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Report for

VACCINE REGISTRATION WEBSITE

Project name: "VACCINE REGISTRATION BD"

Submitted by:

Pulak Saha -1921200042 & Dipto Das -1921216642

North South University, Dhaka, Bangladesh

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Introduction

Vaccine registration system is an essential part of giving vaccine in a proper way. Recently the Covid-19 pandemic breakdown all over the world and the only way to control it is vaccinating people. So due to the increasing demand of a proper registration system and a proper way of vaccinating people, we decide to develop a vaccine registration site that will not only help to do the vaccination process smoothly but also it will help to manage a huge amount of data. Every country in the world has taken some steps to deal with the situation. Bangladesh is not the opposite. like other countries in the world Bangladesh has also built a registration site to maintain registration and data. As Bangladesh is a populous country, distributing and maintaining database is a new challenge for the Bangladesh government. On top of that Bangladesh government has declared lockdown situation several times across the country. So manually vaccine registration would create a great mess. A proper vaccine registration web application is one of best and smartest solution to overcome this challenge.

About Vaccine Registration BD

Typically, a registration site takes information from user and give the user permission to use or access that application. Vaccine Registration BD is a web bases technology. Here when a user first enters the site he or she can see the home page. There he can see many options. A person needs to do sign up first to use all the features.

i)Registration:

For registration user should provide some personal information like NID number, Birth Date, Email Address and then he has to fill the password and confirm password filed. Users given information will be checked in the national database. If the information is matched, then he will go the next page in the meantime he will get a verification code in his given email. User must have to use that code in the proper filed to become successfully registered. If the user does not use the same code that

he got he would not be able to go to the next stage. When the user enter the right code and press enter he will go to the next page. There he will be able to see his all NID information. In that page there is an option to give post code. After giving the post code he can see the available vaccine center and the vaccines. Every vaccine center and vaccine has an individual id. User has to fill up his preference center id and vaccine id. After that his vaccine registration will be completed.

ii)Registration Status:

After the registration if a user wanted to make sure that he is already registered or not he can check is status by this option. When a user enters registration status option he finds an option to give NID no and a human verification code. If a person is already registered, then after giving the information it shows that you are already registered. But if a person gives wrong information or without completing the registration he wants to check his registration status it shows that you are not registered or check your given information.

iii)Vaccine Card:

After successfully completing vaccine registration user will be able to download his vaccine registration card. This vaccine card will be required for taking vaccines from the hospital.

iv)Vaccine Certificate:

After completing two dose of vaccine user will be able to download vaccine certificate. Vaccine certificate is a proof that a person is fully vaccinated. If someone try to download vaccine certificate after completing his first dose he would not be able to download it. To get certificate user have to give his NID no and verification code.

v)Manual:

Web portal user manual is basically for those people who will not be able to understand the uses of this website. In the manual the registration process and every steps are shown in pictorial form. If anyone required any help they can easily take help from the manual.

Purpose and Benefits of Vaccine Registration BD

The main purpose of this site is to help the people to become registered for vaccine very easily. Manual process of registration is very difficult and in manual system it is very difficult to maintain the data record. Sometimes it is also not possible to do this manually because of covid-19 situation. In many places of the country the covid-19 situation is not stable and in many places the government declare lockdown because of increasing covid-19 cases. In this situation online registration in the only way which can handle the registration process smoothly.

8 Benefits of Vaccine Registration BD:

1. **Easy registration process:**

    In this vaccine registration site registration process is very easy. User just need his NID and an email throughout the process. Every user has to type their information very carefully because if it will not match with the national database he has to start the process again.

2. **Easy way to manage data:**

    Through this site to manage user's information is very easy. When a user enters his information in this site, the information will automatically store in its database. Using the information, the site would automatically provide a vaccine card and after completing the vaccination the site will provide a vaccine certificate.

3. **Help the government to monitor the overall progress:**

    The website stores all the user's data. So it is the easiest way to monitor which categories of people and which region people have registered more. This vaccine registration site will help the government to monitor the overall progress. With the help of the record government can take necessary measures to improve the condition.

4. **Saves time:**

    This website saves the time of the users because a person does not need to go to out of the home for the vaccine registration. One the other hand the registration has only 3 steps and that will take not more than 5 minutes. So,

by using this website a user can easily complete his registration only using his mobile phone

5. Reduce Cost:

In manual registration process we need extra worker to input user data. But if we use this website we do not need any worker to input the user information in the database because it is an automated system. When any user givers information in the website it will automatically add in the server database. So using this website will be beneficial in terms of cost.

6. Gives importance to the user's choice:

Here user can choose his preferred vaccine and vaccine center.

7. Easily upgradable:

If required, we can easily make any change to the application.

8. Flexibility:

This website is easily usable and a user can use it anytime anywhere.

Used features and functions:

This vaccine registration site has many wonderful features which makes it more effective for maintenance and overall process.

1. This website sends a verification code in the email while a user does registration. It ensures security.
2. When a user first enters the site he has to make himself register first in the site. That time he needs to set a password. This website has another useful feature to recover password. So, if any user forgets his password he can easily recover it.
3. A user can check his registration status on this website it means that a user can check he is registered or not registered for the vaccine.
4. The website has a feature of generating human verification code. Which also gives extra security.

5. This website automatically generates vaccine registration card after the registration.
6. This website provides vaccine certificate to every user after taking the vaccine dose.
7. Through this website a user knows the Bangladesh as well as world covid-19 information.
8. This website gives everyone the opportunity to register in different categories.
9. Through this website the government can know that how many people have registered in which category.

User Story:

Use case-1:

Mr. X is a university student and he wants to do registration for covid-19 vaccine. So he has to follow some steps-

I.   First he has to go to the vaccine registration website and go to the registration option. There he has to select a university student category.
II. After that he has to give his mail address and some basic information and set a password.
III. He will get a verification code instantly in his mail. He has to fill-up the verification box with the code.
IV. Then he has to fill-up the post code box which is required for vaccine registration center.
V.   Lastly he has to give his preferred vaccine center id and vaccine code and press the confirm button.

Use case-2:

Now Mr. X wants to know his vaccine registration status. For this-

I. First he has to go to the registration status option.
II. Then he has to give his email and fill-up the shown verification code and press enter. Then he will know his registration status.

Use case-3:

If Mr. X wants to download the vaccine card after the vaccine registration then-

   I.   First he has to go to the vaccine card option and fill-up the NID and Password field.

  II.   Then he has to fill the given verification code in the given box and press enter.

Use case-4:

Lastly if Mr. X wants to download his vaccine certificate after completing the two doses of vaccine then-

   I.   First he has to go to the vaccine certificate option and fill-up the NID and Password field.

  II.   Then he has to fill the given verification code in the given box and press enter.

Limitations of Vaccine Registration BD:

1. All the content of the website is mainly in English language. So if someone do not know English he may find it difficult.
2. Since it is online based registration system so user needs smartphone or computer and internet. If someone do not have those things he might find this system ineffective.

Use Case Diagram:
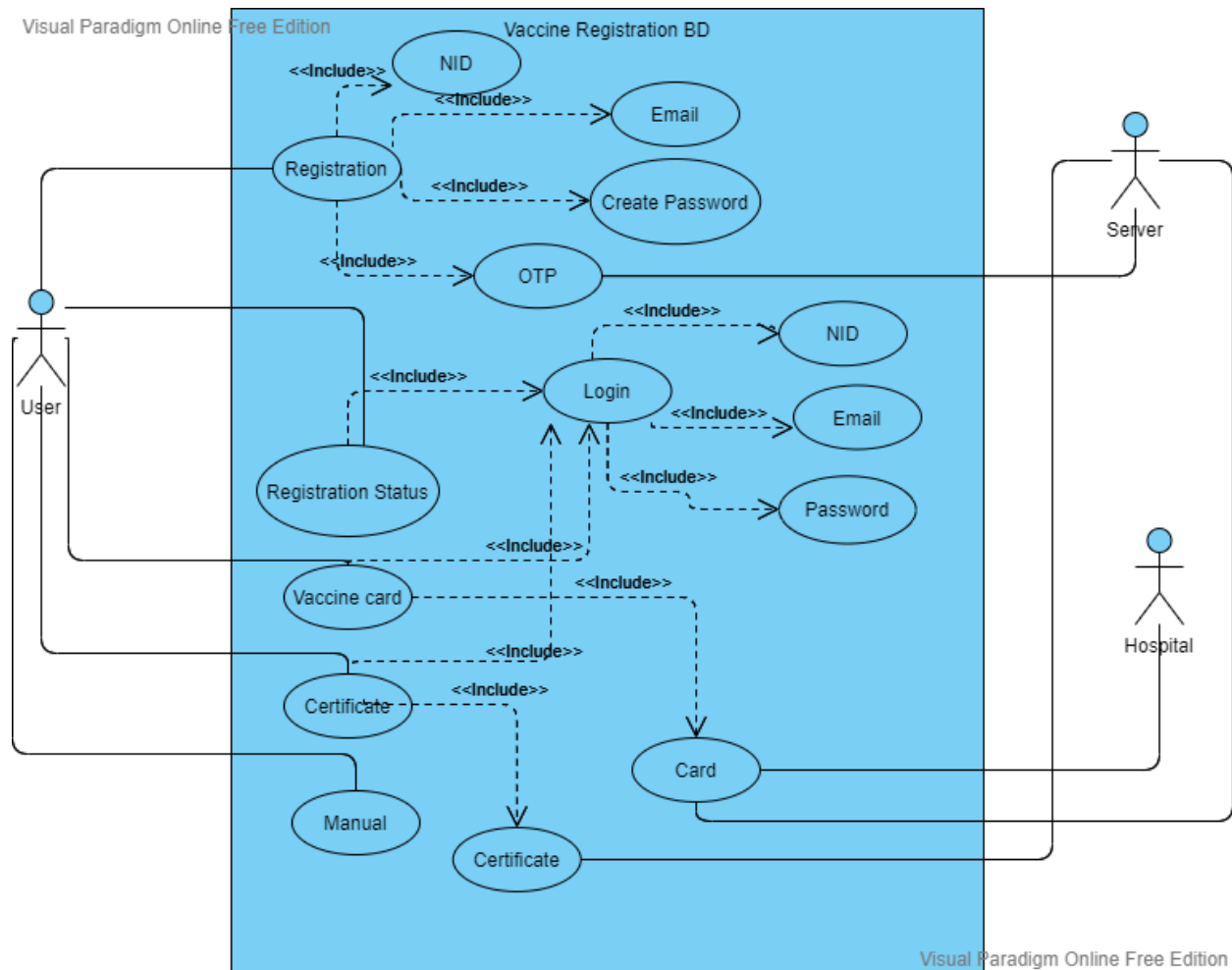
Front-End Plan:

1) Home Page

2) Registration Page

3) Registration Status Page

4) Vaccine Card Page

5) Vaccine Certificate Page

6) User Manual Page

Back End Development:

1) Registration Page development

    a. Sign up form, verification through email

    b. User details shown using database interaction

    c. Show available vaccine and hospital using join, insert, update operation

2) Registration Status Page development

    a. NID checker form through database interaction using database interaction.

3) Vaccine Card Page Development

    a. Login

    b. Forgot password using update operation through email.

    c. Show Registration number, Personal information and Vaccine Dates using update, join, subquery operations.

    d. Vaccine dates alert using trigger through email.

    e. Vaccine card download or Print through print button

4) Vaccine Certificate Page Development

    a. Login

    b. Forgot password using update operation through email.

    c. Show Personal information, Vaccine Dates and vaccine dose confirmation using update, join, subquery operations.

    d. Vaccine certificate download or Print through print button

Tools and Technologies:

1. Database: MySQL
2. HTML
3. CSS
4. JavaScript
5. PHP
6. OTP Authentication code over Email
7. Auto Human Verification code generate

Some Screenshots of Project:

Registration-

Your Details:

NID NO:	14530
First Name:	Megan
Last Name:	Selleck
Father's Name:	Kevin Tobia
Mother's Name:	Agnus Shankle
Blood Group:	AB

From where you want to take your Vaccine:

Post Code	Enter

Enter the Hospital Center ID you want to choose:

Center ID

Enter Vaccine Batch No. you want to take:

Batch No

Click submit If you enter the correct ID and No.

submit

LIST OF HOSPITAL

Center ID:	Center Name:
203	Comilla Medical College Hospital, Comilla
210	Bangabandhu Memorial Hospital (BBMH), Chittagong

LIST OF VACCINE

BATCH NO:	VACCINE Name:
10011	Moderna
20001	Pfizer
36874	Sinopharm
56987	Verocell

Vaccine Card-

Vaccine Registration BD   Home   Registration   Registration Status   Vaccine card   Vaccine Certificate   Manual

14530

Password

a86c4

Enter the Letters Correctly:

87571

submit

FORGOT PASSWORD

Vaccine Card

REGISTRATION NO: 67

NID NO: 14530

Name: Megan Selleck

Date of Birth: 1986-05-25
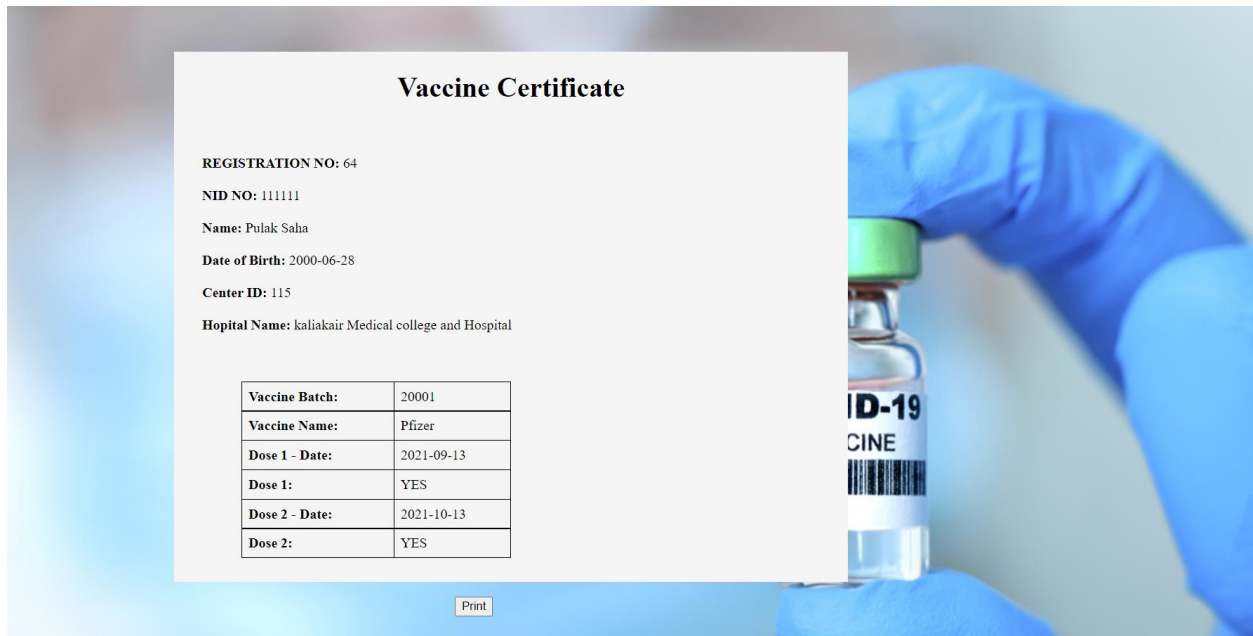
Center ID: 210

Hopital Name: Bangabandhu Memorial Hospital (BBMH), Chittagong

Vaccine Batch:	36874
Vaccine Name:	Sinopharm
Dose 1 - Date:	
Dose 2 - Date:	

Print

Vaccine certificate-

Conclusion

Now a day's online registration system has become very popular. There are many reasons behind it. The most common reason is digitalization. Government is trying hardly to make everything online. Now registration is required everywhere from school, college to hospital. And online registration makes is easier for us. If we do online registration, we do not need to be physically place on this place. On the other hand, manual registration process is slower because in some places there are less workers and they have to take many information form many users. And in manual process there are high chances to make mistakes. In online registration data storage is also easier than manual. In this system the organization do not need to set a worker to manage the registration work.

In the same way the Vaccine Registration BD site helps to complete the vaccine registration process smoothly. Also in this pandemic situation it is very difficult to go to outside and complete registration. The vaccine registration BD website properly stores all user's data so that if necessary it can be used later.

Appendix:

Contact Information

Name: Dipto Das

Email: dipto.das01@northsouth.edu

Name: Pulak Saha

Email: pulak.saha@northsouth.edu

Repository link: https://github.com/Pulak092/CSE-311-Project