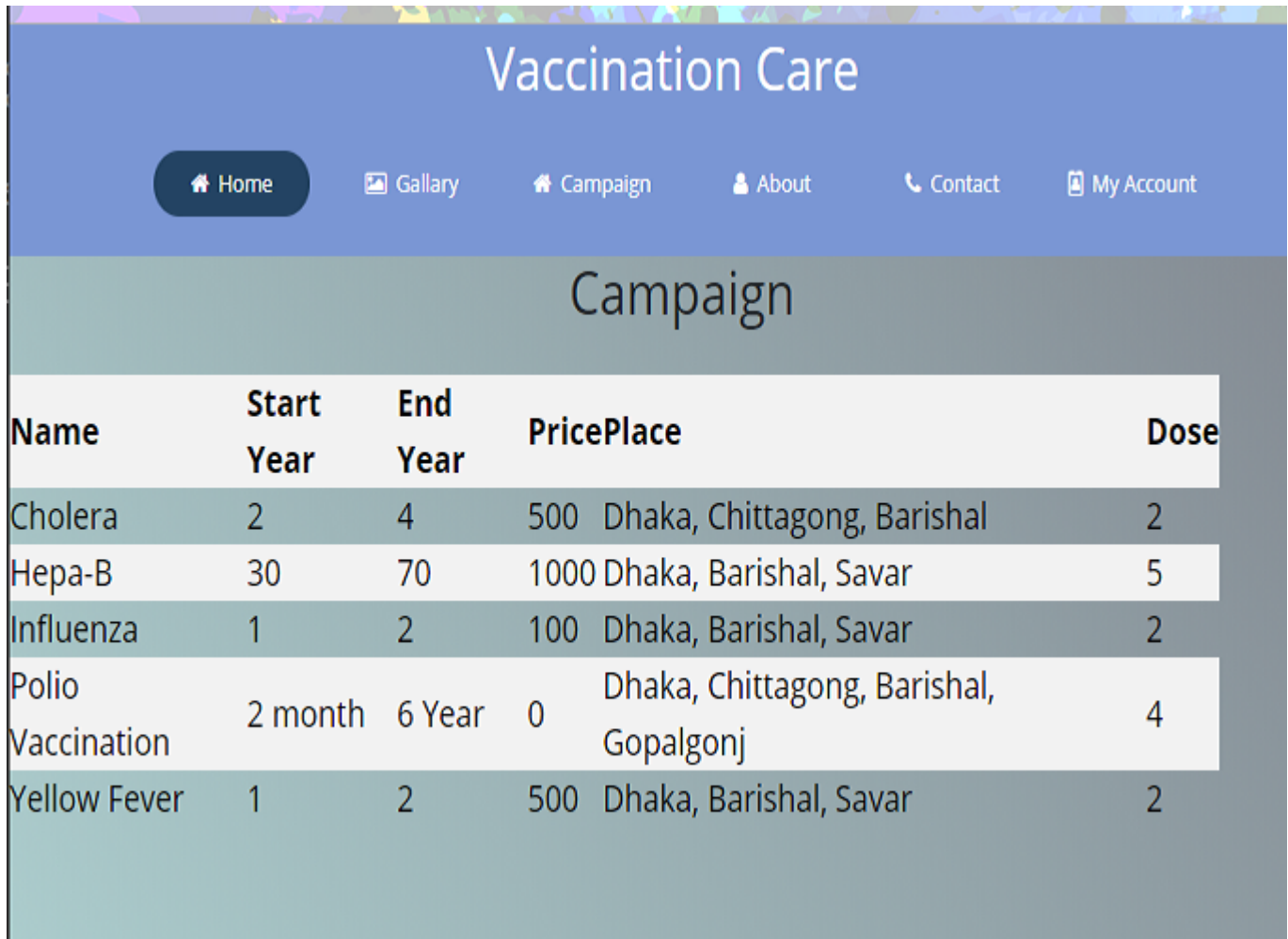
0

**Place**

Barisha

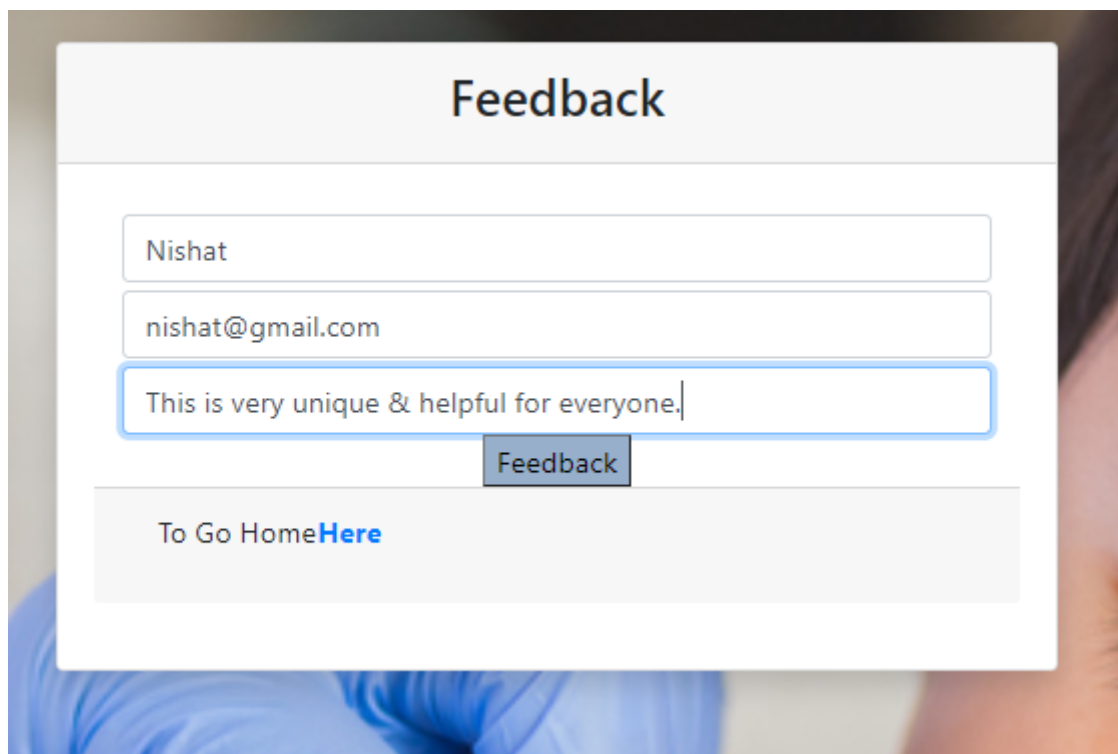
Update

FIGURE 5.11: Design of Update My Vaccine



Home	Gallery	Campaign	About	Contact	My Account
Campaign					
Name	Start Year	End Year	Price	Place	Dose
Cholera	2	4	500	Dhaka, Chittagong, Barishal	2
Hepa-B	30	70	1000	Dhaka, Barishal, Savar	5
Influenza	1	2	100	Dhaka, Barishal, Savar	2
Polio Vaccination	2 month	6 Year	0	Dhaka, Chittagong, Barishal, Gopalganj	4
Yellow Fever	1	2	500	Dhaka, Barishal, Savar	2

FIGURE 5.12: Design of Campaign



**Feedback**

Nishat

nishat@gmail.com

This is very unique & helpful for everyone.

Feedback

To Go Home[Here](#)

---

FIGURE 5.13: Design of Feedback

## Chapter 6

# Conclusion

### 6.1 Future Plan

- We want to Show User to his/her babies all completed vaccine with date time.
- We want to send a reminder to a specific one with his/her babies' various vaccine next dose date.
- We want to store vaccination card of the registered children then we could generate a digital version a great collection of thous vaccination card.

### 6.2 Conclusion

This is our initial step to save our children from various common diseases like Polio, Hum-Rubella, Hepatitis, etc by proper vaccination support from an early stage of their life. After all, awareness is the most important part of a successful campaign or dream. We all wants to see Happy Bangladesh.

## Chapter 7

# Introduction

### Introduction

In a common problem to our guardian, they somehow forget about their children's vaccination time that's why we want to make a website based software which is reminder our parents about their children's vaccination time suggests them the nearest healthcare place vaccinate their children. We always remind them to send a reminder SMS to the guardian's mobile number.

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