The Development of Web-Based Attendance System for Senior High School Students of Santolan High School

A Research Paper
Presented to
the Faculty of Senior High School
Santolan High School

By
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APPROVAL SHEET

This thesis entitled**, "The Development of Web-Based Attendance System for Senior High School Students of Santolan High School",** prepared and submitted by **Villareal Richard, Metante Niky Joy, Zapanta Angelica, Taroc Eloisa Jane and Dag-uman John Mark David** in partial fulfillment of the requirements for research congress held by the division office of Department of Education

ANTONIO C. DE GUZMAN, M.P.H., L.P.T.
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_____

PANEL OF EXAMINERS

Examined and approved by the Panel of Examiners in an Oral examination with a grade of _____on

January 2023.

Chairman: _____

Member: _____

Member: _____

Accepted as a partial fulfillment of the requirements for the subject Inquiry, Investigation and Immersion.

RODNEY ALLAN V. GIANAN, L.P.T., M.Ed.
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CERTIFICATE OF ORIGINALITY

I hereby certify that this **"The Development of Web-Based Attendance System for Senior High School Students of Santolan High School"** is our own work and that, to the best of our knowledge and belief, it contains no material previously written or published by another person or organization nor any material which has been accepted for award of any other degree or diploma from a university or institution of higher learning, except where due acknowledgment is made thereof.

Furthermore, We declare that the intellectual content of this thesis is the product of our work although We have received assistance from others on the manner of organization, presentation, language and style.

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ABSTRACT OF THE STUDY

The research aims to solve the traditional (handwritten attendance) way of encoding attendance by using automated, uniformed, and secure application made with the several help of application such as browsers, servers and QR code recognition library to form a suite that is suitable for end users such as students which they can use it as primary attendance. Along the new form of the attendance, the research would like to enrich the work experiencing or the studying experience on the governing establishment. The capabilities of the Web – Based Attendance System is purely experimental that meant that the features of the Web – Based Attendance System will vary depending on the researchers implementation of features. The open -source nature of the research of allows it self to be accessible to everyone who wants to know or have a Attendance System that is this simple, secure and efficient.

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Introduction

The technological advancement today allows us to automate tasks especially when encoding attendances. Encoding data on paper became the norm until today. There were obvious security issues with that certain method. Primarily having a physical paper means it can be disposed of either accidentally or deliberately, Furthermore having several physical papers is imaginably heavy on a stack and time consuming browsing its contents. Prior to its' counterpart encrypting and decrypting data digitally allows everyone to have the confidence to surf the world wide web especially in School and its communities. The researcher piece out several open-source programs to make a working application to use. These suites are open source functions that are easy to repurpose to such a degree that are able to compete with their commercial counterparts.

Today's technology allows everyone to program anything that the computer processors can. And artificial intelligence is no different, such as coding a simple image recognition can be meticulous, Just to mimic how humans recognize faces (Jadhav A. et al., 2017).

The study was conducted during the post-pandemic of sars-cov 2022, to solidify the learning experience of the student and to support the mandatory social distancing that was implemented in 2020. That inspires the research to conduct this study to reduce contact between individuals, whilst giving the same, uniform, and light attendance system. Therefore monitoring everyone who is in the database that the advisers and maintainer put up. As suggested, the research could add features such as SMS notification, and User Tracking. Due to its' open source nature.

Statement of the problem

The goal of the study is to determine outcome of having a scannable attendance application in Santolan High School;

1. What is the demographic profile of the respondents in terms of;
   1. Complete Name
   2. Learner Reference Number
   3. Section
2. What are the procedures conducted by the researchers?
3. What is the frequency of the respondents who logged-in the Web – Based Attendance System? (Total Average)
4. What is the average number of the respondents who were able to log in, within 1, 5 and 10 minutes?
5. What is the mean average of the research prototype and the traditional signing of attendance?
6. What are the problems encountered by the researchers during the development and using the Web-Based attendance system?

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Hypothesis

The encoding data by writing to gathering takes more time to encode and validate to test, whether if it is much more reliable, secure and efficient the researcher programmed and piece out several programs to work with the research instrument. This is to test the capabilities between two options.

Significance of the Study

The research aims to empower the following:

1. Teachers
2. Students
3. Secretaries
4. Other

Through focusing their time and energy on their work or study with having less worry of their attendance.

Definition of Terms

Open-Source - Refers to the method of developing programs by sharing it publicly therefore increasing its' volunteers and freelancers to make it better.

Traditional - Refers to the written method of encoding data.

Suite - A series of applications, codes, and functions that are interconnected to work as one whole application.

Mimic - Ability to copy something; a feature, color, structure.

Spreadsheet - A spreadsheet is a computer application for computation, organization, analysis and storage of data in tabular form

i386 - A type of CPU that has 32 bits of instruction sets.

ArmV6 - Advanced RISC machine version 6, A SOC that is designed to work like i386, but also has the necessary instruction set to work in a 64-bit environment.

Debian/Arch - UNIX distribution which has gain popularity in the development industry.

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BASH - Bourne-Again Shell, Terminal used by the most of the UNIX operating system.

DOS terminal - Disk operating system, which is used as the main terminal for Windows.

LAMPP/XAMPP - Is an open source Web development platform that uses Linux as the operating system, Apache as the Web server, MySQL as the relational database management system and PHP as the object-oriented scripting language.

Front-End - Type of code that deals with the interactable state of the program such as image, websites, and renders.

Back-End - Type of code that deals with the hidden elements that supports the front-end code. Such as behaviors, actions, state, and relations.

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Review Related Literature

In recent years, there has been a growing interest in web-based attendance systems as a means of improving attendance tracking and management in various organizations, including schools, businesses, and government agencies. Several studies have explored the theme of how web-based attendance systems can help organizations in different ways.

One of the most prominent benefits of web-based attendance systems is that they can streamline the attendance tracking process, reducing the time and resources needed for manual tracking methods. This has been shown to improve efficiency and accuracy in attendance tracking, leading to better data analysis and informed decision-making (Liu et al., 2021). Additionally, web-based attendance systems can be accessed remotely, allowing employees to record their attendance from any location, which is particularly useful in cases of remote work or flexible work arrangements (Joshi, 2020).

Another theme that has emerged in the literature is the impact of web-based attendance systems on employee engagement and motivation. Several studies have shown that web-based attendance systems can promote transparency and fairness in attendance tracking, which can lead to higher levels of employee satisfaction and motivation (Arora and Sharma, 2019; Kim and Jung, 2018). Moreover, the use of web-based attendance systems can help organizations identify attendance patterns and trends, enabling them to take proactive steps to improve employee engagement and productivity (Joshi, 2020).

Web-based attendance systems have also been found to have positive effects on student attendance and academic performance in schools. Several studies have shown that the use of web-based attendance systems in schools can improve attendance rates and reduce truancy (Ahmad et al., 2019; Rahmawati and Pratama, 2021). Moreover, the use of web-based attendance systems in schools has been associated with improved academic performance, as students are more likely to attend classes regularly and participate in learning activities (Ahmad et al., 2019).

In conclusion, the literature suggests that web-based attendance systems can offer numerous benefits to organizations, schools, and other institutions. By streamlining attendance tracking and promoting transparency and fairness, web-based attendance systems can improve efficiency, accuracy, and employee/student engagement, leading to better outcomes for organizations and students alike.

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Conceptual Framework

The research allows the subject to log-in without the need of using a pen, therefore allowing them to do less contact with the instruments and other people.

Chart 1: Operation Sequence
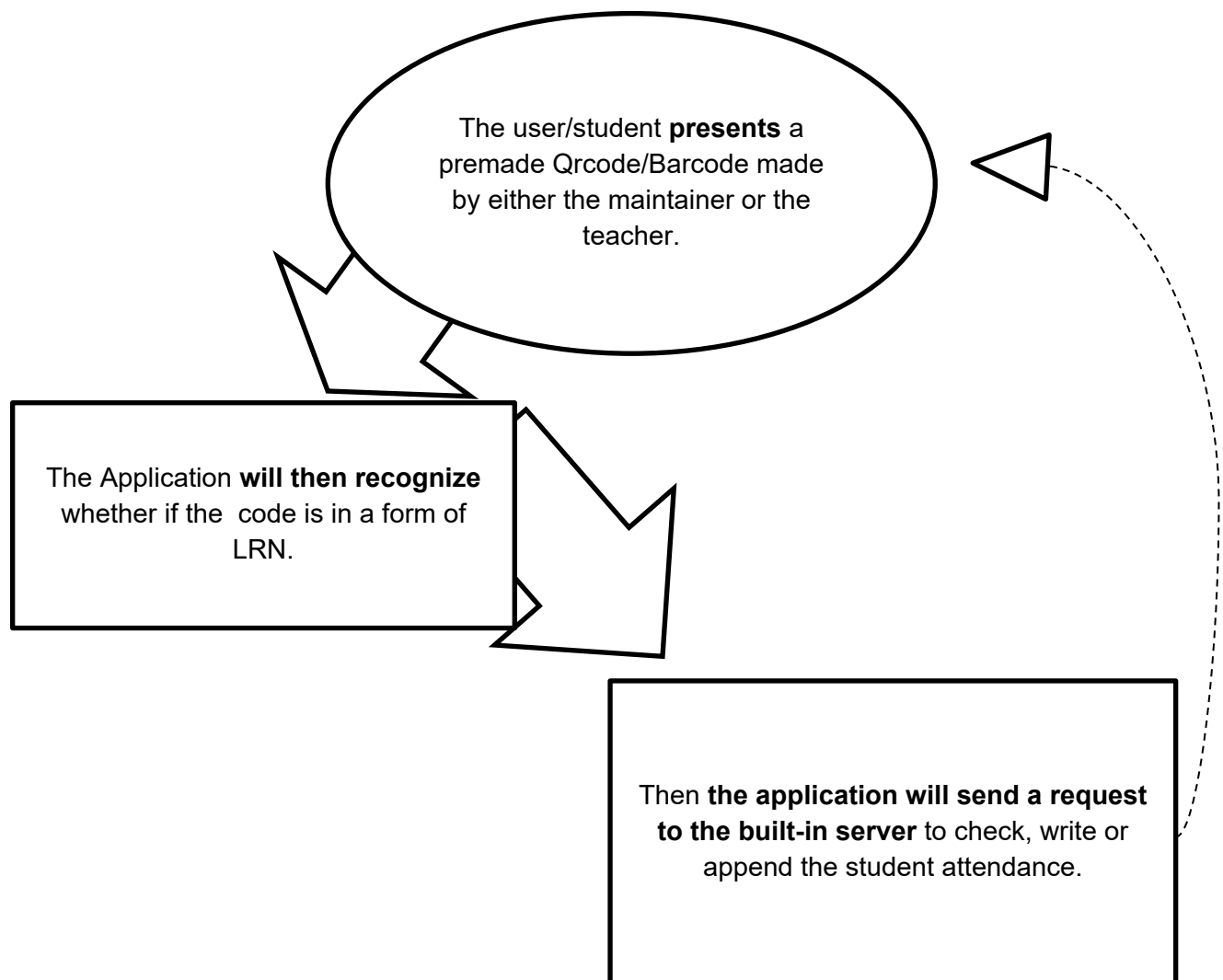
The user/student **presents** a premade Qrcode/Barcode made by either the maintainer or the teacher.

The Application **will then recognize** whether if the code is in a form of LRN.

Then **the application will send a request to the built-in server** to check, write or append the student attendance.

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Research Design

The research is designed to support a time consuming task that every school has, that said the experimental nature of the research allows itself to be fast, reliable and secure, In order to materialize the study several knowledge is required to be able to maintain the study.

1. Knowledge in using different kinds of operating system and able to work flawlessly.

2. Basic knowledge in using the internet browser and other related office suite.

3. The patience and perseverance to program, troubleshoot and to maintain the application in a working order.

Locale of the Study

The locale of the study is located at the Santolan Highschool, specifically the combined class of grade 12, Andersen(AAD and BCW) and Tolstoy(ICT). That is because of the information availability will ease the gathering of data.

Sample of the Study

The development of the research instrument took most of the time for conduct it, Its sample of the study is effectively affected so it needs be narrowed down around 45 participants which are the sections of Grade 12 Tolstoy(ICT), Grade 12 Andersen(BCW), and Grade 12 Andersen(AAD).

Research Instrument

The research instrument is a developed web-based attendance system. It consists of 2 processing sides: Frontend and Backend.

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Diagram 1: Entity-Relationship Diagram (ERD)
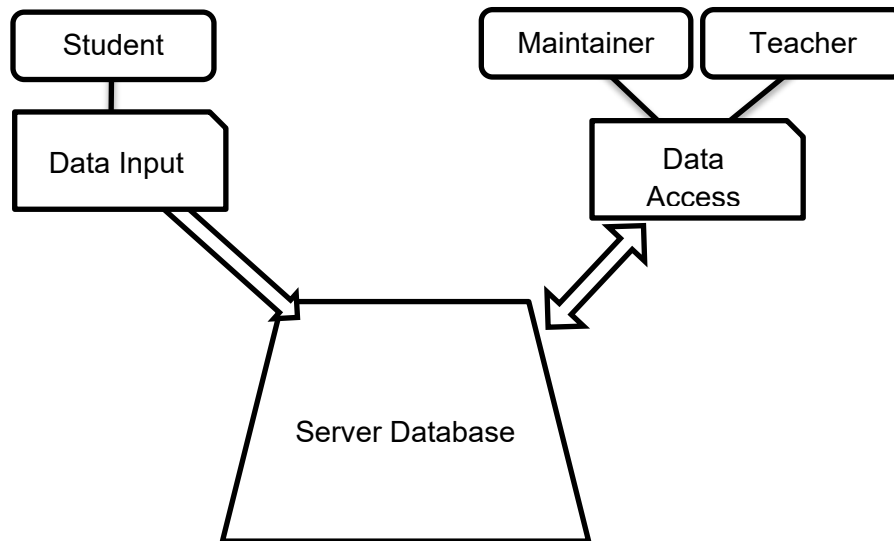
The Diagram above explains how the roles of the variables works in the perspective of the research. As shown above as a Entity-Relationship Diagram. This is form to clarify who is able to access the research prototype and who is not.

Validation of the Instruments

Developing the Web – Based Attendance, requires the researcher to learn unsual languages like PHP that is to add enough security measures on a Query type automation. Testing the instrument shows that 50-70% time difference in logging in as a dry run for the researchers' porfolio.

Potential Ethical Issues

The research expected the following issues that may invalidate or bug the system/application:

1. The research instrument cannot know whether the user is in school or not.

2. The research database can be altered, that may due to computers trusts' devices or inputs made physically.

3. The research instrument cannot identify if the user is the correct person associated with

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4. The research instrument is made primarily of code and does not require any hosts or operating system requirement that implies compatibility of the server its' being run into.

5. Does the research instrument able to perform as intended.

6. Are the data processed safe or private?

7. Cost of Deployment, if any.

Data Gathering Procedures

To start the Data gathering process the researcher need several information from the respondents namely, fullname, grade, section, and learner referrence number or phone number(in 12 digit format)

Enrolling Students

Once the respondent give the information the researcher then starts encoding their learner referrence number or the 12 digit phone number in either the form of QR code or Barcode. Once that done, the researcher can now encode the required information to the database of the Web – Based Attendance system.

Enrolling students on the database: encoding respondents to the database is fairly easy as editing a word document. First you have to know where is the masterlist? The master list is located by default at "C://xampp/htdocs/<prototype_name>/src/private/master_list.csv" as mentioned just append the respondents detailed in this manner "LRN, Fullname, Grade, Section."

Scanning for Attendance

Once the respondent received the either QR code or Barcode, the respondent can now use the Web – Based attendance system as a primary attendance.

Retrieving/Accessing Data from the server

As Stated on the Diagram in page 7, there are 2 persons allowed to access the data from the server. The first one is the maintainer who is tasked to check the Web- Based Attendance System in Working order, and the Second one is the Teacher who can also be the maintainer.

Retrieving/Accesing the server; Assuming that the server is installed in windows with the help of XAMPP. The data is located at "C://xampp/htdocs/<prototype_name>/src/private/out". Note that the output of these files is in the format of .csv or comma separated values, which most spreadsheet application supports.

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System Requirements

As long as the computer is able to run XAMPP or Apache Web server with fastcgi enable the computer is supported and the Web - Based Attendance system can run normally as it should.

Image 1: Initial Testing


```
<> index.html        ▦ January222023.csv  ✕

private > out > ▦ January222023.csv
  1    136733100016, Carl Joshua,  G.,  Araojo,12,  Andersen, January222023-10:21-PM
  2    136739121065, Richard Josh,  B., Villareal,12, Tolstoy, January222023-10:22-PM
  3    109403100168, Alyxise,  C.,  Katipunan,12,  Tolstoy, January222023-10:23-PM
  4    109405100214, Leila Jasmin,  M.,  Mones,12,  Tolstoy, January222023-10:23-PM
  5    164529110147, Niky Joy,  L.,  Metante,12,  Tolstoy, January222023-10:24-PM
  6    109538100347, Riel Alexandrov,  N.,  Villanueva,12,  Andersen, January222023-10:24-PM
  7    136739100059, Jacqueline,  R.,  Ardales,12,  Andersen, January222023-10:25-PM
  8    000000000000, Gerald,  S.,  Vinegas,12,  Andersen, January222023-10:25-PM
  9    128457100047, Jhay Marc,  #,  Mandras,12,  Tolstoy, January222023-10:25-PM
 10    136552090043, John Miguel,  C.,  Malabuyoc,12,  Tolstoy, January222023-10:26-PM
 11    136739100780, Tristan,  B.,  Valendez,12,  Tolstoy, January222023-10:26-PM
 12    124918090017, Betty Jane,  M.,  Peque,12,  Tolstoy, January222023-10:26-PM
 13    109538100347, Riel Alexandrov,  N.,  Villanueva,12,  Andersen, January222023-10:27-PM
 14    132578110051, Justin,  A.,  Barcelita,12, Tolstoy, January222023-10:27-PM
 15    136739100815, Angelica Mae,  P.,  Zapanta,12,  Tolstoy, January222023-10:27-PM
 16    136486120076, Eloisa Jane,  I.,  Taroc,12,  Tolstoy, January222023-10:27-PM
 17    120092100080, John Mark,  #,  Rosil,12,  Andersen, January222023-10:28-PM
 18    136739100599, Simon,  B.,  Pecate,12,  Tolstoy, January222023-10:30-PM
 19    136739090193, Karl Anthony,  D.,  Curilan,12,  Tolstoy, January222023-10:40-PM
 20    136739080183, Justin Leonard,  P.,  Cruz,12,  Tolstoy, January222023-10:40-PM
 21    136739100187, Thalia Verenicci,  E.,  Castro,12,  Tolstoy, January222023-10:40-PM
 22
```

The Initial testing of the Web – Based Attendance System was on January 22, 2023 after the researchs' title formulation, the Web – Based Attendance System was supposed to be a project to be added to the researchers' porfolio.

Statistical Analysis

The researcher has formulated several functions to use as a guideline in finding, translating and assigning correct data to the correct graphs.

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1. The demographics of the participants

2. Time taken of return or submission before the query to submit the data.

3. The mean difference between the Web – Based Attendance System and Traditional Attendance Signing.

4. Total Average of Usage

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Presentation of Data

The Procedures performed from gathering to logging in, in the Web-Based Application. The flowchart below explains the action organization and should clearly state the necessary actions to complete the enrollment of the participants to using the Web – Based Attendance System.

Chart 3: Flowchart

1	Gathering the demographic profile of the respondents
2	Encoding of the LRN in either QR / BAR code by the use of third party QR / Bar code generator online
3	Disseminating of the encoded QR /BAR code to the associated respondent.
4	Enrolling the respondents to the database of the Web-Based Attendance System.
5	Logging in of the respondents to the Web-Based Attendance system

The frequency of the respondents who logged-in the Web – Based Attendance System. The total number of respondents who logged in the Web – Based Attendance System is 33 but the expected number is 45 since there were 45 enrolled at the beginning of the study.

The average number of the respondents who were able to log in, within 1, 5 and 10 minutes. The mean average of the research prototype and the traditional signing of attendance

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Graph 1: Student Per Minute
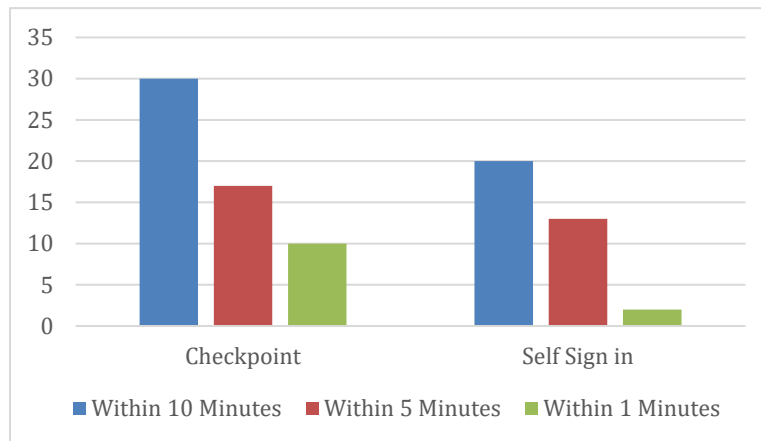
The data presented on the graph above shows that the Web – Based Attendance System is able to scan 10 respondents within 1 minute, 17 respondents within 5 minutes and 30 respondents within 10 minutes. The graph also shows only who are the present within the day of testing or experimenting. The data itself represents the frequency of students per minute.

This means that the longer the time alloted the more students could log in, this also explains that the Web – Based Attendance System is able to scan simultaneously within a minute.

Graph 2: Student per minute
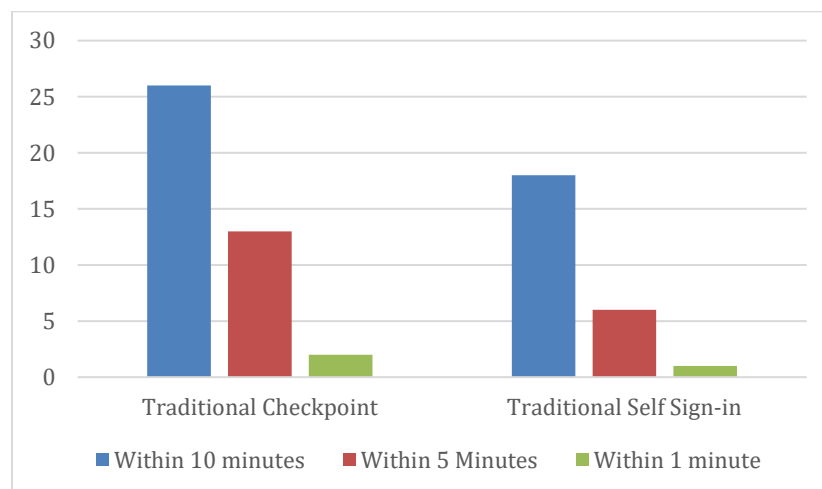
The data presented on the graph above shows that the students were able to write their attendance and there were 2 respondents within 1 minute, 13 respondents within 5 minutes and 26
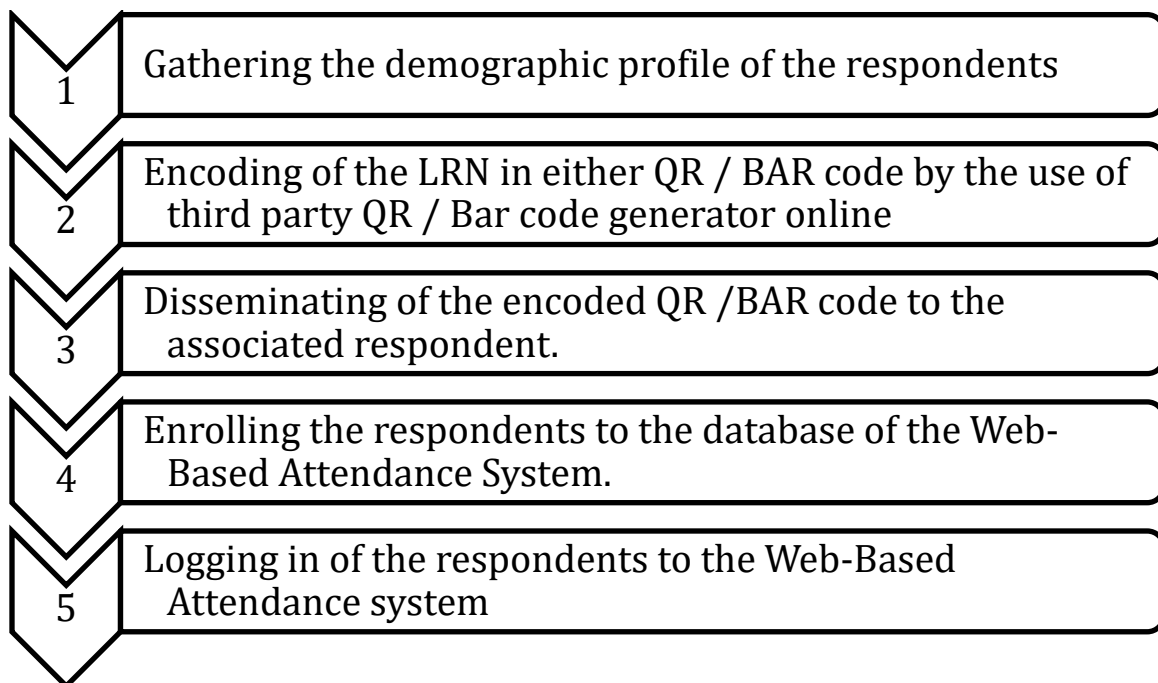
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respondents within 10 minutes. This concludes that using Web – Based Attendance System is significantly faster than the traditional signing-in of attendance.

Table 1: Problems Encountered During And After the Development of the Web – Based Attendance System

Possible Cost (Installation, Income or Maintenance)	
Installation	The hardware would be the maintenance choice since the software requires very little specifications thus the price varies.
Income	The open-source nature of the components used the research will not allow the software to be monetize therefore. This can only rely on Donations.
Maintenance	The research instrument can easily be understood for someone with experience in object orient-programming.
Is there any Hardware specified?	No, the research instrument is made entirely of code. Just make sure that the host is a server class computer.
Knowing where the participants is.	Unfortunately implementing this feature is too much of work to be done in such short amount of time. Plus, it is another learning curve for the researcher.
Security	The research application is preferred to be deployed in a UNIX environment with BTRFS (**B-Tree File System**).
Data Security	Since the research instrument is made with PHP a server-side programming language, It is secure enough to contain the data it has.
Physical Data Alteration	Although it is possible to change, delete,

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	modify the file. But that is if the infiltrator has the knowledge of using UNIX or the hosts' Operating System. This can be solved by putting up passwords.
Does the Research Instrument Able to Perform as intended?	Yes, as it is design to be.
Publication	The code is open and licensed with MIT it is free to use and can be used for academic purposes. But cannot be monetize.

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Summary of Findings

The traditional form of data gathering takes more time to encode and validate to test whether its' much more reliable, secure and efficient. The researcher found that it is faster to scan inputs from students rather than writing on paper.

But they are both reliable in storing data in their own. The research instrument is able to store more data than the traditional considering the spatial consumption a paper takes compared to a eletromagnetic data which is several times smaller.

Analysis

Testing the Web – Based Attendance System shows peculiar result such as double sign in, failed to sign time on the internet time and participants neglegence of signing in(eg. Either delibirately or accidentaly forgotting to sign in). Aside from these the other results are as expected and the Web – Based Attendance System works as intended.

Conclusion

The researcher concludes that having the research intrument as the primary source of attendance is indeed reliable, more secure and far more efficient than writing on paper. It true that the research instrument can be buggy and unreliable that is due to its alpha development phase meaning the research instrument is usable and able to do work as intended, it also has bugs which are implemented code that may break the design of the research instrument. Glitches are less of the worries since the research application is not calculating any hard mathematical questions like realtime physics engine therefore it can calculate faster.

Recommendations

The Research Instrument can be used to following:

1. Franchise or Small Business; the following are able to get an affordable ID system along with the punch card attendance.

2. Motels, Hotels or Inns; The following are able to get better security and validation. As a Key or Passcode is going in the rooms, plus the manager or computer literate can change the passcode for added security for every time they finish their time in.

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3. Corporate or Private Companies; the following can have additional security measures by adding a ID system for guest or temporary employees.

4. Inventory; The code's versatility allows it to not only be used as attendance but also as a inventory

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APPENDIX A

Image 1: Frontend Rendered
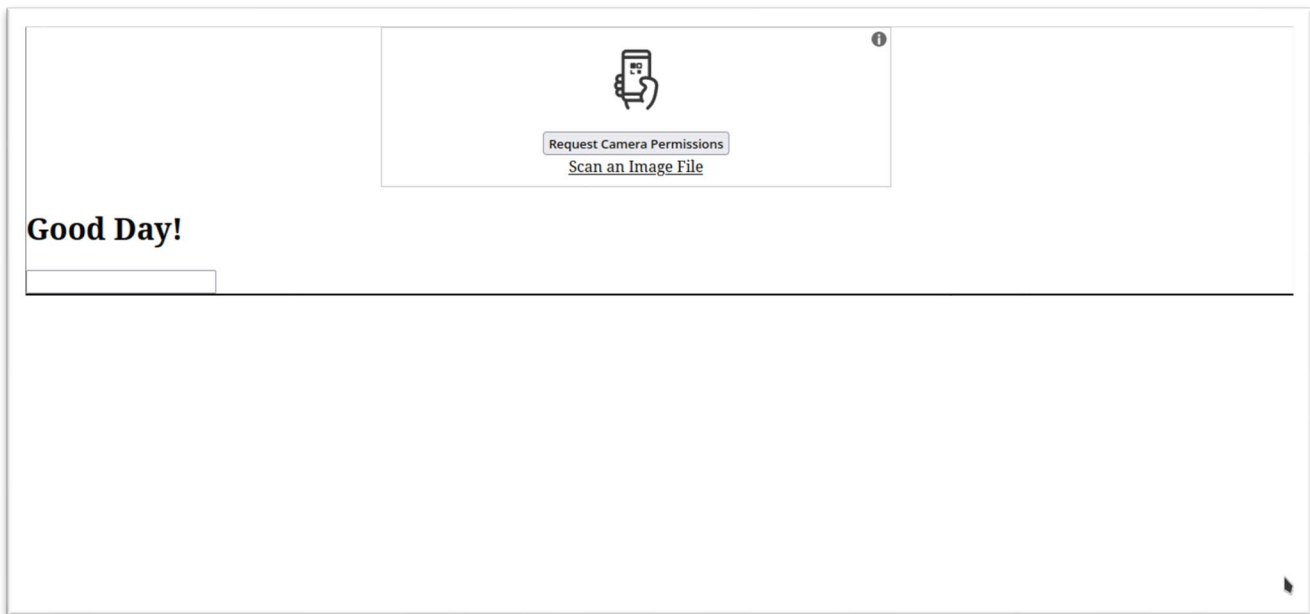
Request Camera Permissions
Scan an Image File

Good Day!

Image 2: Backend Response Frontend Only

Current Attendance of Monday 4th of January 2023

136739121065

Present Richard Josh B. Villareal, 12, Tolstoy.

Attendance Written

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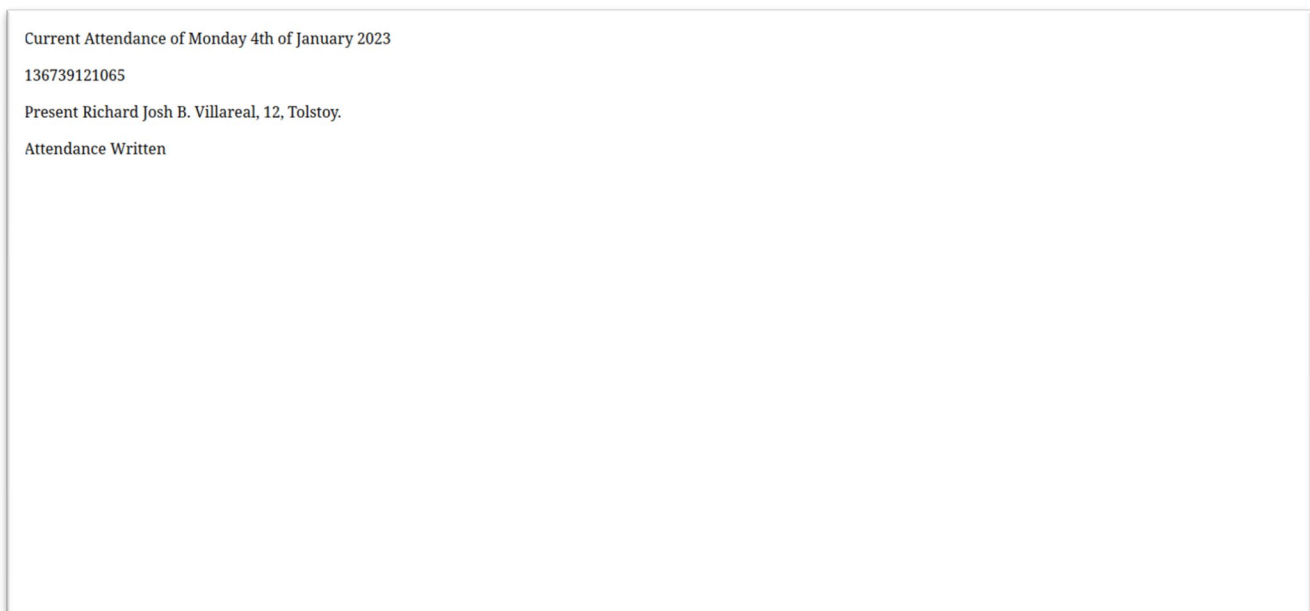
Image 3: Source Code of The Index.html

```
index.html > html > head > style > {} @media screen and (min-width: 900px) and (min-height: 400px)
33          function onScanSuccess(decodedText, decodedResult) {
34              let u_lrn = document.getElementById("u_lrn");
35              lrn = String(decodedText);
36              if (lrn.length == 12){
37                  alert("Input Accepted");
38                  u_lrn.value=decodedText;
39                  alert("Signing In!");
40                  document.getElementById('lrnform').submit();
41              }else{
42                  alert("Input Error")
43                  alert(lrn);
44              }
45          }
46          function onScanFailure(error) {
47              // handle scan failure, usually better to ignore and keep scanning.
48              // for example:
49              console.warn(`Code scan error = ${error}`);
50          }
51          let html5QrcodeScanner = new Html5QrcodeScanner(
52          "reader"
53          ,{ fps: 10, qrbox: {width: 250, height: 250} },/* verbose= */ false);
54          html5QrcodeScanner.render(onScanSuccess, onScanFailure);
55      </script>
56  </body>
57  </html>
58
                                            Ln 15, Col 14   Tab Size: 4   UTF-8   LF   HTML
```

```
index.html > html > head > style > {} @media screen and (min-width: 900px) and (min-height: 400px)
1   <!DOCTYPE html>
2   <html>
3       <head>
4           <title>Attendance Portal</title>
5           <script src="html5-qrcode.min.js" type="application/x-javascript"></script>
6           <style>
7               @media screen and (min-width: 900px) and (min-height: 400px){
8                   .contents {
9                       border: 2px solid ☐black;
10                  }
11                  .qrcodescanner {
12                      width: 540px;
13                      margin-left: 28%;
14                  }
15              }
16              @media screen and (max-width: 420px) and ( max-height: 780px){
17                  .contents {
18                      border: 2px solid ☐green;
19                  }
20              }
21          </style>
22          <meta name="viewport" content="width=device-width, initial-scale=1.0">
23      </head>
24      <body>
25          <div class="contents">
26              <div class="qrcodescanner" id="reader"></div>
27              <form id="lrnform" method="POST" action="private/main.php">
28                  <h1>Good Day!</h1>
29                  <input type="textbox" name="lrn" id="u_lrn">
30              </form>
31          </div>
32          <script>
                                            Ln 15, Col 14   Tab Size: 4   UTF-8   LF   HTML
```

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Image 5: PHP Source Code

```php
private > main.php > html > body > validateData
1    <html>
2        <head>
3            <title>Processing...</title>
4            <meta name="viewport" content="width=device-width, initial-scale=1.0">
5            <style>
6
7            </style>
8        </head>
9        <body>
10           <?php
11               $u_lrn= $_POST['lrn'];
12               function validateData($lrn){
13                   echo "<p>" . "Current Attendance of " . date("l jS \of F Y") . "<br>" . "</p>";
14                   echo "<p>" . $lrn . "</p>";
15                   if (! empty($lrn)){
16                       $master_list = fopen("./src/master-list.csv", "r");
17                       if ($master_list !== FALSE){
18                           while(! feof($master_list)){
19                               $data = fgetcsv($master_list,0,",");
20                               if (! empty($data)){
21                                   if ($lrn === $data[0]){
22                                       echo "<p id=". $lrn .">"."Present ". "" . $data[1] . " " . $data[2]
23                                       $GLOBALS['csvDetails']=$data[0]. ",".$data[1]. ", ".$data[2]. ", ".
24                                       return 0;
25                                       break;
26                                   }
27                               }
28                           }
29                       }
30                   }else{
31                       echo "<p>"."403 Forbidden, Action requires admin privileges" . "</p>";
32                   }
```

```php
private > main.php > html > body > validateData
33                   fclose($master_list);
34               }
35               function appendAttendance($DataToWrite,$Path){
36                   $file = $Path . date("FjY") . ".csv";
37                   if (file_exists($file)){
38                       $CSVfile = fopen($file, 'a') or die($file . " Can't Access File");
39                       fwrite($CSVfile, $DataToWrite);
40                       echo "<p>". "Attendance Added" . "</p>";
41                       fclose($CSVfile);
42                   }else{
43                       $CSVfile = fopen($file, 'w') or die($file . " Can't Access File");
44                       fwrite($CSVfile, $DataToWrite);
45                       echo "<p>". "Attendance Written" . "</p>";
46                       fclose($CSVfile);
47                   }
48               }
49               function main($lrn, $master_list, $WritePath){
50                   switch(validateData($lrn)){
51                       case 0:
52                           appendAttendance($GLOBALS['csvDetails'],$WritePath);
53                           break;
54                       default:
55                           echo "<p>"."404 Not Found, Contact your adviser or any computer literate in you
56                           break;
57                   }
58               }
59               main($u_lrn, "./src/master-list.csv", "./out/");
60           ?>
61       </body>
62   </html>
63
```

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Image 6: Traditional

8	00:00:23.22	00:03:30.94
7	00:00:23.36	00:03:07.71
6	00:00:42.35	00:02:44.35
5	00:00:27.78	00:02:01.99
4	00:00:23.63	00:01:34.21
3	00:00:24.22	00:01:10.57
2	00:00:27.71	00:00:46.35
1	00:00:18.63	00:00:18.63

13		00:00:17.67	00:05:33.06
12		00:00:19.92	00:05:15.38
11	Slowest	00:00:42.59	00:04:55.46
10		00:00:30.77	00:04:12.87
9	Fastest	00:00:11.15	00:03:42.09
8		00:00:23.22	00:03:30.94
7		00:00:23.36	00:03:07.71
6		00:00:42.35	00:02:44.35

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Image 7: Attendance Data

```
 1    136734100132, Bruce,  E.,  Mendoza, 12,  Andersen, March272023-12:46-AM
 2    127587100007, Lyka,  G.,  Badoles, 12,  Andersen, March272023-12:46-AM
 3    124918090017, Betty Jane,  M.,  Peque, 12,  Tolstoy, March272023-12:46-AM
 4    136486120076, Eloisa Jane,  I.,  Taroc, 12,  Tolstoy, March272023-12:46-AM
 5    136739100815, Angelica Mae,  P.,  Zapanta, 12,  Tolstoy, March272023-12:46-AM
 6    136733100003, Alex,  S.,  Araneta, 12,  Andersen, March272023-12:47-AM
 7    136733100003, Alex,  S.,  Araneta, 12,  Andersen, March272023-12:47-AM
 8    119990100019, Vina,  #,  Badoles, 12,  Andersen, March272023-12:47-AM
 9    116971100005, Gerald,  P.,  Claro, 12,  Andersen, March272023-12:47-AM
10    116971100005, Gerald,  P.,  Claro, 12,  Andersen, March272023-12:47-AM
11    136739090175, Jowielyn Rose, D., Corutan, 12, Andersen, March272023-12:47-AM
12    136739150526, Diana Rose,  B.,  Cataga, 12,  Andersen, March272023-12:48-AM
13    136739100294, Caroline,  N.,  Dipad, 12,  Andersen, March272023-12:48-AM
14    127471100041, Jamaica Kris,  S.,  Ganade, 12,  Andersen, March272023-12:48-AM
15    000000000000, Gerald,  S.,  Vinegas, 12,  Andersen, March272023-12:48-AM
16    136739100059, Jacqueline,  R.,  Ardales, 12,  Andersen, March272023-12:49-AM
17    136735100363, Jill,  E.,  Mejorada, 12,  Andersen, March272023-12:49-AM
18    136735100363, Jill,  E.,  Mejorada, 12,  Andersen, March272023-12:49-AM
19    136739080183, Justin Leonard,  P.,  Cruz, 12,  Tolstoy, March272023-12:49-AM
20    136739100599, Simon,  B.,  Pecate, 12,  Tolstoy, March272023-12:49-AM
21    136739090193, Karl Anthony,  D.,  Curilan, 12,  Tolstoy, March272023-12:50-AM
22    136739100187, Thalia Verenicci,  E.,  Castro, 12,  Tolstoy, March272023-12:50-AM
23    136738100164, Chealzzi,  L.,  Fulgencio, 12,  Tolstoy, March272023-12:50-AM
24    131143120259, John Mark David,  P.,  Dag-uman, 12,  Tolstoy, March272023-12:50-AM
25    136739078041, Charles Dylan,  E.,  Mata, 12,  Tolstoy, March272023-12:50-AM
26    128457100047, Jhay Marc,  #,  Mandras, 12,  Tolstoy, March272023-12:50-AM
27    136739100780, Tristan,  B.,  Valendez, 12,  Tolstoy, March272023-12:51-AM
28    136739121065, Richard Josh, B., Villareal, 12, Tolstoy, March272023-12:51-AM
29    120092100080, John Mark,  #,  Rosil, 12,  Andersen, March272023-12:51-AM
30    164529110147, Niky Joy,  L.,  Metante, 12,  Tolstoy, March272023-12:51-AM
31    109405100214, Leila Jasmin,  M.,  Mones, 12,  Tolstoy, March272023-12:52-AM
32    136739100582, John Mark,  B.,  Panzo, 12,  Tolstoy, March272023-12:53-AM
33    136739121065, Richard Josh, B., Villareal, 12, Tolstoy, March272023-09:47-AM
34    |
```

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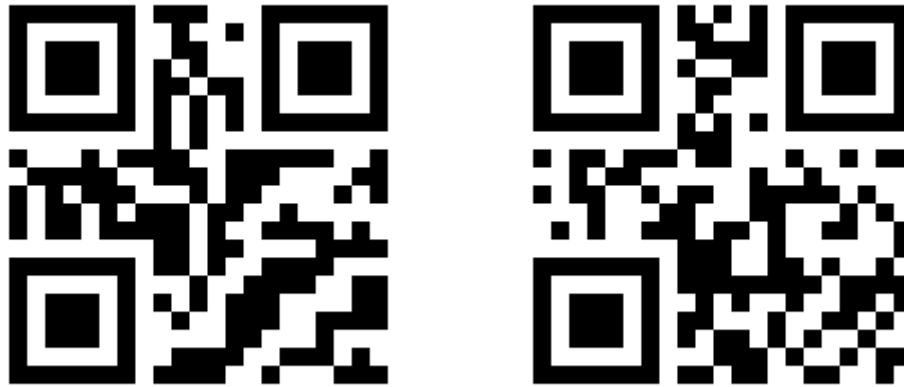
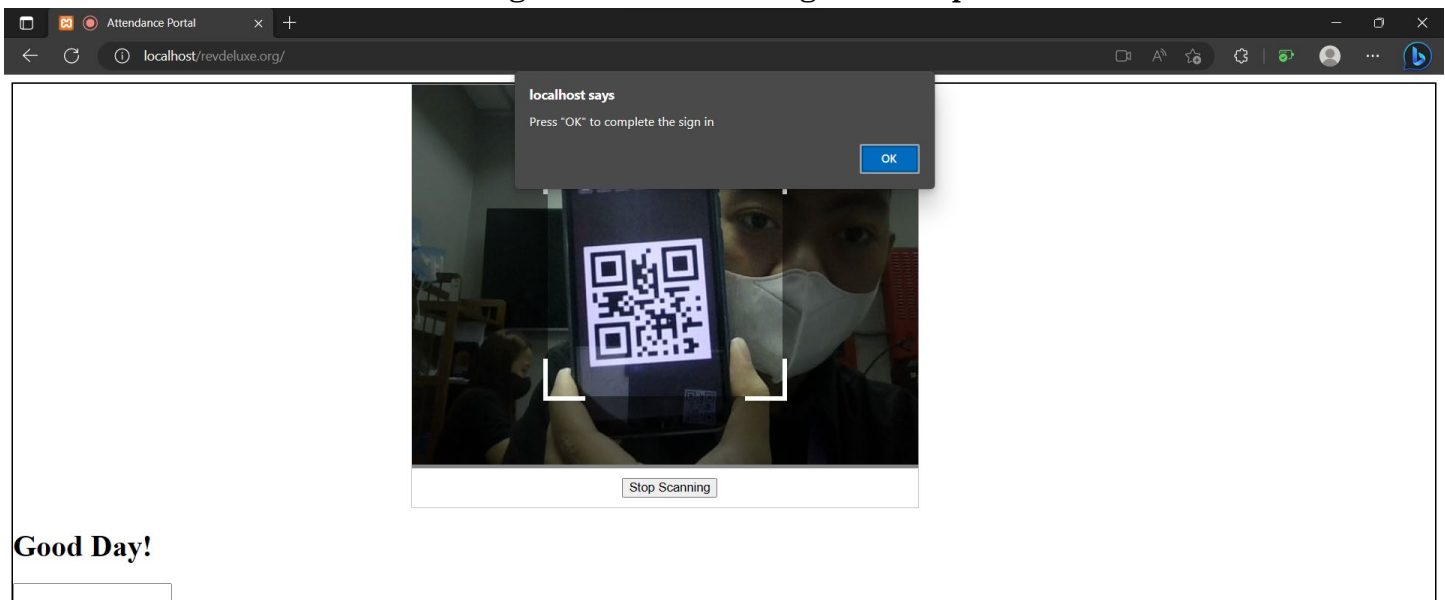**Image 8: QR code Sample**

Image 9: Attendance Sign in Sample

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Curriculum Vitae

Richard Josh Bacia Villareal

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    lucovierno@yandex.com (RU-CN-DE-EN)
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Work Experience

Software Developer/Tester

Posistion: Contributor, Programmer, Translator, Tech Support
Job Type: Freelance
Microsoft Github 2018-Current (2023)

Skills
Computer Literate
Multimedia
Programming I (C, C++, Java, Python, Lua)
Programming E (Rust, Javascript, HTML/CSS, Markdown, PHP)
Office Suites (MS Offices, LibreOffices, and Google Suites)
Engine/Framework (Bevy, Godot Game Engine, Unreal Engine, Unity(C), GoldSource, Pygame)
Scouting
Basic Cadet Drills
Basic Foraging
First Aid

Music Literate
Complete Mastery of Music Theory
Music Production

Education

Primary:	Secondary:	Vocational/K-12:
Santolan Elementary school	Sto. Tomas de Villanueva	Santolan High School
2 Evangelista St,Santolan, Pasig, 1610 Metro Manila	Parochial School	San Isidro, Marisol Subdivision, Santolan. 1610 Metro Manila
(S.Y. 2007-2014)	Evangelista Ave, Pasig, 1610 Metro Manila	(S.Y. 2021-2023)
	(S.Y. 2015-2019)	

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Zapanta Angelica Mae P.
Blk 4 Lot A 0170 M. De Leon West
St Brgy. Santolan Pasig City
Tel: 09155276250
ZapantaAngelica14@gmail.com

PERSONAL INFORMATION:
Date Birth : May 22, 2005
Age   : 17
Nationality : Filipino
Place Birth : Pasig City
Gender   : Female
Religion   : Catholic

OBJECTIVE:

skills and developed it, which will able me to grow professionally and my personality.

SKILLS AND QUALIFICATION:

- Able to work in Microsoft word such as encoding documents
- Capable on working in long hours.
- Good interpersonal relationship

EDUCATION ATTAINMENT:

K-12   :   Santolan High School   (S.Y. 2021-2023)
                     Santolan High School Pasig City
Secondary: Junior High School   (S.Y. 2017-2020)
                     Santolan High School
Primary   :   Elementary School   (S.Y. 2012-2016)
                     Santolan Elementary School

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Taroc, Eloisa Jhane I.
167-C Evangelista St.
Santolan Pasig City
09618941760
eloisajhanetaroc@gmail.com

PERSONAL INFORMATION:

Date of Birth: July 14, 2004
Place of Birth: Manila
Citizenship: Filipino
Religion: Catholic
Height: 4'9
Weight: 41
Father's Name: Edmer M. Taroc
Mother's Name: Jane Ann I. Taroc

OBJECTIVE:

To work in company where I can contribute my knowledge and skills and will give the opportunity to enhance my potential and help the company achieved goals and success.

SKILLS AND QUALIFICATION:

Good interpersonal relationship
Able to work in Microsoft word such as encoding documents
Capable on working in long hours

EDUCATION ATTAINMENT:

Elementary- (Santolan High School 2015-2017)
High School- (Santolan High School 2017-2021)
Senior High-   (Santolan High School 2021-2023)

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Metante, Niky Joy L.
Information Communication Technology
21 Buenmar
Santolan, Pasig City 1610 09655790130 nikymetante922@gmail.com

PERSONAL INFORMATION

OBJECTIVES

I am currently still studying Information Communication Technology ICT at Santolan High School and all that I learned in my specialized K-12 course. As an ICT student I learned how to maintain a computer and I am still learning how to be a Web Page, Coding in HTML, Operating/Manipulating a software.

SKILLS

- Able to work as Computer Maintenance, Manipulate Microsoft software.
- To develop a Web Page design.
- Coding through HTML.

WORKING EXPERIENCE

- I do not yet have any working experiences, because I am still studying as a Senior High Student and graduating before August 2023.

EDUCATION

	School	Location	Year
Elementary	Dayap Elementary School Annex, Calauan Laguna		2016
High School	Dayap National High School		
	Santolan High School		2020
Senior High	Santolan High School		2023

AWARDS/HONORS RECEIVED

- Batang Magalang Kinder (2007).
- Achievers Award ELementary (2016).
- With Honors High School Moving up (2020).
- With Honors Grade 11 Senior High School (2021).

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DAG-UMAN, JOHN MARK DAVID P.

BKL 12 Ester St. Centenial 2,
Pinagbuhatan, Pasig City
09983709744
johnmarkdavid321@gmail.com

OBJECTIVES:

To provide entertainment to everyone.
To serve others
To serve my nation

SKILLS:

Graphic Designer
- Video Editing
- Photoshop

Short Story Writer
Computer Servicing System

EDUCATION:

Primary: Santolan Elem., Hipodromo Elem., Krus na Ligas Elem., Lebak Sultan Kudarat Elem.
Secondary: Alternative learning system – Santolan High School 2019-2020.
Senior High: Santolan Senior High School 2020-2021 & 2022 2023.

PERSONAL INFORMATION:

Date of Birth: August 24, 2003 (19)
Place of Birth: Pasig City
Citizenship: Filipino