

**FINAL YEAR PROJECT REPORT ON DESIGN AND DEVELOPMENT OF
NIDPORT**

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This Report Presented in Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science in Computer Science and Engineering

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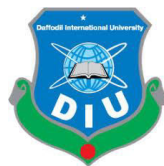
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DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

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APPROVAL

This Project/internship titled “**Design and Development of NIDPort**”, submitted by Atiqur Rahman, ID No: 161-15-6924 And Suraya Sultana, ID No:161-15-7413 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 6 December, 2019.

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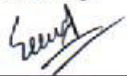
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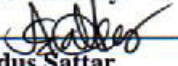
We hereby declare that, this project has been done by us under the supervision of **Md. Sazzadur Ahamed, Graphics, Human computer interaction, Department of CSE** at Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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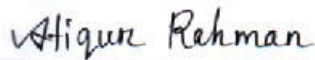
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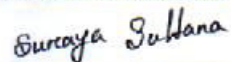


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ABSTRACT

We are living in a development country, with emerging technology and digitalization. Although the way of leaving is changing rapidly, but still the peoples of our country are facing many problems regarding Birth Certificate, NID Card, and Passport. Problems like NID card information doesn't match with passport or birth certificate information, birth certificate information doesn't match with passport or NID. Also big problems arises when someone try to fix or correct those documents. The ugliest side is that people face corruption, harassment, and waste their time in this way. There should a centralization of all those documents so that this type of problem can be fixed all together. This NIDPORT project can help people to get rid all of this problems. As we know in current process when a new baby born, a birth certificate need to make for the baby, then when they grow up they have to provide same information as they used to provide at the time of birth certificate to make NID card then again same information's for passport. So our plan is when a baby born a smart NIDPORT will created for him/her with proper information, then after certain age they will become voter automatically. Because all the information needed for NID is already exists in the NIDPORT database. Which will also help them to get passport easily. If someone update their information in the NIDPORT, the birth certificate, NID card and passport information will be updated as well.

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CHAPTER 1

Introduction

1.1 Introduction

We are living in an era of digitalization. Digitalization means the process of making digital everything that can be digitized and the process of converting data into digital format. Now a day's most of the develop countries are trying to digitalized their identity security system. So, we have focused on a web based system for our government to do more digitalize and more secure our National Identity system. People and government both are facing many kinds of problem about National Identity system like NID card, Birth Certificate and passport also. That's why we developed a web based identity system that will help both people and government. It can overcome many existing problems about National Identity. We gave a name to our system that is "NIDPORT".

1.2 Motivation

The peoples of our country are facing many problems regarding Birth Certificate, NID Card, and Passport. Problems like NID card information doesn't match with passport or birth certificate information, birth certificate information doesn't match with passport or NID. Also big problems arise when someone try to fix or correct those documents. The ugliest side is that people face corruption, harassment, and waste their time in this way. For those reasons we decided to develop this web based system. Basically we have to do the same thing three times for making NID, passport and birth certificate. We think this app will help people and government. This will save people and governments time and money also. Thinking about something new will be a motivation to us to do this work.

1.3 Objective

We wanted to develop a web based system that will eliminate the existing problem about our national identity system and as well as improve security of our national identity system. We incorporated a database system on the web based system and used laravel as web application framework. Our other target to enable society to meet up with the technology and minimizing time & cost of people.

1.4 Expected Output

Our system will generate pdf form of our all data regarding NID and passport. We also added log in and registration system to our NIDPORT system. This will help people to get their data easily. We made it user friendly for users. When all sector are being digital then why National Identity system will fall behind? This is a very important issue especially in developing and low developing countries.

CHAPTER 2

Project Review

2.1 Related project work of other develop countries

We didn't find any paper regarding our topic, that's why we reviewed about many developed countries digital identity system. Here is a little description about Kuwait's National identity system.

The name of Kuwait Digital ID card is "Civil ID card". The government of Kuwait almost added everything of a citizen of them in this civil ID. They added up all basic information, driving license, medical card information, Ration card, water bill payment, electricity bill payment, bank account information, criminal records and etc. The government doesn't have to search information individually about their citizen. They can find all information in single digital card. The citizen of Kuwait also can travel many countries which are in the GULF society without passport. They just have to show their civil ID for travel those countries. They also can take loan from bank just showing their civil ID.

Many of the develop countries have many kinds of digitalized identity system. So we will fall behind?

2.2 Limitation of reviewed project

We are living in a developing country. Our government provide us NID card free of cost. But the government of Kuwait take charge 2KD (Kuwait Dinar) from every citizen which is almost like 500 TK. And they also take 20KD if anyone lost their civil ID, which is equivalent to 5000 Bangladeshi TK. But our government gives us this service free of cost. Just we have to do some formalities.

We have got some information and help from Kuwait civil ID website [1].

CHAPTER 3

Methodology

3.1 Introduction

A web based system for generating pdf form of national identity system is more acceptable rather than mobile app based system. User and admin can easily operate this system. In this system we used database for inserting data, html css for design, php laravel for also design and implementation. After some research, we see that many of the developed countries has a better or more digitalized identity security system. They already developed many phases of identity security. So, I think this project or ours can take forward to our identity security system.

3.2 Purpose of using web based system

Web based system is more acceptable than any other field specially this type of project. The security of people's data matters a lot. For ensuring data security we used web based system. And if we work with government in this project we will need a huge space for gathering data. That's quite complicated in mobile app based system. That's why we used web based system.

3.3 Proposed web based system structure

The proposed web based system will add up all types of data of a legal citizen of our country.

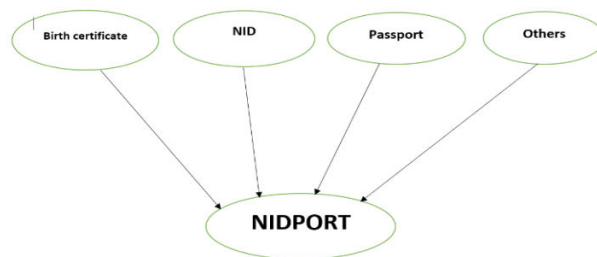


Figure-3.1: Proposed web based model.

This Figure 3.1 is the basic model of our web based system. In this figure we showed that our National identity card data, passport data including all data like criminal database data, bank information data and all other data will store in our NIDPORT.

3.4 Algorithm for generate NIDPORT form

We used laravel as web application framework for generating NIDPORT as pdf form as well as some design and implementation also done by laravel. HTML, CSS also used for some basic design. JavaScript for validation, database for data insert. Admin will insert the through database and user will get their data as a pdf form through successful login and registration. A basic model is given as a layout Figure 3.2. Admin is related with database and user is related with login, registration and final output.

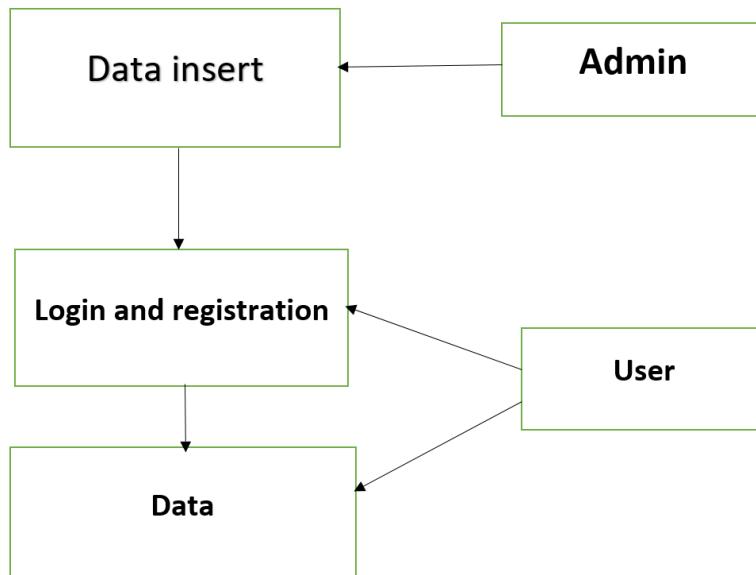


Figure-3.2: Layout of algorithm.

This is the database table 3.2 where admin will insert the data which is given by people.

3.5 Advantages of web based system

There is many advantages of using web based system.

1. It is more secure than mobile app based system for this project.
2. Time saving.
3. Easier use for this project.
4. User friendly.

And many others.

3.6 Data collection procedure

We are working in this project with NID and passport data only. That's why we collected 30-40 Individual NID and passport data for data insert. And we also inserted some of the collected data for getting a valid successful output. We have our collected data as hard copy.

3.7 Implementation requirements

For implementation of this project, we needed Notepad/Notepad++ installed first for basic design. Then we had to install Xampp localhost in our device for creating database for inserting collected data. Then we installed php laravel web application framework for rest of the design and implementation. We also used laravel for generating our output data as pdf form. That's all we needed to complete our project work.

We have got some help from [5] and [6] for designing user login Figure 4.1 and registration form Figure 4.2. We also got some help for basic jQuery to make code simple, concise and reusable and styling the project interface design from [2].

We used MySQL for store data in the database. We have got some help for basic MySQL at [3].

Here We also used some basic Bootstrap for responsive design for the project.

For basic Bootstrap we needed some help from [7].

We used laravel as general web application framework for design and impliment our project and the final output as pdf format. And we used some help for design and implementation from [4].

CHAPTER 4

Experimental Results and Discussion

4.1 Experimental Setup

We designed our system in two phases. Admin will insert valid data to database in two fields. One is NID data and the other one is passport data. Then the user will login with their registered unique number and a valid password.

Table-4.1: Database for data insert for admin.

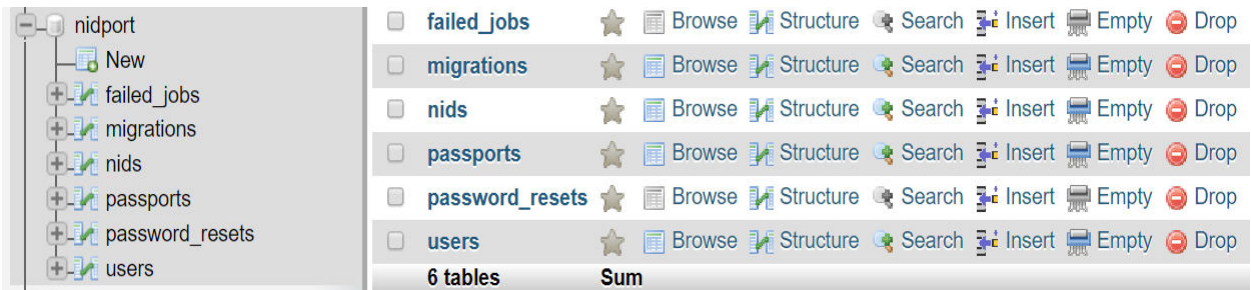


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This is the database Table 4.1 where admin will insert the data which is given by people.

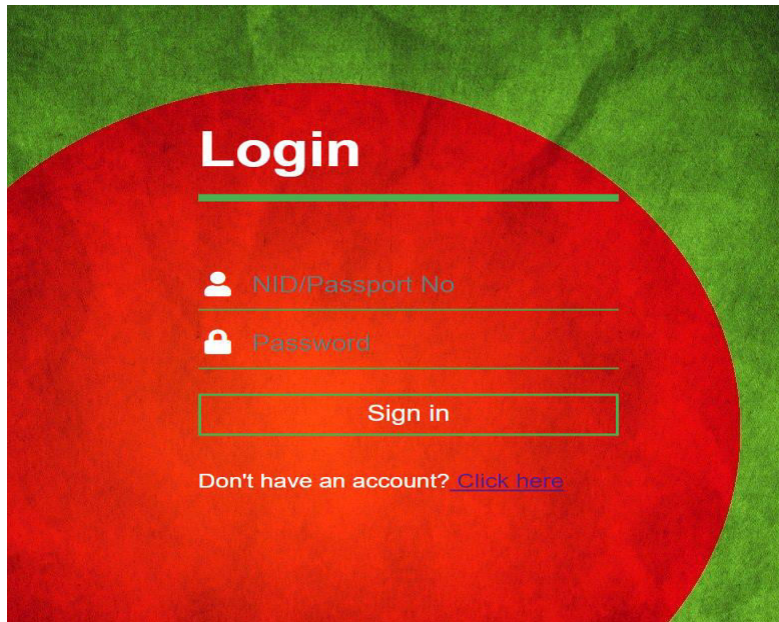


Figure-4.1: Login page for user.

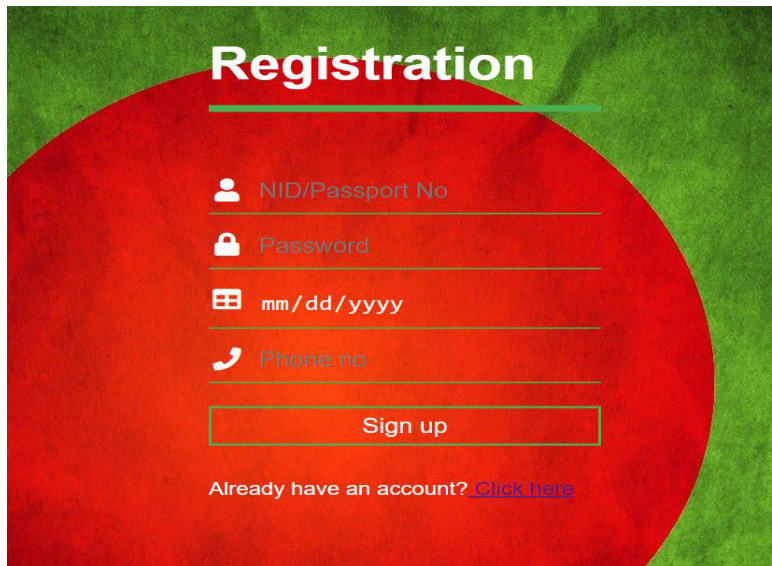


Figure-4.2: Registration page for user.

If user already have an account with their unique number and password, they can directly login at Figure 4.1 login page. Otherwise user has to register first with their unique number, password, date of birth and contact number in the Figure 4.2 registration form.

4.2 Experimental results

We have taken 30-40 NID and passport data for experiment. After collecting data, we inserted them to our database. After a successful login and registration, user will get all data together as NIDPORT pdf form Figure 4.3.

The image shows a PDF form titled 'গণপ্রজাতন্ত্রী বাংলাদেশ সরকার' (People's Republic of Bangladesh Government) and 'NIDPORT'. The form contains the following information:



নাম:	মোঃমুশফিকুল ইসলাম	
Name:	MOHAMMAD MUSHFIKUL ISLAM	
Sur Name:	ISLAM	
Given Name:	MOHAMMAD MUSHFIQUL	
Date of birth:	[REDACTED]	
Gender:	M	
Nationality:	BANGLADESHI	
পিতার নাম:	মোঃমামুনুর রশিদ	
Father's Name:	MOHAMMAD MAMUNUR RASHID	EMERGENCY CONTACT
মাতার নাম:	আরমানা বেগম	Name: MOHAMMAD MAMUNUR RASHID
Mother's Name:	ARMANA BEGUM	Relationship: FATHER
Spouse's Name:	NA	Address: [REDACTED]
Place of Birth:	JOYPURHAT	Telephone No: [REDACTED]
Blood Group:	A+	
ঠিকানা:	[REDACTED]	
Permanent Address:	[REDACTED]	
Passport Type:	p	
Country Code:	BGD	
NID No:	[REDACTED]	
Issuing Date of NID:	14-02-2018	
Passport No:	[REDACTED]	
Personal No:	[REDACTED]	
Date of Issue:	16-09-2015	
Date of Expiry:	20-09-2020	
Issuing Authority:	DIP/DHAKA	

Figure-4.3: User will get this pdf form as output.

Many people don't have passport or NID card. In this case our system will show that some of his/her information is missing Figure 4.4



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
NIDPORT

Passport information is missing


<p>নাম: আতিকুর রহমান</p> <p>Name: ATIQR RAHMAN</p> <p>Sur Name:</p> <p>Given Name:</p> <p>Date of birth: [REDACTED]</p> <p>Gender:</p> <p>Nationality:</p> <p>পিতার নাম: সহিদুল আলম</p> <p>Father's Name:</p> <p>মাতার নাম: রেহেনা আক্তার</p> <p>Mother's Name:</p> <p>Spouse's Name:</p> <p>Place of Birth: CUMILLA</p> <p>Blood Group: O+</p> <p>ঠিকানা: [REDACTED]</p> <p>Permanent Address:</p> <p>Pasport Type:</p> <p>Country Code:</p> <p>NID No: [REDACTED]</p> <p>Issuing Date of NID: 15-02-2018</p> <p>Passport No:</p> <p>Personal No:</p> <p>Date of Issuee:</p> <p>Date of Expiry:</p> <p>Issuing Authority:</p>	 <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">EMERGENCY</td> <td style="width: 50%;">CONTACT</td> </tr> <tr> <td>Name:</td> <td></td> </tr> <tr> <td>Relationship:</td> <td></td> </tr> <tr> <td>Adress:</td> <td></td> </tr> <tr> <td>Telephone No:</td> <td></td> </tr> </table>	EMERGENCY	CONTACT	Name:		Relationship:		Adress:		Telephone No:	
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Figure-4.4: Output with missing information.

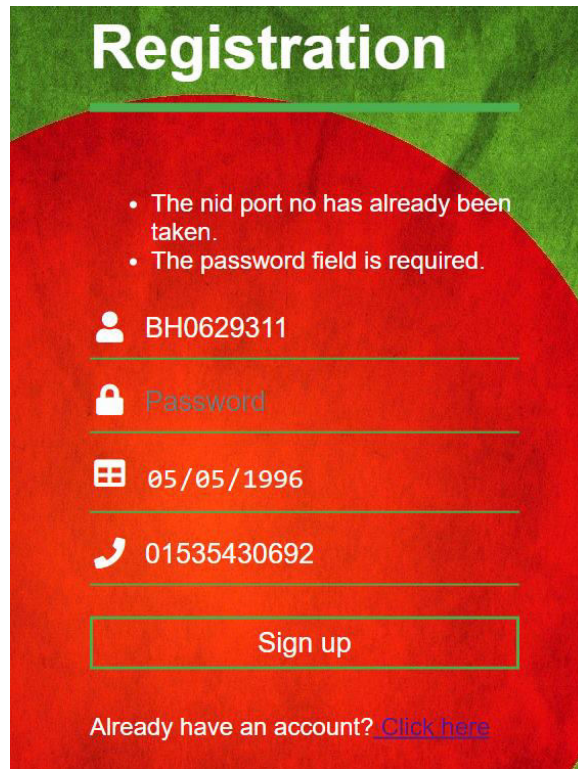


Figure-4.5: Making sure the security issue

In this figure 4.5 we showed that no one can insert any NIDPORT information of others and which are already in database. So we think the security will improve for this validation.

4.3 Discussion

For those experimental output, our output accuracy was 100%. We have got our output as we expected. Thus we have some limitations but we can say that our system works good. At the end of the experiment we can decide that our NIDPORT performing very well and hopefully this system will help student and researchers who wants to work more on this topic in future.

CHAPTER 5

Summary, Conclusion, Recommendation and Implication for Future Research

5.1 Summary of the Study

This paper presents a novel method to assess the next level national Identity system of our country. In this method a strong database used for keep the information and laravel as web application framework for design and implementation. We used web based system instead of mobile app because of security purpose and easier use of system. Because this type of project is little complicated in mobile app. The output test shows a good result as we expected. This system opens a possible way to digitalized and next level system of our national identity system, which will make our data more secure and help people and government. It will also save time and cost for people and government both.

5.2 Conclusion

At the last we can say that our research can help people and government from many difficulties regarding national identity system. It can secure peoples data more than existing system. It can digitalize our identity security system as well as it can save peoples and government's time and money.

5.3 Recommendation and Implication for Future Research

Everything is updating day by day. We only worked in this project with NID and passport data. But the idea is not limited with that. It's a huge a project regarding all information of a human being needs in daily life like bank account, driving license etc. We will work in future regarding all of those data or if in future someone want to work in this type of project, they will get help from our idea and our project also. We can propose our government about our idea to work in this project with us.

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