TWO - STEP VERIFICATION SYSTEM OF NATIONAL ID

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

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APPROVAL

This Project titled “Two - Step Verification System of National ID” submitted by Rony Pal and Md. Shohel Rana to the Department of Computer Science & 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 & Engineering and approved as to its style and contents. The presentation has been held on 26 January 2013.

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We hereby declare that, this project has been done by us under the supervision of Narayan Ranjan Chakraborty, Department of CSE 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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Finally, we must acknowledge with due respect the constant support and patients of our parents.
ABSTRACT

National ID number is an important identity document for personal identification in the country and for lots of work. Example a new passport or driving license or their renewal, taxpayer identification number (TIN), apply for jobs, opening bank accounts, getting bank loan etc. Some private and government organization have made it mandatory to have a National ID in order to get their services. Recent reports show that some people are making fake ID and supplying to the citizens for a small amount of money. There is no system for ID validation and verification.

In this project we build such a system where the concern people can check the originality of national ID card by using two step verification systems. At first check the User id and date of birth. Next check users father id and their information. This proposed system developed by some language like that php, mysql, css and html. After implementation of all functions, the system is tested in different stages and it works successfully as a prototype.
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</tbody>
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1.2 Introduction: Bangladeshi government has passed an ordinance making national ID cards mandatory for citizens. ID cards have, however, been issued only for voting purposes in the beginning to encourage eligible people to register their names on the electoral roll at the registration centers. Now this ID card is mandatory for all kinds of verifications such as Bank loan or Account, Buying assets etc. in near future it will be an essential element for any valid transition.

Personal and family information is needed at different phases of life. Information is embedded in different documents: birth certificate, School admission application, Citizenship certificate, College admission form etc. The information appears in a scatter form also. The national ID card can make consistency of the information of the same person whether it is needed. The National IDs can and has been a difference to the lives of the citizens and it will continue to make such a difference in future. In Bangladesh NID card issued to 81.3 million people before the national election was a by-product of the Election Commission’s initial project titled “Preparation of Electoral Roll with Photographs (PERP)—launched with a view to prepare voter list with photographs. An average Bangladeshi earlier had to carry at least three to four different identities to prove his identity. The limitation of existing IDs is that they serve different and limited purposes. As citizens are issued different identity proofs with different purposes, there is lack of a centralized information data system, thus caused redundancy and wastage of resources. In the following endeavor we will try to analyze the institutional mechanism of NID formulation process of a developing country and try to explore the gaps for further improvement.

1.2 Establish of National ID card In Bangladesh: Every citizen who is eligible to be a voter under the electoral roll act, 2009 shall have the right to obtain, in the prescribed manner and subject to payment of prescribed fees, a National ID card of the prescribed class. Each citizen shall be issued with only one National Identity Card by Bangladesh
Election Commission. Every citizen shall get his or her identity registered to obtain the National Identity Card.

A person should have the following qualifications to be registered as a voter according to Article 122 of the Constitution of the People’s Republic of Bangladesh and Section 7 of Electoral Rolls Act 2009:

- Is a citizen of Bangladesh?
- Is not less than eighteen years of age?
- Does not stand declared by a competent court to be a unsound mind and
- Is or is deemed to a resident of an electoral area.

Data collection and integration take place at two phases. A Data Collection is assigned to 300-400 voters. Data Collection collects voter data and incorporates them into the prescribed Registration Forms. During the household visit, Data collection complete, or assist to complete, the registration forms. After completion of voter registration form, the voters are given a slip to come to the registration centers on the designated day for photographs and data entry. Voters attend the registration centers at the appointed time. Before approaching the data entry operator, the voter is verified by the concerned Data Collection and Local Government representative for correctness.

Data Entry Operator takes photo, fingerprints and uploads voter data into laptop computer. Special arrangement is made to take the photographs and fingerprint of the disabled, sick and aged person at home. At the field registration center, Data Entry teams perform data entry. Thereafter, the teams return to the Server Stations at Upazila and upload data to the server.

1.3 General Attributes of NID:

Generally a NID has the following attributes

- Some specific information of a particular citizen. It could be both “General” and “Biometric”. The ‘General’ information may comprise name, parent’s name, address, date of birth etc. of a citizen and the ‘Biometric’ information may
comprise hand geometry, facial recognition, retina and iris scans (“eye prints”), voice recognition etc. of a citizen.

- Can recognize each of the individual citizens separately through unique identification number or other attributes like finger print of a NID card.
- Matrix of NID- paper, magnetic chip etc.
- Coverage- generally covers whole country.

1.3 **Aim of our project:** We need a system to check the authenticity of our Voter ID number. Our system helps the users to get their real or fake id easily, where they have to fill all the contents in the verification form with this their individual name or id. We need to check the authenticity of our voter id number.

1.4 **Background of the project:** Bangladesh Election Commission (BEC) created a National ID card/Voter ID for the people of Bangladesh. People who were equal or more than 18 years of age are eligible to receive these cards. It was created mainly as a Voter ID. BEC proposed that in near future one will need to show NID card for getting a new passport or driving license or their renewal, taxpayer identification number(TIN), apply for jobs, opening bank accounts, getting bank loan etc. Some private and government organization has made it mandatory to have a National ID in order to get their services. Recent reports show that some people are making fake ID and supplying to the citizens for a small amount of money.

1.5 **Report of Wales:**

- Introduction is the most valuable subject in national id here that when establish of national ID card in Bangladesh, known as General Attributes, aim of project, background of project, Organization of the Report & last topic are conclusion.
- National Identification Number is vastly important for country citizen which is denoted by a unique number. These are known what is national id? Describe here. Structure of national ID, Purpose of National ID, Methodology and Which Countries uses that.
• System is checking here. Checking procedure is described validating and verifying.

• Development and implementation contains logical and physical design with this system, DFD of system and Outlook of the system also describe here.

• System design access through a web browser on the source program. Such language example (Text, HTML, CSS, PHP, MYSQL & JavaScript) use here.

• Uses of proposed system must be depend on user birth registration, result of S.S.C and H.S.C, digital Passport, bank account and tax ID.

• Critical appraisal describes contents strength and weakness on the proposed system.

• The last wales are describing system conclusion. In future as the government has taken an initiative to develop a national database provide further suggested work.

1.6 Organization of the Report: Bangladesh Election Commission (BEC) has the most authentic electoral database covering all eligible voters and in the process BEC has issued equal number of National Identity Card (NID) to the registered voters. Necessary infrastructure and facility are in place now to provide NID verification service to the government and non-government bodies. This service shall provide the option to verify the validity of a NID on.

1.6.1 Who can avail this service: Any government or non-government organization who accepts the Terms of Service (TOS) and has the minimum ICT infrastructure and manpower to run own system.

1.6.2 How to take the service:

• The organization interested in taking the service would require login the admin of verification system in national id website (http://www.voterid.com.bd).

• There would be two categories of users; one is already registered and the other one is new registration. Click the appropriate option.

• Fill up the registration form and submit.
A system generated acknowledgment shall be sent to the e-mail address of the authorized person provided in the registration form.

1.6.3 Service and access management:

- On fulfillment of all conditions, ECS shall send Master User ID, Password and the NID Verification Link to the e-mail address of the authorized person provided in the registration form.
- The organization shall have the option to create and manage sub users as per the information provided in the registration form. The number of sub users may be increased through re-registration.

1.7 Conclusion: Every system needs to have a verification system. Security is an issue that needs to take very seriously. More the IT world is growing more the threat of intrusion is increasing. Unfortunately we are far behind when it comes to security issues. So considering this fact we have tried to develop a system that will provide authentication to the NID structure as well as detect typing errors.
CHAPTER 02
NATIONAL ID

2.1 Introduction: National ID means National Identification of a citizen of a country which is denoted by a unique number. National ID or National Identification Number is vastly important for country citizens. National ID is two types. One for the permanent citizen and the other is for the temporary citizen who is living as a guest in the country. There are so many countries that use national ID for their citizens. The government creates the National ID for the purpose of taxation, passport, for the government agencies and so on. Bangladesh has a National ID for its citizens. The Bangladesh Election Commission (BEC) was responsible for creating National IDs for the country. The Bangladesh Election Commission, in partnership with the Bangladesh Army, established the Bangladesh Voter Registration Project to digitally register all legal Voters in the country in advance of general elections in December 2008. The biometric registration of voters which began in early 2007 resulted in a database that included photographic and fingerprint records for 80 million voters. BEC mainly created a voter registration ID for the purpose of voting because they faced many difficulties in the previous years during voting periods. They also created a database for the people of 18 years and above. The database contains several information of a citizen of Bangladesh such as name, father’s name, mother's name, husband’s name (in case of married women), address, birth date and soon. With this information they created a Voter registration ID which was called National ID.

2.2 The structure of National ID of Bangladesh: Our Voter ID number contains 17 digits. The structure is — (BYDDRTTUUSSSSSS).
Digits-(BY) for Birth year code of the ID holder.
Digits-(DD) for District code of the ID holder, next one digit —(R) for R.M.O code, the next two digit.
Digits-(TT) for Thana code, next two — (UU) for Union code and the last — (SSSSSS) six digits.
Structure of the National ID of Bangladesh which has been created by BEC (Bangladesh Election Commission) shown in figure 2.2.

Here that,
BY=Code for Birth of Year
DD = Code for district.
R= code for R.M.O.
TT = code for Thana.
UU = code for Union.

Some examples of National ID of Bangladesh are given below. Fig 2.2 shown as.
(A) 19904114792000116
2.3 Purpose of National ID:
The Voter ID holds a great advantage for the citizen of any country. Illegal people cannot stay in a country without permission of the government of that country. National ID can be used for the purpose of citizenship, permanent residence, work, taxation, government benefits, health care and other government-related functions. Our National ID is appeared on an identity card issued by the Election Commission. Although there was a policy adopted that the ID would be used in opening Bank Accounts and the ID card holder would get 22 additional benefits. Still now there is beneficial use of the National ID.

2.4 Countries that use National ID:
The countries that use the National ID are given below:

<table>
<thead>
<tr>
<th>NO.</th>
<th>Name of Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Argentina</td>
</tr>
<tr>
<td>2</td>
<td>Australia</td>
</tr>
<tr>
<td>3</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>4</td>
<td>Belgium</td>
</tr>
<tr>
<td>5</td>
<td>Chile</td>
</tr>
<tr>
<td>6</td>
<td>People's Republic of China</td>
</tr>
<tr>
<td>7</td>
<td>Iceland</td>
</tr>
<tr>
<td>8</td>
<td>Pakistan</td>
</tr>
<tr>
<td>9</td>
<td>Poland</td>
</tr>
<tr>
<td>10</td>
<td>Italy</td>
</tr>
<tr>
<td>11</td>
<td>Malaysia</td>
</tr>
<tr>
<td>12</td>
<td>South Korea</td>
</tr>
<tr>
<td>13</td>
<td>Sri Lanka</td>
</tr>
<tr>
<td>14</td>
<td>United States</td>
</tr>
<tr>
<td>15</td>
<td>Republic of China (Taiwan)</td>
</tr>
<tr>
<td>16</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>17</td>
<td>Hungary</td>
</tr>
<tr>
<td>18</td>
<td>Macau Poland</td>
</tr>
<tr>
<td>18</td>
<td>Romania</td>
</tr>
</tbody>
</table>
19. San Marino
20. Singapore
21. Slovakia etc

2.5 Methodology: National identity is a measure of self-identity reflecting the subjective nature of national identity. A question on national identity allows a person to express a preference as to which country or countries, nation or nations that they feel most affiliated to.

There has been an increasing interest in 'national’ consciousness and many people wanting acknowledgement of their national identity. In response a recommended harmonized 'national identity' question has been developed for use on social surveys that offers some insight into how an individual views their identity. This guidance outlines the process for asking and presenting national identity data.

It is recommended that the question should be used in addition to the ethnic group question and whenever there is a need to collect data about national identities; for example, when respondents classify themselves as English, Scottish, Welsh, Northern Irish, Irish, British or another national identity.[14]

2.6 Conclusion: The need of a NID for a country like Bangladesh becomes more crucial than for a host of countries that have already adopted such a system or are in the process of such an exercise. Provision of multiple services to a large population by government and private organizations is a mammoth task and is accompanied by many hurdles. The National IDs would help in better delivery of government services like Public Distribution System, self-employment, banking and investment services, health facilities and different schemes offered by the government. But if we fail to address the problems like- legal status of NID, sound mechanism to replace ID in case of urgency, establishing public friendly and accurate updating procedure of list, protecting duplicate registration in order to obtain replacement of IDs, establishing well equipped infrastructure at local level, developing the capacity of the working personnel, putting sufficient security features in the ID cards, checking the production and use of fake cards then we will fail to attain the deserved outcome. [13]
CHAPTER 03
CHECKING

3.1 Introduction: System checking is an empirical investigation conducted to provide stakeholders with information about the quality of the product or service under test, with respect to the context in which it is intended to operate. System checking also provides an objective, independent view of the system to allow the business to appreciate and understand the risks at implementation of the software. Check techniques include, but are not limited to, the process of executing a program or application with the intent of finding software bugs. It can also be stated as the process of validating and verifying that a software program/application/product meets the business and technical requirements that guided its design and development, so that it works as expected and can be implemented with the same characteristics.

3.2 Checking procedure:
1. At First, putting the National id, Date of birth and other information in our Database. Such as: National Id No: 19907611642000235 Date of birth: 07-01-1990
2. Taking National id, Date of birth from user And Check this National id, Date of birth with the putting database National id, Date of birth.
3. If match Taking National id and Date of birth with putting database National id, Date of birth. Go to step 4.
4. Next to check user related id like father id. If the id is match then the id is valid.
4. If not match. The id is invalid.
Example of the checking procedure:
1st Step: At first user given own their id & date of birth. Fig 3.1: shows an.

ID: 19907611642000235
Date of birth: 07-01-1990

Fig 3.1: Example of user given id & date of birth.

2nd Step: If the requirement are correct then go to next step. Fig 3.2: shows an.

Enter your Father ID: 19687611642000222

Fig 3.2: Enter user father id
3rd Step: If the user enter real father’s id & show the information. Fig 3.3: shows an.

![Image of ID information]

**Name:** Shohel Rana  
**Father Name:** Nazrul Islam  
**Mother Name:** Sajeda Begum  
**Date of Birth:** 07-01-1990  
**ID NO:** 19907611642000235  
**Blood Group:** B+  
**Father ID:** 19687611642000222

Fig 3.3: Example of real id information.

4th Step: If the user’s father id is not real then the fig 3.4: shows a message.

---

**Your Given ID is not Valid.**

---

Fig 3.3: Example of invalid message.
3.3 Conclusion: Testing can never completely identify all the defects within software. Instead, it furnishes a criticism or comparison that compares the state and behavior of the product against oracles—principles or mechanisms by which someone might recognize a problem.
CHAPTER 04
DEVELOPMENT AND IMPLEMENTATION

4.1 Introduction: System design contains logical design and physical designing. Logical designing describes the structure and characteristics or features, like output, input, files, database & procedures. The physical design follows the logical design, actual software and a working system. There will be constraints like hardware, software, cost, time and interfaces.

4.2 DFD of the system:

At the 1st step the user creates a note pad file of their data. After entering the website they have to simply upload their note pad file that contains the ID number. By just pressing the calculate button they would be able to generate a new ID with a check ID. Fig4.1: Shows DFD of our system.
4.3 Outlook of the website:

This is system home page. Some information of national ID here that. Fig 4.2: shown as.

![System Home Page](image)

**NATIONAL ID**

Voter or National Id created by the Bangladesh Election Commission (BEC) in the year 2008. People who were 18 years and above received these cards. It was created mainly as a Voter ID. BEC proposed that in near future one will need to show NID card for getting a new passport or driving license or their renewal, taxpayer identification number (TIN), apply for jobs, opening bank accounts, getting bank loan etc. Some private and government organization have made it mandatory to have a National ID in order to get their services. Recent reports show that some people are making fake ID and supplying to the citizens for a small amount of money. Voter ID means National Identification of a citizen of a country which is denoted by a unique number. National ID or National Identification Number is vastly important for a country's citizens. There are two types of National ID. One for the permanent citizen and the other is for the temporary citizen who is living as a guest in the country. There are so many countries that use national ID for their citizens. The government creates the National ID for the purpose of taxation, passport, for the government agencies and so on.

The Bangladesh Election Commission (BEC) was responsible for creating National IDs for the country. The Bangladesh Election Commission, in partnership with the Bangladesh Army, established the Bangladesh Voter Registration Project to digitally register all legal voters in the country in advance of general elections in December 2008. The biometric registration of voters which began in early 2007 resulted in a database that included photographic and fingerprint records for 80 million voters. BEC mainly created a voter registration ID for the purpose of voting because they faced many difficulties in the previous years during voting periods. They also created a database for the people of 16 years and above. The database contains several information of a citizen of Bangladesh such as name, father's name, mother's name, husband's name (in case of married women), address, birth date and so on. With this information they created a voter registration ID which was called National ID.

Fig 4.2: System Home Page
This page is checking form in proposed system site. Fig 4.3 shown as.

Fig 4.3: System Check ID

No body can blank requerment submitted field. Fig 4.4 shown as.

Fig 4.4: Blank Check ID
This field user’s are putting value. Fig 4.5 shown as.

![Fig 4.5: Valid submitted ID](image)

User is putting father real Id and show message. Fig 4.6 shown as.

![Fig 4.6: To check father ID](image)
If user is putting valid id then show this message. Fig 4.7 shown as.

Fig 4.7: A valid ID Shown
If the user given incorrect id this message are shown here. Fig 4.8 shown as.

![Fig 4.8: Invalid ID Shown](image)

Only admin are login here. Fig 4.9 shown as.

![Fig 4.9: Login Option for Admin](image)
Only admin can show this page and add information. Fig 4.10 shown as.

Fig 4.10: Add profile page for admin
Admin can show this page. Fig 4.11 shown as.

![TWO STEP VERIFICATION SYSTEM OF NATIONAL ID](image)

<table>
<thead>
<tr>
<th>Name</th>
<th>Father Name</th>
<th>Mother Name</th>
<th>Date of Birth</th>
<th>Voter ID</th>
<th>Image</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shohel Rana</td>
<td>Nazrul Islam</td>
<td>Sajeda Begum</td>
<td>07-01-1990</td>
<td>19507611642000235</td>
<td><img src="image" alt="Image" /></td>
<td>Delete</td>
</tr>
<tr>
<td>Rony Pal</td>
<td>Ratan Pal</td>
<td>Kalpona Pal</td>
<td>01-07-1990</td>
<td>19904114792000116</td>
<td><img src="image" alt="Image" /></td>
<td>Delete</td>
</tr>
<tr>
<td>Sajib Hassan</td>
<td>Molla Hassan</td>
<td>Fathema</td>
<td>13-07-1988</td>
<td>19907611642000130</td>
<td><img src="image" alt="Image" /></td>
<td>Delete</td>
</tr>
<tr>
<td>Mosam Mahmud</td>
<td>Shadath Mahmud</td>
<td>Shokina</td>
<td>26-02-1990</td>
<td>19507611642004275</td>
<td><img src="image" alt="Image" /></td>
<td>Delete</td>
</tr>
</tbody>
</table>

Fig 4.11: Admin can show view profile
4.6 Conclusion: Systems design is the process or art of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. One could see it as the application of systems theory to product development.
CHAPTER 5
SYSTEM DESIGN

5.1 Introduction: A web page is a resource of information that is suitable for the World Wide Web and can be accessed through a web browser. This information is usually in HTML format and may provide navigation to other web pages via hypertext links. Web page may be stored in a local computer or on a remote server. The web server may restrict pages to a private network, a corporate intranet, or it may publish pages on the World Wide Web pages are requested and served from web servers using Hypertext Transfer Protocol (HTTP). Web pages may consist of files of static text within the web server's file system, or the web server may read files of computer code that instruct it how to construct the HTML for each web page when it is requested by a browser (dynamic web pages).

5.2 Web page design:
Web page design is the process of organizing content and images on a web page for the purpose of selling your ideas and information to visitors coming across our website.

5.3 Elements of a web page:
A webpage can contain content which is able to seen or heard by the user. These elements include, but are not limited to:

- Text
- HTML
- CSS
- PHP
- MYSQL
- Hyperlinks
- JavaScript
5.3.1 PHP language: PHP is an HTML-embedded scripting language. It is one of the first developed server-side scripting languages to be embedded into an HTML source document rather than calling an external file to process data. The code is interpreted by a Web server with a PHP processor module which generates the resulting Web page. It also has evolved to include a command-line interface capability and can be used in standalone graphical applications.[2] PHP can be deployed on most Web servers and also as a standalone shell on almost every operating system and platform, free of charge. It began in 1994 as a set of Common Gateway Interface binaries written in the C programming language by the Danish/Greenlandic programmer Ramus Leadoff. Leadoff initially created these Personal Home Page Tools to replace a small set of Perl scripts he had been using to maintain his personal homepage. The tools were used to perform tasks such as displaying his résumé and recording how much traffic his page was receiving. He combined these binaries with his Form Interpreter to create PHP/FI, which had more functionality. PHP/FI included a larger implementation for the C programming language and could communicate with databases, enabling the building of simple, dynamic web applications. [6]

5.3.1.1 Benefit of using PHP: PHP would run on a specific operating system because PHP can be run on Windows, Linux, Mac OS X, BSD, Solaris, as well as any variety of different platforms. The profits for you will be huge because PHP is free! You can just download the code, use it in your business and make changes without worrying about licensing fees or anything. Your website will be in top shape and will be able to perform at a high level. PHP has a very high benchmark when compared to any other languages. PHP has many different functions that are already prepared for you to use. There are functions for handling database connections, formatting date, editing strings, handling emails. You can easily extend PHP if you have any specific functions that you would want to incorporate in your website. [7]

5.3.1.2 System Requirement for using PHP:
Server software (an operating system such as windows 2000 or Linux).
PHP 6.0 (get the download from www.hp.net)
A relational database system such as MYSQL. 
APHP compatible web server such as Apache. 
A text editor such as Notepad, Adobe Dreamweaver and so on. 
A web browser such as IE, Mozilla, and so on.

5.3.2 HTML: Hypertext Markup Language (HTML) is the language used to create web pages and other types of documents viewable in a browser. More precisely, HTML is the language that describes the structure and the semantic of a document. The content is tagged with HTML elements like <image>, <title>, <p>, <div> etc. HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages. [8]

5.3.2.1 A sample example of HTML:
The Voter ID program, a common computer program employed for comparing programming languages, scripting languages, and markup languages is made of 9 lines of code in HTML, albeit line breaks and the <!DOCTYPE> tag, or the document type declaration, are optional:

```html
<!DOCTYPE html>
<html>
<head>
<title>Voter ID</title>
</head>
<body>
<p>Voter ID</p>
</body>
```
5.3.3 CSS:
Cascading Style Sheets, most of the time abbreviated in CSS, is a style sheet language used to describe the presentation of a document written in HTML or XML (including various XML languages like SVG or XHTML). CSS describes how the structured element must be rendered on screen, on paper, in speech, or on other media. CSS is one of the core languages of the open web and has a standardized W3C specification. Developed in levels, CSS1 is now obsolete, CSS2.1 a recommendation and CSS3, now split into smaller modules, is progressing on the standard track. The first early drafts of CSS4 modules are being written. CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities or weights are calculated and assigned to rules, so that the results are predictable. Internet Explorer support for CSS began with IE 3.0 and increased progressively with each version. [9]

5.3.3.1 Example code of our CSS:
```
body {
  background-color: #F4FFE4;
}
.style1 {
  color: #000000;
  font-size: 18px;
}
```

5.3.4 Conclusion: Some information regarding the tools that were used in our work was illustrated. These are the tools that the modern day web page developers use more frequently to create good and attractive websites.
CHAPTER 6
USES OF PROPOSED SYSTEM

6.1 Introduction: There are some limitations in our Voter ID structure. The main problem is ID verification. Our proposals regarding Voter ID are given below.

6.2 Logic for Voter ID: We already said that the main limitation of the Voter ID structure of Bangladesh is the verification problem. Another big problem is that anyone can easily make a fake ID card.

Now we look towards error detection method. There are so many error detection methods in computer science.

When we studied the Voter ID structure of other countries of the world, we found that they use different methods for verifying their ID. The most reliable method is adding a checksum digit with the Voter ID. The checksum digit is generated from the overall ID calculation. By the check digit we can verify the validity of the ID holder.

6.3. Voter ID: The first benefit of our proposal is to use the Voter ID number in the purpose of voting. We all knew that the ID we received would allow us to vote. Our Voter ID which is called —voter registration ID was not properly utilized. Although we got the IDs, we were given separate voting numbers and on that basis we gave our vote.

Even some people got the number on the voting day. That number was considered as our voter ID. So it is clear that the Voter ID and the Voter ID is not the same or is not used in a proper way. In our proposal we provide an ID that can be used for the purpose of voting also.
6.4 Birth registration:
Suppose SHOHEL was born last night. Parents of Z have to go to the local commissioner's office for registering the birth of their child. The office gives a birth registration form to the parents. They have to fill up the form, which contains fields such as name, date of birth, birth place, parent's name, and nationality and so on. According to the information they (employees of the Commission Office) would create an ID for the child. The ID holder gets the ID before he appears for S.S.C examinations.

In the existing system the birth registration ID and National ID are not the same. So it is difficult to remember and carry the two ID and use them for different purposes. So we propose to use the same ID in different purposes. So if the ID is created during the birth registration process then it would be a great advantage.

6.5 Result of S.S.C and H.S.C:
The errors discussed above may occur in S.S.C or H.S.C results also. Above one lack students take part in the S.S.C or H.S.C examinations. After completing their examinations they get their results after two months. If the roll number of the student who appeared for the S.S.C examination is 33669911 but if a transposition error occurs then the roll number would turn to 33668911. The deserving candidate would then receive a complete false result sheet.

6.6 Digital Passport:
Getting a passport in our country is a very lengthy and expensive process. One has to go to the passport office, fill up a form and then the form verification takes a long time to complete. Now we are hearing that our government is making a central database for the citizens. So if it is made then getting a passport would be a matter of few hours. If a person holds a National ID, then he or she just needs to provide the ID card to the passport office. The officer in charge would look into the database for the ID number along with the ID holder's relevant information. After getting the ID, the ID would then be verified by our proposed system. If the ID is valid then the passport of the person can
be processed and delivered within few hours. In this way one can get a passport in a very quick time.

6.7 Bank Account:
Voter ID can also be used in opening a bank account. We can use our system in the Bank for ID checking.

6.8 Tax ID:
Bangladesh is a developing country. It is a small country is size but large in population. People of different occupations live in this country. Every year the government makes a lot of money from tax. The government has some rules and regulation for taxation. The tax office can verify the ID of the people who are eligible for tax using our verification system.

6.9 Conclusion: It is clear that the new and improved system would definitely make the ID structure far more secure. As a result it would be impossible for anyone to make fake IDs as easily as it was done previously.
CHAPTER 07
CRITICAL APPRAISAL

7.1 Introduction: We have developed the software using PHP language so that it can work in machines consisting of low system requirements. Still there are backdrops of our work which we will discuss in this latter part. Every work has its share of bad and good part. We have tried our best to develop a system that would work well under any condition.

7.2 Strength of the project: A system must have a verification system in order to provide security. Our developed system is the first of its kind in Bangladesh. Our intense research work shows that there hasn’t been a lot of work related to check digit. Our work has certainly made the existing ID structure far more secure. Any IT professional would be highly encouraged to work with check digit after studying our system. We have not only added a check digit but also have developed a checking procedure for the newly developed ID.

7.3 Weakness of the project: The designing of the web page could have been much better. While reading the ID from a notepad, one can only generate the ID and verify it but there are no options to store the ID. If there was a national database then we could have connected our software and real time ID verification could have been possible. We had to complete our work in a very short period so time was a big factor in our work. The designing of the web page could have been much better.

7.4 Conclusion: We hope that although we have few weaknesses but still we were successful in completing the task we were set out to do.
CHAPTER 08
CONCLUSION

8.1 Conclusion: A number of countries are changing their manual system to digital. Bangladesh is a developing country. If we want to change our situation we have to more effort in digitizing our work. BEC (Bangladesh Election Commission) has taken the first step towards this change. They have created a National ID for us. BEC is also planning to make a central database for the citizens. Our existing ID structure has some lacking. In near future when this ID is going to be used for various purposes then it is bound to face a lot of problems. National security is an issue that every country needs to look at very seriously.

To solve this problem we have created a verification system using checksum method. Our system generates an ID with a check digit. The check digit is being calculated using MOD11 method. The new system also possesses the function of verification. Any well-developed system should have a verification system. It is an issue that should be considered while developing the system. We have used check digit because mostly all developed countries have check digits with their ID. We have developed a system which we believe will not only enhance the logic of using check digit but will encourage our IT professionals to think more about security rather than only just developing the system.

8.2 Limitation of our National ID system (existing): There are some limitations in our National ID. The main limitation is the ID structure. There is no system for ID validation and verification. An individual can easily make an illegal ID. Recent newspaper reports show how easily one can get a fake ID.

Report can exist two ways:

- **1st step:** The feature is about some people who make fake National IDs and sell it to the citizens of Bangladesh who have no National ID card. It is quite impossible to determine whether the IDs are fake or not. We are solved to this problem
  - User’s real id info is store in central data base. Only admin can add here.
  - If the user is check there own real id then the go to step 2.
2nd step: A team of Rapid Action Battalion (Rab-2) detained three people and recovered several fake national identity (NID) cards, a number of other fake ID cards of various educational institutions, banks and offices from their shops in city's Milked area on May 4, 2009. Lt Commander Amir Islam of Rab-2 told the reporters, "We recovered three fake NIDs, a large number of other ID cards and certificates bearing names of different offices, banks, educational institutions, and different kinds of licenses during the drive at three shops at Baku Shah Market in Milked. He said, "The fake document providers only sell them to people they know, or 'reliable' customers brought through their known people." The three men arrested, Zakat Husain, 24, Alamgir Hossain, 38, and Shafiq Bachchu, 18, said it was comparatively easy to prepare fake documents with the help of graphics and computers. They said that almost all shops offering computer-based services are capable of preparing such fake documents. Maj Zia, second-in-command of Rab-2, said that although illegal, the business is lucrative as fake documents remain in high demand, not only in the capital but also in the rest of the country. These fake ID cards are sold illegally at a cost of around Tk 500 each by shops offering computer compositions, graphic designs or work, digital scans and related computer based services. These shops are mainly located at city's Nilkhet, Farm gate, Mohammadpur, Mirpur, Mohakhali and Paltan areas. Criminals make use of fake ID cards, inserting fake information on the cards so that they cannot be traced later. Cheats also use fake documents during fraudulent activities. A source also pointed out that many ordinary people, not necessarily hard criminals, also make use of fake ID cards to complete mandatory official formalities such as in banks, when they don't have any IDs of their own. Solve to here.

- If the user id is matching own id then the check in their father’s id.
- People recovered several fake national identity (NID) cards. They can made-up fake user id but not only cerate their father’s id.

This system is exiting a new project. Can users are easily solved to their real life. We hope that.
8.3 **Further suggested work:** In future as the government has taken an initiative to develop a national database. If the database is created then our system could be integrated with that database and new ID can be generated and stored in the database. On the other hand as we also have a verification system so if someone tries to make a fake ID then it could be easily detected. Also a lot of work can be done over the outlook of the website. A section can be opened where companies who are interested in using our system can become members of our site with a certain fee. Our logic can be used by teaching institutions, hospitals, and private and government organizations to create and verify IDs for their students, clients and employees.

8.4 **Conclusion:** It can be observed from the mentioned points that the existing ID structure needs some modification in order to provide a unique identity for a person. The data entry errors that were discussed also need to be taken into consideration. The comparison between countries that is shown in Table 02 clearly indicates that the existing ID structure requires certain changes to make it far more powerful.
APPENDIX

9.1 Connect:

```php
<?php
$q= mysql_connect("localhost", "root","") or die("not connected");
$db= mysql_select_db("newvoterid") or die("not connected");
?>
```

9.2 Submit ID:

```html
<!doctype html>
<html lang="en">
<head>
    <meta charset="utf-8" />
    <title>VOTER ID VERIFICATION SYSTEM</title>
    <link rel="stylesheet" href="styles.css" type="text/css" media="screen" />
    <link rel="stylesheet" type="text/css" href="print.css" media="print" />
    <script src="../SpryAssets/SpryValidationTextField.js" type="text/javascript"></script>
    <link href="../SpryAssets/SpryValidationTextField.css" rel="stylesheet" type="text/css">
</head>
<body>
<div id="wrapper"><!-- #wrapper --></div>
<div id="menu2">
<img src="images/banner5.jpg" height="200" width="940">
</div>
<nav><!-- top nav --></nav>
</body>
```
```html
<form action="check_id.php" method="post">
  <table width="700" border="0" align="center">
    <tr>
      <td align="right">ID:</td>
      <td><span id="sprytextfield1">
        <input name="n_id" type="text" id="float2" maxlength="17" width="400">
        <span class="textfieldRequiredMsg">ID is required.</span>
      </span></td>
      <td>example:19907611642000235</td>
    </tr>
    <tr>
      <td align="right">Date of birth:</td>
      <td><span id="sprytextfield2">
        <input name="d_birth" id="float" type="text" width="400">
        <span class="textfieldRequiredMsg">Date of Birth is required.</span></span>
      </td>
      <td>example:07-01-1990</td>
    </tr>
  </table>
  <input type="submit" value="Check ID" name="checkid">
</form>
```
</tr>
</table>
<script type="text/javascript">
<!--
var sprytextfield1 = new Spry.Widget.ValidationTextField("sprytextfield1", "none",
{validateOn:["blur"]});
var sprytextfield2 = new Spry.Widget.ValidationTextField("sprytextfield2", "none",
{validateOn:["blur"]});
//-->
</script>
</form>
</div>

<?php
include 'footer.php';
?>
9.3 Check ID:

```php
<?php
include 'header.php';
include 'connect.php';
extract($_POST);
?>

<?php
$query=mysql_query("SELECT * FROM voter_info WHERE v_id='$n_id' and d_birth='$d_birth'");
$rows = mysql_num_rows($query);
if($rows>0){
    while($rows = mysql_fetch_array($query) )
    {
        ?>
<br /><br /><br /><br /><br />
        <div align = "center" style="height:300px ">
        <form action="check_id2.php" method="post">
        <b>Enter your Father ID:</b><input type="text" name="f_id" />
        <input type="submit" value="Check" name="check" />
        </form>
        </div>

    }
    ?>
<br /><br /><br /><br /><br />
    <div align="center">
    <?php
```

© Daffodil International University
echo "<h3 style='color:Red'><blink>Your Given ID is not Valid.</blink></h3>";

?>
</div>

<?php
}
include 'footer.php';
?>
REFERENCES


-THE END-