DURNOLDS INSTITUTE
Better Education Better Days

We affirm that the project work titled "Durnolds" being submitted in partial fulfilment for the award of Diploma in Information Technology is the original work carried out by Anotida Arnold Mubaiwa and Phumlani Duncan Mthembu. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other Institution.

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1.1 Introduction

Students' attendance records are important documents for academic institutions that reflect the students' performances and the credibility of the academic institutions. Nevertheless, the process of managing these documents had been done manually, by pen and papers thus making it less efficient.(Mahfudzah Othman, An adaptation of the web-based system architecture in the development of the online attendance system 2012,viewed 15 August 2019, https://ieeexplore. ieee.org/abstract/ document /6417619 / authors#authors)

This document discusses about the development of the new Online Attendance System as the enhancement of the previous developed system named Attendance Register System for Durnolds institutions in Malaysia. The new online system is being developed by adapting the concept of the web-based system architecture.

Durnolds attendance register is a system that is meant to solve problems faced by Dunorld's institution. This attendance register's main function is to capture data from both learners and lecturers, once that part is done the second part begins which is using the data obtained from both users accordingly. Attendance registration does not only recording data related to attendance only, however keeping these records safe and making them available at the correct time without any effort.

1.2 Aim

In this project, we are going to be creating an attendance register that will do the following

- Record pupils pieces of information such as
    - Personal information
    - Pupils modules
    - Pupils teaching modules
    - Attendance

- With obtained information, we will then be able to
    - Allocate a learner to the right educator
    - Monitor the performance of the pupils

- Store data related to educators and the pupils to prevent data loss
    - We will do a migrational database specifically chosen for this project

- Deploy to online severs as primary storage
- Use traditional backup by saving to data to external storages

- And last but not least solve the problem of inconsistency
  - One of the Durnolds rules is enrolled pupils should meet the requirements to be part of the end term and final examination
  - We are going to grade a learner by each attendance that will determine if the pupil qualifies to participate for the examination
  - This will also encourage pupils to attend lectures

1.3 Problem Definition

A problem definition states the design objective in one to three clear, concise sentences. (M. Joseph GordonJr., in Six Sigma Quality for Business and Manufacture, 2002,viewed on 13 August 2019, https://www.sciencedirect.com/topics/engineering/problem-definition)

Durnold's has identified the cause of the decline in pupils performance regarding college work. Only two possible causes of the decline it either students are not attending lectures or it's the lecturers themselves who doesn't attend their respective classes. Even though records were kept it was proven that the data that was captured was not accurate it lacked consistency, students marked themselves present when they were not, lecturers were recorded that they were present for the lecture but they were not. Last but not least, the data loss whenever a specific information is needed it would take long to get hold of it, lacking physical space to keep files for all classes, some data is destroyed before it's time so space can be made available and high consumption of papers the institution has been spending a lot of papers

1.4 Hypothesis

A hypothesis is an assumption, an idea that is proposed for the sake of argument so that it can be tested to see if it might be true. (The Merriam-Webster.com Dictionary 2019, Hypothesis, viewed on 25 August 2019 Merriam-Webster Inc., https://www.merriam-webster.com/dictionary/hypothesis.)

Our hypothesis is that as we introduce this system to the institution:
1. Students will start attending lectures regularly and lecturers will finish their modules on time since the system will be keeping track of the length of their lectures.

2. The attendance checking for the manager will be easy to do and will easy the tracking of students absence to know weather they are allowed to write exams or not.

3. If this system is placed in the institutions it will reduce the amount of time that students take to register for class which increases the academic grades and also that the management, and administrative can monitor students and lecturers.

4. The attendance checking for the manager will be easy to do and will easy the tracking of students absence to know weather they are allowed to write exams or not.

1.5 Objectives
The Front-end App

- The system should allow the educator to sign in
- It should be able to have the day's timetable
- It should be able to recognise geographical location
- And restrict access to the system if access is not from a recognised location
- It should be able to allow the pupils to sign in for lecture
- The lecturer should be able to confirm if all signed in students were actually in class.
- The system is required to mark the present students in the class at each lecture.
- The pupils should get a point if they attendance a class that will determine if pupil can participate for final and end term examination
- The system should be able to take the duration of each and every lecture.
- The system should record the duration of each lecture from start to end.
- It must be able to recognise if pupils tries to attend class that is not allocated to them
- It should verify information being captured if it's the correct one or not.
- It should be able to record the time the student entered class
- It should be able generate a unique id for educators
- It should be portable.

The Back-end Of the Application
The admin should be able to
- login into the system
- Create new tables if required

- add new students
- Add new lecturers
- Remove educator
- Remove pupil
- Update pupils records
- Update educators records
- Display recorded information for both educator and pupils
- Search for educator
- Search for pupils
- Print out pupils information
    - Calculate the score to determine if the student is eligible to participate for the end of term and end of the year examinations

- Monitor live sessions (undergoing)
- Set appropriate modules for educators
- Allocate correct modules for pupils
- Prints on the screen related information abut candidate
- Remove modules for a certain candidate
- Record the start and end of the class session
- See students who are currently in class
- Be able to records for pupils and educators
- Be able to create and allocate register to educators

1.6 Justifications

The attendance register reduces paperwork, reduces expenditure in paper consumption introduces consistency and transparency among educators and pupils who are supposedly in a class . Prevents data duplication, data loss from using papers that might get lost or damaged. Accurate records of who attended and who was absent by recording the time from the moment signed in to class same goes for the lecturers

1.7 Expectations

Short term Expectations

1. Lecturers will commence as scheduled, syllabuses will be finished on time and pupils grades will increase
2. Manager can now attend to their work more rather than concentrating on checking lecture to lecture attendances
3. Students will begin to attend lectures rather than being absent

Long term Expectations

We expect that this system will be used for attendance checking in many institutions. That it will enhance the attendance registration system and eliminate the old way means of marking attendance using paper.

We expect that in time we can expand the system so that different institutions can customise their own design from it. We also expect the system to be enhanced and developed to manage all sectors of institutes in terms of marking attendance for both staff members and students. We expect that the system will be developed to mark the attendance of students in exams.

1.8 Conclusion

We can conclude that this online attendance registration system will eliminate the need of the old manual attendance register system that used paper. It will enhance the security and eliminate the duplication and the inconsistency of data. It is appropriate to use the online system rather than manual system because it does not allow the alteration of data and it will easy the checking of students and lecturer attendances.

2.1 Identification Of The Need

We have seen this application as the solution to eliminating the usage of paper and that it enhances the workflow of the educators. Findings for Durnolds institute showed that a number of pupils are marked in for a class when they are not, the same goes for educators too they forged registers and marked themselves present and the inaccuracy, incorrect information this system will try and solve these problems.

2,2 Preliminary Investigation

The preliminary investigation occurs within a short period ranging from a few hours to a few days and should not exceed two to three days. The purpose of the preliminary investigation is to determine whether the problem or deficiency in the current system really exists.(Accounting Information Systems: The Processes and Controls, 2nd Edition by Andrea Weickgenannt, Leslie Turner 2018)

We have done a research with 10 random educators on a 4 week base period to see if our hypothesis is true regarding pupils not attending class and still marked present for class also to check the number of students that attend the lectures during this trial period. We then asked the student on the reason why they concurrently not attend lectures.

We obtained that

- Students are often on campus but they do not attend class
- The way the manual register is designed, it is much easy to alter
- Or declared lost

2.3. Feasibility Study (Technical, Operational, Economical)

Operational Feasibility

After presenting our ideas to the students we conducted a survey to obtain their views on the idea. They agreed with us that there was a need for the system. The most reasons they most mentioned were that it reduce time needed to sign the manual register and it eliminates the biased system where students can cheat their way into the exams.

We are highly confident that the new system will reduce the workforce since it does not require too much information from the user but only the most relevant one, thus it decreases the time at which the students have to sign in for class and increases the time at which the lecture can commence which allows the lecturers to finish the syllabus on time. The system will not remove the need of lectures. It will only eliminate the usage of the old manual systems.

The system is not going to be complex for the users since it has to remove the workload, thus it will be user friendly to the point that the user side of the system will not require any training to use. The administration side of the system may require training since it will have complex functionality although most of the functions are (used regularly in current available systems).

The user's input on the design of the system is not much required until the system design phase where we will need to know the preferences of the user to the interface design, thus if there are any additional changes they might see as required.

<u>Technical Feasibility</u>

We are developing this system for the users

- to work on a Tablet Phone
- that run on Android software
- and uses WiFi network

For the administration

- to work on desktops
- that runs on both windows 8 to 10 and Linux Operating System
- and uses the proxy server network for internet access

These resources are easy to acquire since the Tablet phone is quite affordable. This is advantageous in terms that it has a pre-installed Android operating system and allows WiFi access which the institution will provide. We are considering to hand each lecturer with a Tablet device to use in there lectures. This is reliable as each lecturer will be held accountable for it in case it gets lost. This system should only be

used by the internal users and should be able to handle large amount of data thus student information as the number of students keeps increasing.

The desktop application resources are already available in the institutions and they run mostly windows 8, whereas others also run on windows 10 on which both operating systems provides the means of the system to function. In case both windows 8 and 10 are not installed the institution will have to purchase a new image from Microsoft or download the Linux free open source operating system and install it on the desktops. The proxy network configurations will have to be set so that it will run smoothly.

Economical Feasibility

Development of this system is highly economically feasible. The only thing to be done is making an environment with an effective supervision. It is cost effective in the sense that has eliminated the paper work completely. The system is also time effective. The implementation of the system will be expensive but then institutions can be able to afford it since they already have most of the hardware required set in place.

Cost Benefit Analysis

Costs		Benefits	
Product	Price	Product	Price
11 lecturer tablets (2100 each)	Available Provided by the institution at the beginning of every year	5(500 page T) per week* 4 weeks in a month (R50 each)*12 months	R12 000
1 windows laptop	available	Printer ink per year	R500
Operating system	available	Files For package R60* 11	R660
Total	R0	TOTAL	R13 600

Figure 1.1 Cost Benefit Analysis

2.4 Project Planning

Stage	Schedule
Analysis Phase 1. Information Gathering 2. Analysis Of Existing System 3. Data Analysis	06 OCTOBER 2019
System Design 1. Architectural design 2. Physical Design 3. Database Design 4. Program Design 5. Interface Design 6. Security Backup Design	27 OCTOBER 2019
Implementation Phase 1. Coding 2. Testing 3. System Testing 4. Installation 5. Maintenance 6. System Evaluation 7. Constraints 8. Recommendation	06 NOVEMBER 2019

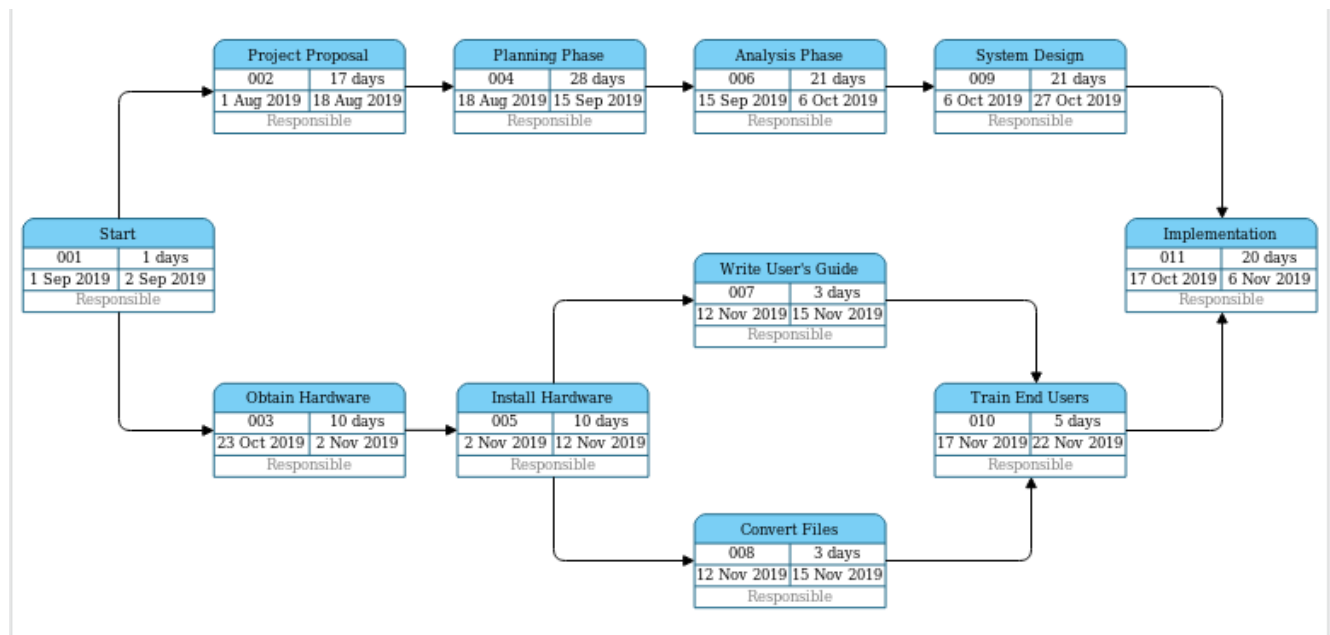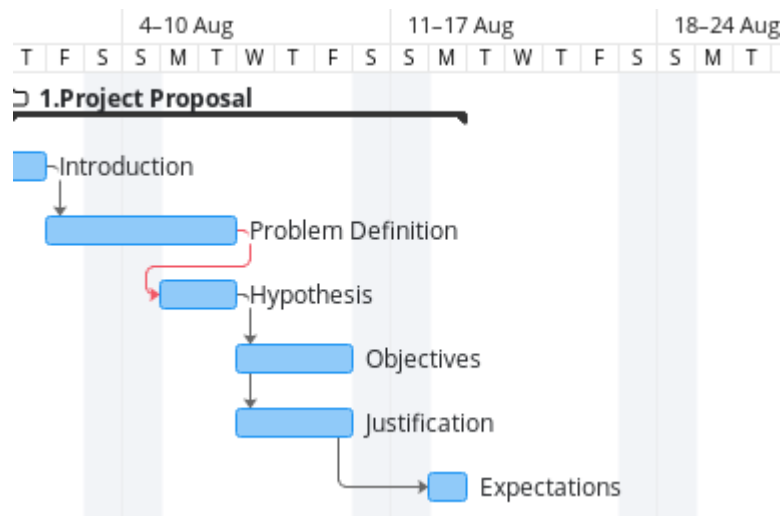## 2.5 Project Scheduling (PERT Chart and Gantt Chart both)

PERT DIAGRAM

Figure 2,2 Pert diagram

Gantt Chart

	15–21 Sep	22–28 Sep	29 Sep – 5 Oct	6–12 Oct	13–19 Oct	20–26 Oct
T F S	S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S	S M T W T

2. Planning

Identification of need

Pleminary Investigation

Software Requirement Specification

Project Scheduling

Feasibility Study

Project Planning

	22–28 Sep	29 Sep – 5 Oct	6–12 Oct	13–19 Oct	20–26 Oct	27 Oct – 2 Nov
S M T W T F	S S M T W T F	S S M T W T F	S S M T W T F	S S M T W T F	S S M T W T F	S S M T W T

3. Analysis Phase

Information Gathering

Analysis of existing system

Data Analysis

Weakness Of the Current System

Non Functional Requirements

Data Modeling for Proposed System

	·19 Oct	20–26 Oct	27 Oct – 2 Nov	3–9 Nov	10–16 Nov
M T W T F S	S M T W T F	S S M T W T F	S S M T W T F	S S M T W

4. System Design Phase

System Design

Security Back Up

Program Design

Database Design

Physical Design

Interface Design
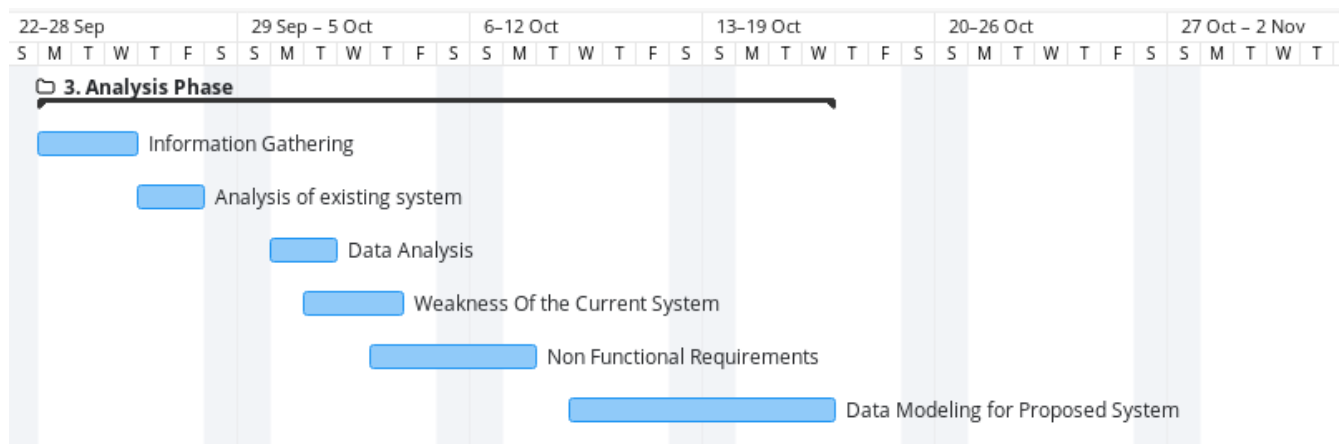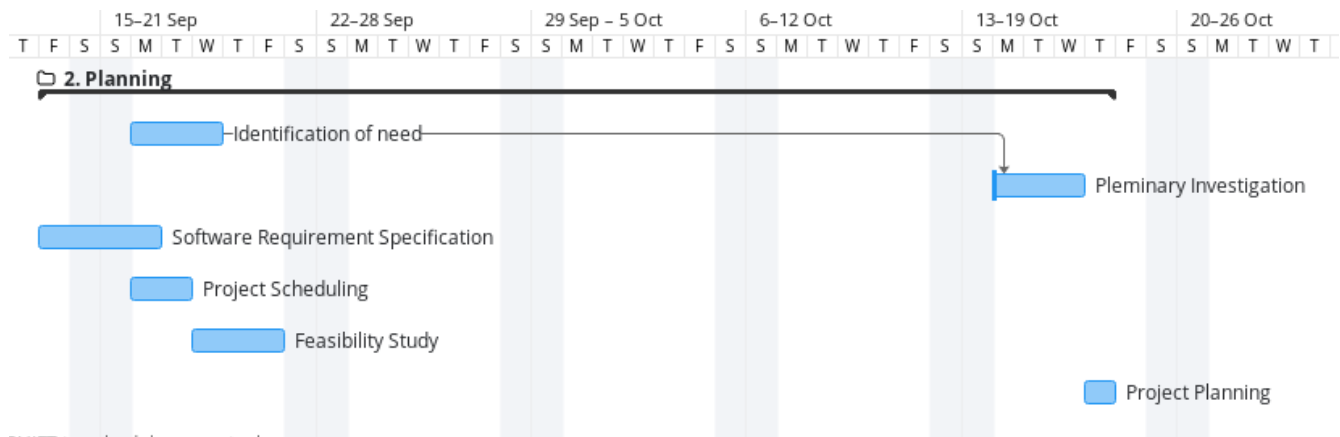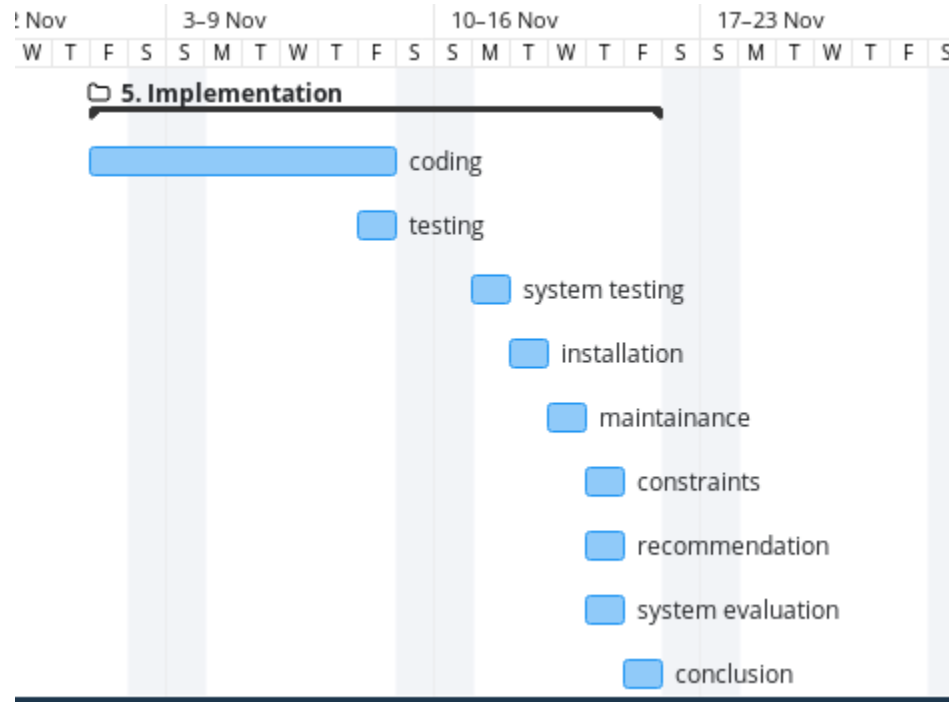
Figure 2.3 Gantt Chart

2.6 Software Requirement Specification

During this project we are going to be using various software to accomplish these tasks mentioned in the planning phase. These software are:

- Visual Studio Code and SublimeText thus because they are easy to use and they can run on Linux operating system.
- We will be using Google Docs for the documentation thus because it saves information safe and it's easy to edit anywhere and at any time, with internet connection and with no internet connection.
- LibreOffice Draw to draw diagrams
- GitHUB to share information thus the code since there is a distance barrior between the group team.
- Xampp as our database connection platform thus because its easy to maintain and use.

- <u>Wrike</u> to draw the Gantt Chart
- <u>Balsamiq Cloud</u> is an online platform to create an interface menus
- <u>Lucidchart</u> is an online platform to produce an efficient PERT Diagram

The mobile tablets that the lecturers and students will be using must be able to run on:

- Android system
- Chrome browser

The administrator's computer should be able to run on

- windows or Linux operating system
- Chrome Browser
- Must have Xampp installed on it

2.7 Data Models

Data Model	Figure
Cost and Benefit analysis	<u>Figure 1.1</u>
PERT DIAGRAM	<u>Figure 2.1</u>
GANTT CHART	<u>Figure 2.2</u>
Flow Chart of the proposed system	<u>Figure 3.1</u>
Use Case Diagram of the proposed system	<u>Figure 3.2</u>
Network diagram	<u>Figure 4,1</u>
ERD Of the proposed System	<u>Figure 4,2</u>
DFD for the Database Tables	<u>Figure 4.3</u>
Interface Designs of the system	<u>Figure 4,4</u>

3. ANALYSIS PHASE

3.1 Introduction

During this stage we will be focusing on gathering information, conducting interviews, analysing the existing system, its weakness, analysing the proposed system, its functional and non-functional requirements.

3.2. Information Gathering Methodology

Interview Questions

Question To ask the manager.

- How often do you record the students and lecture register in a month?
  - For students, the process is done ones a month.
  - For lecture they do the attendance check for class everyday either by class to class check or random register collection check.
- What are the difficulties you meet when you are using the manual system?
  - Manual system consumes to much space
  - It is cost as much paper is required
  - It requires a lot of flipping to find the required register for a particular day.
- What are the processes that you take to manage the student attendance?
  - After the lectures has recorded the monthly students attendance the manager begins punching in one by one student attendance into the system and the files of the lecture are kept in the store room for a period of 5 years.
- How much do you spent on Printer and papers in a year to print the attendance registers?
  - Every week the college opens 2*500 sheets printing paper
- Why do you want to shift to online systems?
  - It easies the searching of students
  - Saves time in recording attendance
  - Accuracy in terms that attendance records are kept safe and can be checked anytime within the future these records are available for the enquiries when needed
- What functionalities would you want the online attendance registration system to have?
  - Searching for information easily
  - Autheticate he user

Questions For the lecturesrs

1. What are the procedures you take to record attendance?
    1. We print the register for the students
    2. We give students the register to sign during every lecture they gets into.
    3. After the students signs in for class we records the attendance on our separate file.
    4. We keep the register for an audit
2. What difficulties to you face when taking attendance during class?
    1. It requires too much paper trail
    2. It difficult to keep track of all the attendance of the students
3. Is it possible for students to make changes to the registers?
    1. Alteration is not enavaitable. Students with intentions to change the information or update the information can easily change it as it is on a paper
4. What functionalities would you want on the new system.
    1. Easy usage much more
5. Do you think the introduction of the new system will have an effect on the recording of student attendance.
    1. From the proposed system i do agree . The reason being is that elimination the usage of paper and using mobile

Questions For the Students

1. How long does it take you to record your name on the system?
    1. A couple of minutes or minute
2. What functionality would you want on the new system?
    1. The easy data entry

Observations

Manager's Observation

"The current system's disadvantage is that it requires too much paper to maintain and storage. During auditing it is difficult to find data of a particular day since the attendance registers are kept for a period of 5 years and flipping to find one requires time."

Student's Observation

"As a student, I have observed that it is easy for a student to sign their selves present for a lecture that they were absent since the register consists of a 5 day period signing. So even if student was absent on a Monday you can just sign yourself in on a Tuesday or any other day you will attend that lecture during that week. If you have your friend's student number you can just sign them in for class since the lecture does not confirm the students attendance at the end of each period."

3.3. Analysis Of The Existing System

- Durnolds Institute s currently use manual attendance register that use paper trails.
- The paper trail has 4 users Students, Lecturers, Manager and Inspector.
- Students are require to sign for class every time they have attended class.
- The lecturers keeps the records for attendance until the manager needs them.
- The manager can do a random check ones in a while to check if the studies are proceeding as scheduled
- If the inspector needs the record, the lecturer will have to scan and send the information through emails.
- If a particular record is needed they have to look for it in a pile of papers which take time to finish.

3.4. Data Analysis (Data Integrity & Constraints)

The system constraints are that we are not able to acquire hardware that will enable us to use data signature and e-signatures. As a result the values that the students will be entering will only be confirmed as true, in terms of confirming if the student was really in class.

Data entered in the current system can not be validated and it has lots of inconsistency. We believe that the data we will enter will be validated and verified.

3.5. Weakness of the Current System

- Takes up a lot of space- As the days goes by the paper increases and it requires space to be placed on and filed.
- Prone to damage and being misplacement- Paper can easily be damaged at anytime by mistake or intentionally by use of liquids or solids.
- Access time- It takes time to looks for the attendance of each and every student on a pail of papers. That time can be used to accomplish something else.

- Lack of security- The papers are easily accessed by anyone at anytime if they are not safely looked.
- Higher cost- When using paper documents, the costs are going to be higher because they are paying for ink and paper.

3.6. Analysis of the Proposed System(Functional Requirements)

Functional requirements describe what the system should do.

This system is being developed to eliminate the processes met in the manual system, easing the way data is collected arranged and extracted when required.

- The system will allow the admin to login into the backend and add, delete or update both lecturers and students.
- The lecturers will then login into the front-end of the system. They will select the particular lessons that they are giving.
- The students will then sign in for class.
- The lecture will then confirm if all the students marked as present were really in class.
- The data will be sent to the database after clicking the confirm button or automatically even if there was no class attended.

3.7. Non Functional Requirements

Reliability

The online attendance register system should be reliable and secure so that the information is not altered and accessed by illegal operators. It should not be offline at any time during class days.

Security

The online attendance registration system data should be handled only by the administrator and authorised users. The administrator should only be the only one to manage users thus adding and deleting lecturers and students. They should keep the reports of all attendances. The data regarding attendance in the database should not be altered at any moment.

Availability

The online attendance register system will be available only to authorised users thus students, lecturers and administrator. The lectures will login, select the particular available lecture and logout. The students will sign in for class and the administrator add, updates and deletes users. The help option

should always be available on how the system works and error messages should always show when wrong data is entered.

Portability

The software is a web based application and is built in HTML, CSS, PHP and My SQL thus it is platform independent and is independent of OS but we strongly recommend Android, Linux and Windows. The reason being is that we are building this system on these platforms and we are making the front-end of the system to be mobile portable.

Maintainability

The application is to be designed so that it is easily maintained. Also it should allow incorporating new requirements in any module of system. Backups for database should be available always.

3.8. Data Modelling for Proposed System

Flow Chart Of The System
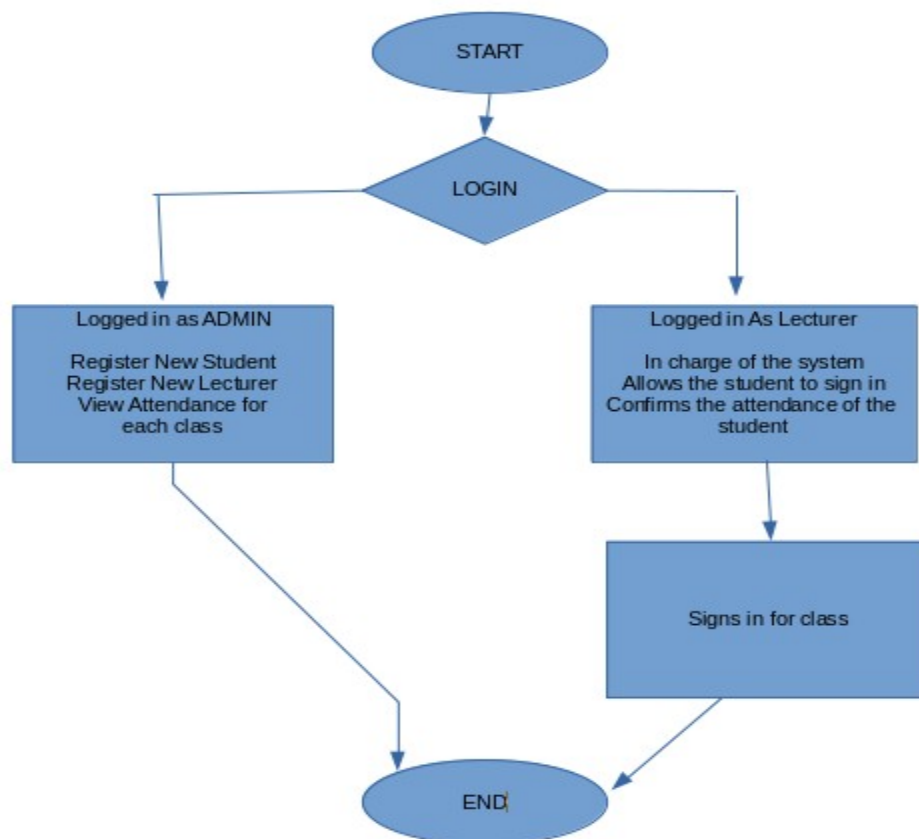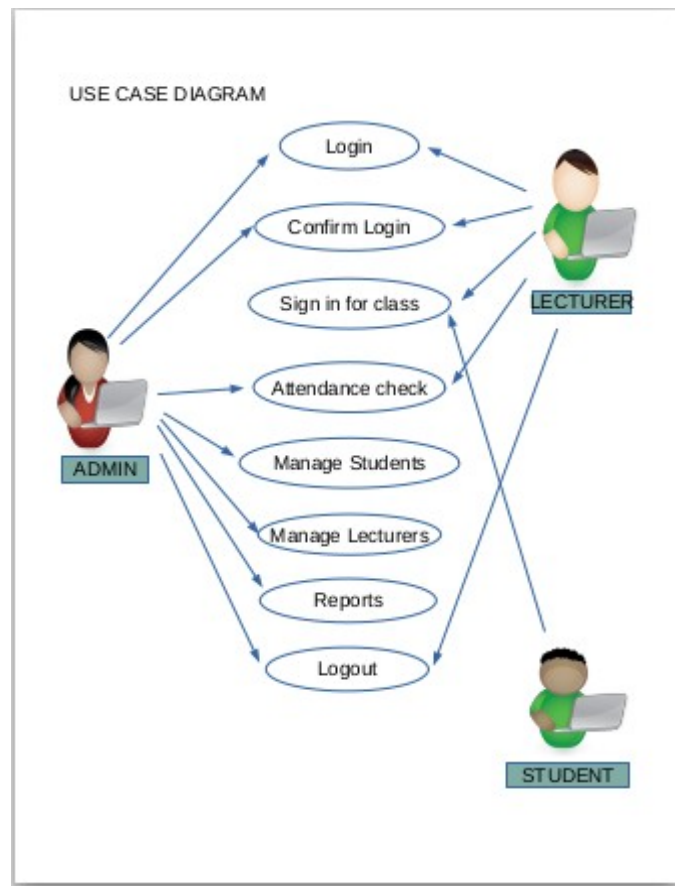

Figure 3.1 Flow Chart

Use Case Diagram

Figure 3.2 Use case Diagram of the proposed system

4, System Design

4.1 Introduction

System design is the phase where the blueprint of the system that satisfy all documented requirements for the system thus during this phase we will also determine the logic design into modules and code. The result of this phase is documented in the system design specification and presented to management and users for review and approval.

4.2 System Design (Description of Proposed System)

- The proposed system has got 3 main users that is the student, lecture, and administrator. These three actors plays different rows in the implementation of the system. The admin is the one who controls all the users of the system. Lecturer controls the student.

The data management

- The main focus on the system is to develop it so that it can record attendance of each and every lecture capturing the time period that every lecture has started and ended. It should also capture the time period at which each student entered into class also with the date.

- The admin should have full access to every record in the system. They should be able to retrieve it at easy and in no time. They should be able to print documents out and add new users at no time.

4.3 system architecture

Network architecture
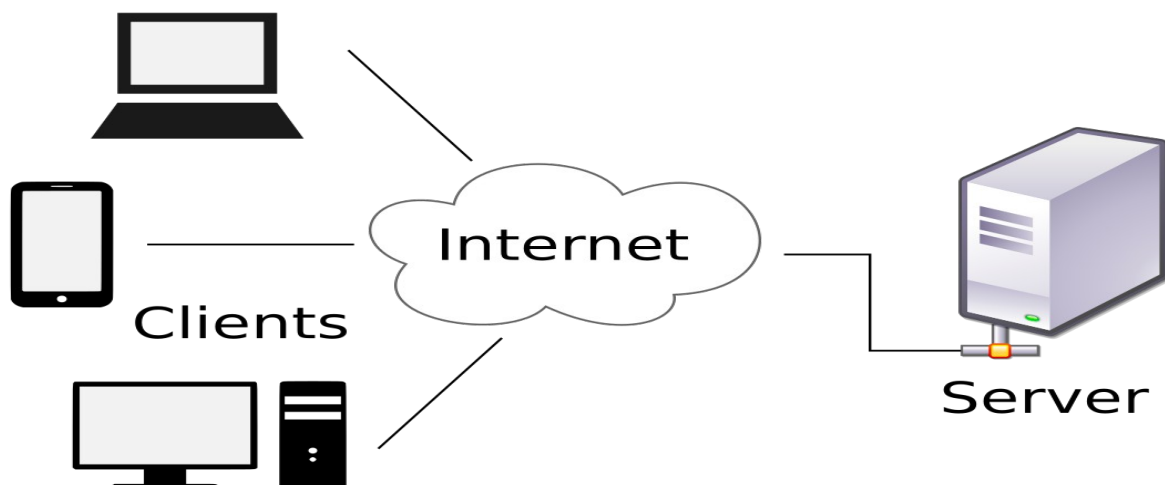

Figure 4.1 Network architecture

4.4.Physical Design

4.5 Database Design

We are going to be using Mysql database with myPHP admin as a host

ERD of The Proposed System

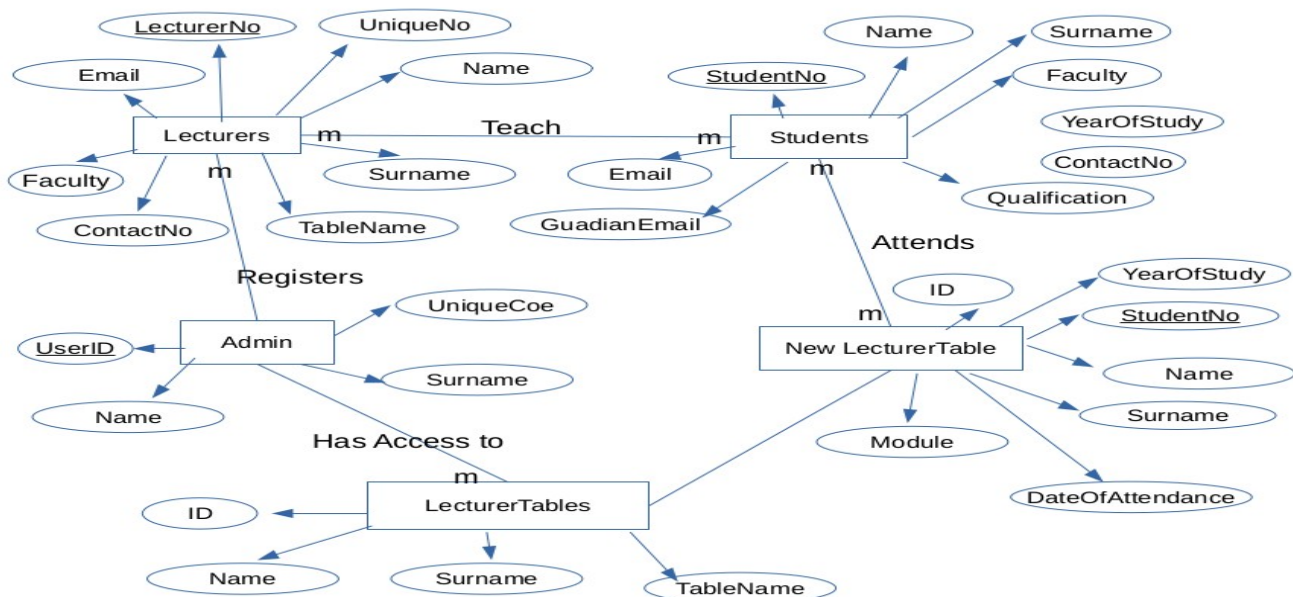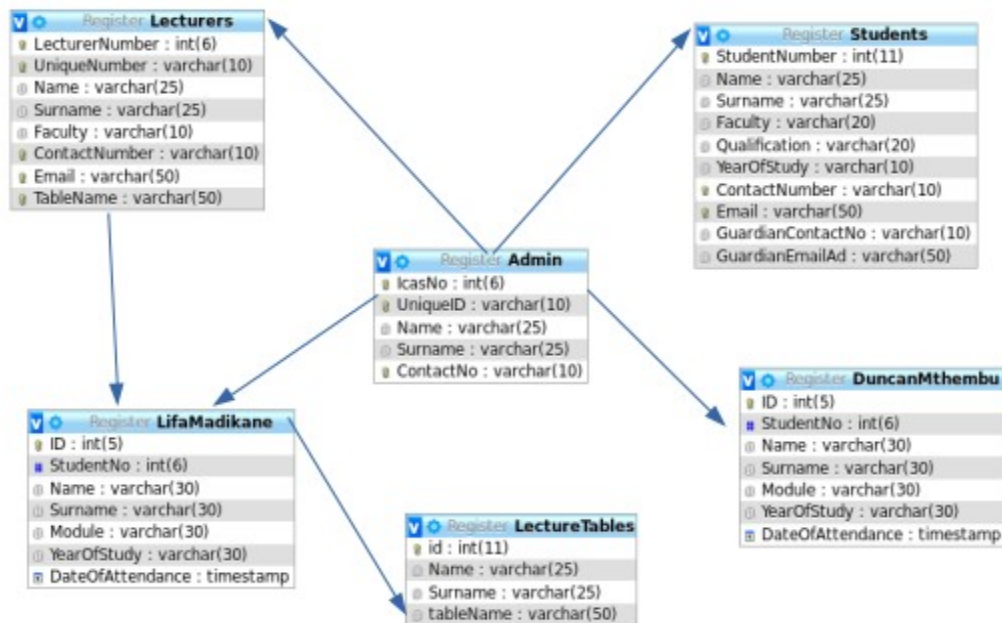Figure 4,2

Figure 4,3 DFD for the Database Tables

4.6 Program Psuedocode

////////////////////////////////////
////////////////////////////////////

```
start

housekeeping()
        int lecturer
        int admin
        int uniqueID
        int id= read id
        string name = read name
        string surnmae = read surname
        strint faculty = read faculty

        println "Enter Your staff number"
        read uniqueID

        Student_Register
                int studentnumber
                string name
                string surname
                string DateOfAttendance

                string heading= "Student number |Name |Surname |Date Of Attendance"

return
perform housekeeping()
if (uniqueID == lecturer) then
        perform Lecturers()
else
        If (uniqueID == admin) then
                perform Admin()
        else
                println "Enter Your staff number"
                read uniqueID
        endif
endif

stop

/////////////////////////////////////
/////////////////////////////////////
///////for the lecturer site/////////
/////////////////////////////////////
Lecturers()
        getInfo()
```

```
                println id
                println name
                println surname
                println faculty
        return
        perform getInfo()
        if (getInfo() == true) then
                perform choose()
        else
                Exit
        endif
return

///////////////////////////////////
///////////////////////////////////


choose()
        boolen register
        boolen newPeriod
                register()
                        print heading
                        while not eof
                                read Student_Register
                return
        if (register = true) then
                perform register()
        else
                if (newPeriod = true) then
                        perform newPeriod()
                else
                        exit
                endif
        endif
return

///////////////////////////////////
///////////////////////////////////


newPeriod()
        if (studentnumber = true) then
                read Student_Register
                print "studentnumber name surname DateOfAttendance"
        else
                perform checkAttendance()
```

```
        endif
return


/////////////////////////////////
/////////////////////////////////


checkAttendance()
        if studentnumber = true and attendance =true then
                print Student_Register
        else
                remove Student_Register
        endif
exit
return


admin


Admin()
        boolean add
        boolean delete
        boolean update
        boolean read
        boolean print
        boolean recordExists

        if(add = true && studentnumber == true || lecturenumber= true) then
                perform Add()
        else
                if(delete = true &&  lecturenumber= true) then
                        perform Delete()
                else
                        if(Update = true && studentnumber == true || lecturenumber= true) then
                                perform Update()
                        else
                                if(read = true && studentnumber == true || lecturenumber= true) then
                                        perform Read()
                                else
                                        if(print = true && studentnumber == true || lecturenumber= true) then
                                                perform Print()
                                        else
                                                exit
                                        endif
                                endif
                        endif
                endif
```

```
                endif
        endif
return


Add()
        if (recordExists = true) then
                print "record already exists"
        else
                        write file
                        print header
                        read Student_Register
        endif
return


Delete()
        if (recordExists = true) then
                delete current record
        else
                print "record does not exists"
        endif
return


Update()
        if (recordExists = true) then
                update file
                print header
                read Student_Register
        else
                print "record does not exists"
        endif
return


Read()
        if (recordExists = true) then
                read file
                print header
                read Student_Register
        else
                print "record does not exists"
        endif
return


Print()
        if (recordExists = true) then
```

```
                open file
                print header
                read Student_Register
        else
                print "record does not exists"
        endif
return
```
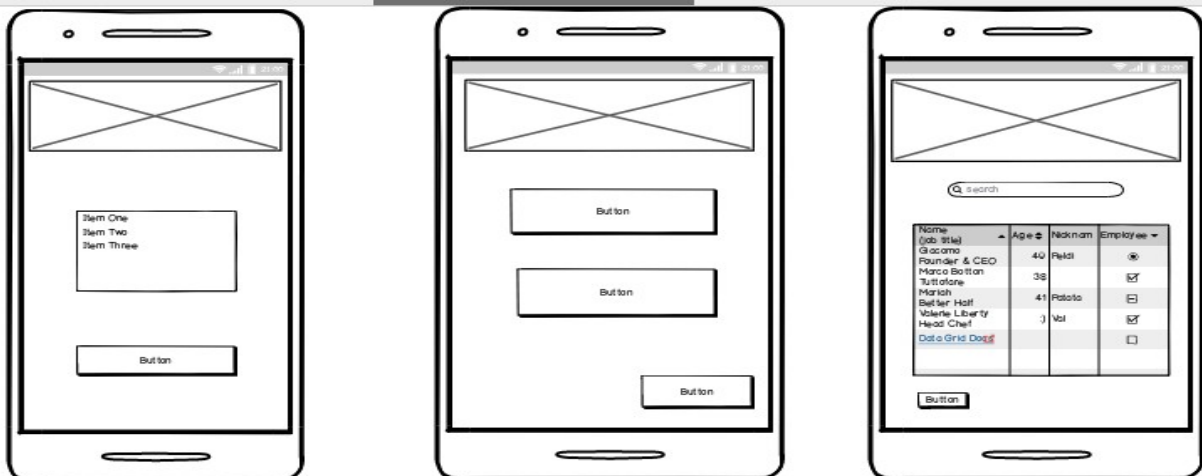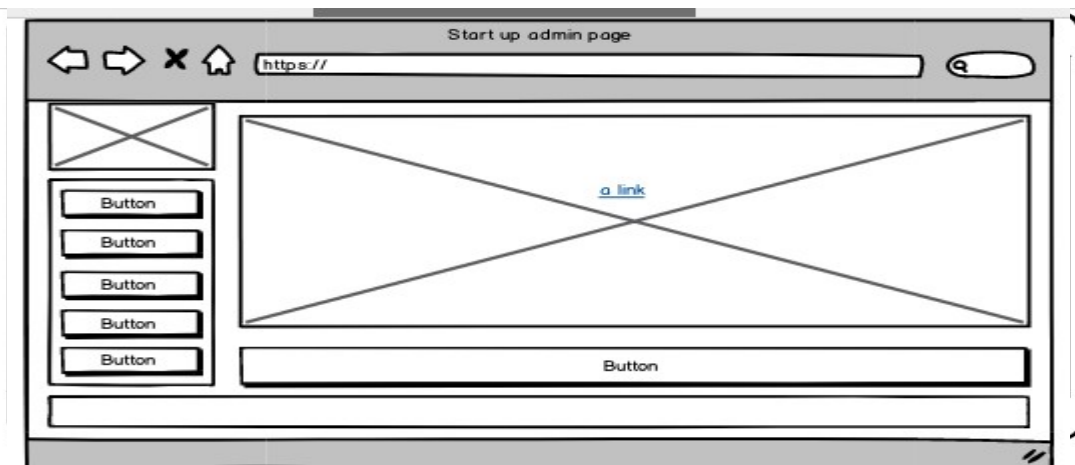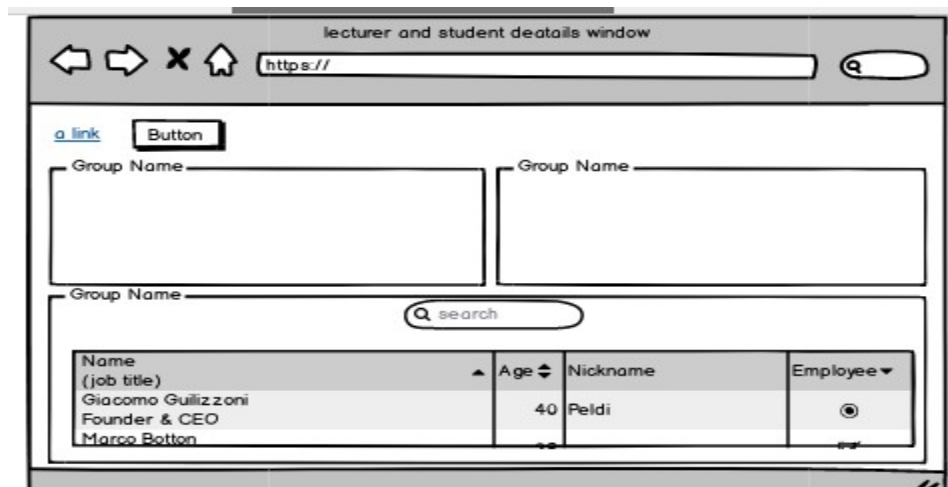
4.7 Interface Design

Login Page

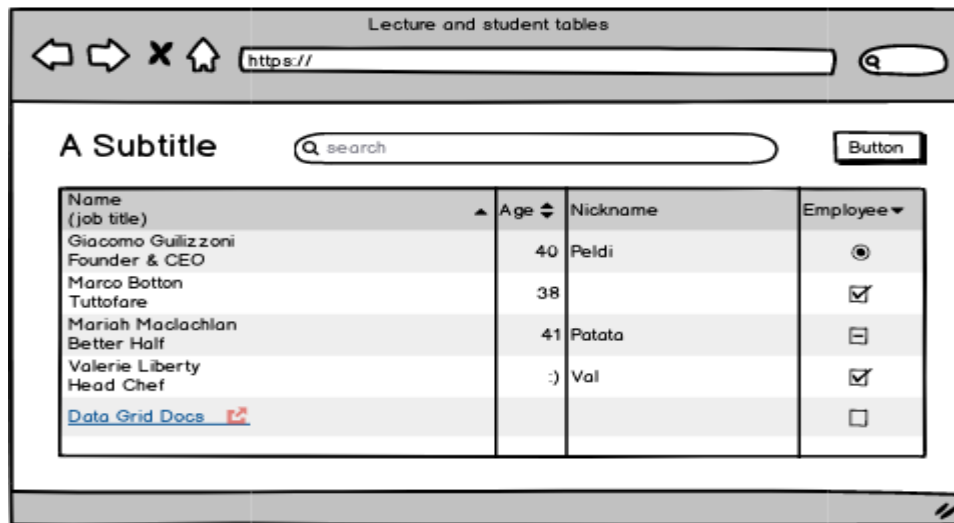For The client side(Lecturers and Students)

For the Administrator

Figure 4,4

4.8 Security back up design (Software concern)

In the case that a lecturer has lost, or admin has lost their unique ID they will be provide by another one. Not everyone will be able to know the unique Ids of staff members. The holder of the Unique ID will be the only one liable for it. The system cannot be accessed by anyone who is not authorized to thus only those with a unique ID can login to the network. If an admin or lecturer has been deleted from the system they will no longer have access to the system.

5. Implementation Phase

5,1 Introduction

This is the installation and delivery of the entire system into production. In this phase we will write the code, test it document the program and install it. At a conclusion of this phase, the system is ready for use. Final preparations include converting data to the new system's files, training users, and performing the actual transition to the new system.

5.2 Coding

It is the process of turning program logic into specific instructions that can be executed by the computer system. The fllowing code has been generated by members of Durnolds group.

- The **connection.php** that will be used by all the websites in this project. Here is the code snippet:

```php
<?php
$servername = "localhost";
$username = "root";
$password = "";
$myDB= "Register";

// Create connection
$conn = new mysqli($servername, $username, $password,$myDB);
// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
    require_once('CreateDatabase.php');
}
?>
```

if Database does not exists it is created in the **CreateDatabase.php** here is a snippet

```php
<?php
$servername = "localhost";
$username = "root";
$password = "";
// Create connection
$conn = new mysqli($servername, $username, $password);
// Check connection
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
// Create database
$sql = "CREATE DATABASE Register";
if ($conn->query($sql) === TRUE) {
    echo "Database created successfully";
} else {
    echo "Error creating database: " . $conn->error;
}
$conn->close();
?>
```

The *index2,php* thus the login page for both users:

```php
<?php
// require_once "db.php";
// require_once "sessions_start.php";
session_start();
require_once("connection.php");
        if($_SERVER["REQUEST_METHOD"]== "POST"){
        $UniqueCode = mysqli_real_escape_string($conn,$_POST['passcode']);
```

```php
        //$userName= $_GET['Name'];
        //$userSurname = $_GET['Surname'];
        $sql = "SELECT UniqueNumber from Lecturers Where UniqueNumber= '$UniqueCode'";
        $sqlSESSION = "SELECT * from Lecturers Where UniqueNumber= '$UniqueCode'";
    $sql2 = "SELECT UniqueID  from Admin Where UniqueID= '$UniqueCode'";
    //Query the database
        $result = mysqli_query($conn,$sql);
        $result2 = mysqli_query($conn,$sql2);
    $result3 =mysqli_query($conn,$sqlSESSION);
    //
        $row = mysqli_fetch_array($result,MYSQLI_ASSOC);
    $row2 = mysqli_fetch_array($result2,MYSQLI_ASSOC);
    $row3 = mysqli_fetch_array($result3,MYSQLI_ASSOC);
    //
    $userID = $row3['LecturerNumber'];
    $userName = $row3['Name'];
    $userSurname = $row3['Surname'];
    $userTableName = $row3['TableName'];
    $userFaculty = $row3['Faculty'];
        $active = $row['active'];
    $active2 = $row2['active'];
    //Checking if there are any records available
        $count = mysqli_num_rows($result);
        $count2 = mysqli_num_rows($result2);
        if($count === 1){
                // session_register("myusername");
                $_SESSION['login_ID']=$userID;
                $_SESSION['login_Name']= $userName;
    $_SESSION['login_Surname']= $userSurname;
    $_SESSION['login_TableName']=$userTableName;
    $_SESSION['login_Faculty']= $userFaculty;
                header("location: Client/confimation.php");
        }else if ($count2==1) {
                header("location: Admin/admin.php");
        }else {
    header("location: error.php");
    }
}
?>
<!DOCTYPE html>
<html>
<head>
  <meta charset='utf-8'>
  <meta http-equiv='X-UA-Compatible' content='IE=edge'>
  <title>LOGIN PAGE</title>
  <meta name='viewport' content='width=device-width, initial-scale=1'>
  <link rel="stylesheet" type="text/css" href="css/index.css">
</head>
<body>
<div class="container">
  <div id="logo_container">
```

```html
    <img class="img-responsive" id="Logo" src="images/home.png">
    <!-- <img class="img-responsive" id="Logo" src="confirmation.html"> -->
    <!-- <script type="text/javascript" src="jquery-1.3.2.min.js/jquery-1.3.2.min.js"></script>
    <script type="text/javascript" src="http://code.jquery.com/jquery-latest.min.js"></script> -->
  </div>
  <div class="main_div">
    <h2>STAFF SIGN IN</h2>
    <p>ENTER YOUR ASSIGNED CODE</p><BR>
    <form class="input_group" id="form" method="post" action="">
      <input id="input_box" type="password" name="passcode" placeholder="unique code"></br>
      <input class="button" type= "submit" value="Submit">
    </form>
  </div>
</div>
<script type="text/javascript" src="javascript/indexjs.js"></script>
<script src='main.js'></script>
</body>
</html>
```

Confimation.php

```php
<?php
// require_once "db.php";
// require_once "sessions_start.php";
session_start();
require_once("connection.php");
        if($_SERVER["REQUEST_METHOD"]== "POST"){
        $UniqueCode = mysqli_real_escape_string($conn,$_POST['passcode']);
        //$userName= $_GET['Name'];
        //$userSurname = $_GET['Surname'];
        $sql = "SELECT UniqueNumber from Lecturers Where UniqueNumber= '$UniqueCode'";
        $sqlSESSION = "SELECT * from Lecturers Where UniqueNumber= '$UniqueCode'";
   $sql2 = "SELECT UniqueID  from Admin Where UniqueID= '$UniqueCode'";
   //Query the database
        $result = mysqli_query($conn,$sql);
        $result2 = mysqli_query($conn,$sql2);
   $result3 =mysqli_query($conn,$sqlSESSION);

   //
        $row = mysqli_fetch_array($result,MYSQLI_ASSOC);
   $row2 = mysqli_fetch_array($result2,MYSQLI_ASSOC);
   $row3 = mysqli_fetch_array($result3,MYSQLI_ASSOC);

   //
   $userID = $row3['LecturerNumber'];
   $userName = $row3['Name'];
   $userSurname = $row3['Surname'];
   $userTableName = $row3['TableName'];
   $userFaculty = $row3['Faculty'];
        $active = $row['active'];
   $active2 = $row2['active'];
```

```php
   //Checking if there are any records available
        $count = mysqli_num_rows($result);
        $count2 = mysqli_num_rows($result2);

        if($count === 1){
                // session_register("myusername");
                $_SESSION['login_ID']=$userID;
                $_SESSION['login_Name']= $userName;
    $_SESSION['login_Surname']= $userSurname;
    $_SESSION['login_TableName']=$userTableName;
    $_SESSION['login_Faculty']= $userFaculty;
                header("location: Client/confimation.php");
        }else if ($count2==1) {
                header("location: Admin/admin.php");
        }else {
    header("location: error.php");
  }
}

?>
<!DOCTYPE html>
<html>

<head>
   <meta charset='utf-8'>
   <meta http-equiv='X-UA-Compatible' content='IE=edge'>
   <title>LOGIN PAGE</title>
   <meta name='viewport' content='width=device-width, initial-scale=1'>

   <link rel="stylesheet" type="text/css" href="css/index.css">


</head>
<body>
<div class="container">
   <div id="logo_container">
     <img class="img-responsive" id="Logo" src="images/home.png">
     <!-- <img class="img-responsive" id="Logo" src="confirmation.html"> -->
     <!-- <script type="text/javascript" src="jquery-1.3.2.min.js/jquery-1.3.2.min.js"></script>
     <script type="text/javascript" src="http://code.jquery.com/jquery-latest.min.js"></script> -->
   </div>
   <div class="main_div">
     <h2>STAFF SIGN IN</h2>
     <p>ENTER YOUR ASSIGNED CODE</p><BR>
     <form class="input_group" id="form" method="post" action="">
       <input id="input_box" type="password" name="passcode" placeholder="unique code"></br>
       <input class="button" type= "submit" value="Submit">
     </form>
   </div>
</div>
```

```html
<script type="text/javascript" src="javascript/indexjs.js"></script>
<script src='main.js'></script>
</body>
</html>
```

- After confirming the Lecture is prompted to choose the function he wants to take either View his register, or sign students for another class they are about to attend.
- Choose.php

```php
<?php
session_start();
if(count($_POST)>0) {
require_once('connection.php');
$_SESSION['module']= $_POST['module'];
header("location: StudentSignin.php");
}
?>
<!DOCTYPE html>
<html lang="en">

<head>
   <meta charset="UTF-8">
   <!-- <meta name="viewport" content="width=device-width, initial-scale=1.0"> -->
   <meta http-equiv="X-UA-Compatible" content="ie=edge">
   <link rel="stylesheet" type="text/css" href="../css/main.css">
   <script type="text/javascript" src="../js/jquery-1.3.2.min.js"></script>
   <script type="text/javascript" src="http://code.jquery.com/jquery-latest.min.js"></script>
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
   <title>Choose</title>
   <style>
      .container {
         text-align: center;
         width: 80%;
         margin-left: 10%;
      }
      .View-register,
      .Select-modules {
         margin-top: 40px;
         padding-bottom: 20px;
      }
      .buttons {
         width: 60%;
         padding-top: 20px;
         padding-bottom: 20px;
         font-size: 24px;
         background-color: rgb(11, 19, 46);
         opacity: 0.8;
         color: white;
         border-radius: 10px;
      }
      .buttons:hover {
```

```
      background-color: rgb(11, 19, 46);
      color: white;
      opacity: 1;
    }
    a {
      text-decoration: none;
    }
    #logo_container {
      margin-bottom: 20px;
    }
    #moveDown {
      margin-top: 130px;
    }
  </style>
</head>

<body>
  <div class="container">
    <div id="logo_container">
      <img src="../images/home.png" />
    </div>
    <div id="moveDown" class="View-register">
      <a href="Register.php">
        <input class="buttons" type="button" value="VIEW REGISTER">
      </a>
    </div>
    <div class="Select-modules">
      <input id="setModule" class="buttons" type="button" value="SET CURRENT MODULE">

      <form id="form-values" method="post" hidden>
        <div class="form-group"> <label>Enter Current Module and Code</label> <input class="form-control"
            type="text" name="module" placeholder="e.g Programming 511" required><br>
        </div>
        <a href="StudentSignin.php"><input class="btn " type="Submit" value="Submit"></a>
      </form>
    </div>
    <div id="backlink">
      <a id="lOGOUT" href="../index2.php"><label>LOGOUT</label></a>
    </div>
  </div>
  <script>
    $(document).ready(function () {
      $("#setModule").click(function () {
        $("#form-values").toggle(1000);
      });
    });
  </script>
</body>
</html>
```

- If the lecturer selects Register.php the lecturer will be provided with apage where they can view their previous classes and they can search for a particular student s attendances

- Register,php

```php
<?php
session_start();
require_once('connection.php');
$table = $_SESSION['login_TableName'];
?>
<!Doctype html>
<html>
  <head>
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
  <style type="text/css">
    #logo_container{
    /* padding-top: 3%; */
    padding-bottom: 7%;
      width: 60%;
      height: 100px;
      margin-left:20%;
      position:fixed;
    }
      #Logo{
        width: 100%;
        height: 170px;

      }

    .page-header h2{
      margin-top: 0;
    }
    .container{
      /* margin-right:30%; */
      /* border:2px solid black; */
    }
    th{
      background-color: rgb(11, 19, 46);
      color:white;
      padding-right:10px;
      padding-left:10px;
    }
    table tr td:last-child a{
      margin-right: 10px;
    }
    body{
      /* padding:40px; */
    }
    td{
      font-size:14px;
```

```
      }
      .addBTN{
         background-color: rgb(11, 19, 46);
         color:white;
      }
      tr{
         background-color: lightgray;
         color:black;
      }

      .search-btn{
         width:50%;
         height:40px;
         border-radius:15px;
         border: 2px solid rgb(11, 19, 46);
         padding-left:20px;
         margin-left:4%;
      }
      .Back:hover{
         background-color:lightgray;
      }
      .Back {
 background-color : white;
 color:rgb(11, 19, 46);
 padding: 10px 20px;
 border-radius: 4px;
 border-color: rgb(11, 19, 46);
}
.row{
   padding-top: 130px;
}
#mybutton {
   vertical-align: bottom
 /* position: fixed; */
 bottom: -4px;
 /* right: 10px; */
}
   </style>
   <script type="text/javascript">
      $(document).ready(function(){
         $('[data-toggle="tooltip"]').tooltip();
      });
   </script>
    <script>
function myFunction() {
 // Declare variables
 var input, filter, table, tr, td, i, txtValue;
 input = document.getElementById("myInput");
 filter = input.value.toUpperCase();
 table = document.getElementById("myTable");
 tr = table.getElementsByTagName("tr");
```

```
 // Loop through all table rows, and hide those who don't match the search query
 for (i = 0; i < tr.length; i++) {
  td = tr[i].getElementsByTagName("td")[0];
  // td2=tr[i].getElementsByTagName("td")[5];
  if ( td) {
   txtValue = td.textContent || td.innerText;
   if (txtValue.toUpperCase().indexOf(filter) > -1) {
    tr[i].style.display = "";
   } else {
    tr[i].style.display = "none";
   }
  }
 }
}
</script>
</head>
<body>
<div class="container">
<div id="logo_container">
                        <img class="img-responsive" id="Logo" src="../images/home.png">
                </div>
      <div class="row">
         <div class="col-md-12">
            <div class="page-header clearfix" style="text-align:center;">

                <input type="text" id="myInput" class="search-btn" onkeyup="myFunction()" placeholder="Search
For Student Number..">

              </div>

             <?php

            $sql = "SELECT * FROM $table ORDER BY DateOfAttendance DESC";
            if($result = mysqli_query($conn, $sql)){
               if(mysqli_num_rows($result) > 0){
                  echo "<table id ='myTable' class='table table-bordered table-striped'>";
                     echo "<thead>";
                        echo "<tr>";
                           echo "<th>Student Number</th>";
                           echo "<th>Name</th>";
                           echo "<th>Surname</th>";;
                           echo "<th>Module</th>";
                           echo "<th>Year Of Study</th>";
                           echo "<th>Date Of Attendance</th>";

                        echo "</tr>";
                     echo "</thead>";
                     echo "<tbody>";
                     while($row = mysqli_fetch_array($result)){
                        echo "<tr>";
```

```php
            echo "<td>" . $row['StudentNo'] . "</td>";
            echo "<td>" . $row['Name'] . "</td>";
            echo "<td>" . $row['Surname'] . "</td>";
            echo "<td>" . $row['Module']. "</td>";
            echo "<td>" . $row['YearOfStudy'] . "</td>";
            echo "<td>" . $row['DateOfAttendance'] . "</td>";
            echo "</tr>";
          }
         echo "</tbody>";
       echo "</table>";
       // Free result set
       mysqli_free_result($result);
     } else{
       echo "<p class='lead'><em>No records were found.</em></p>";
     }
   } else{
      echo "ERROR: Could not able to execute $sql. " . mysqli_error($conn);
   }
   // Close connection
   mysqli_close($conn);
   ?>
  </div>
</div>
<div id="mybutton">
   <a href="Choose.php">
<button class="Back">Back</button>
   </a>
</div>
</body>
</html>
```

If the lecturer selected SET CURRENT MODULE on the Choose.php they will be provided with a form that asks them to enter the mode they want to lecturer at the moment.

Here is the code snippet that allow then to do so: in the **Choose.php**

```
    <div class="Select-modules">
        <input id="setModule" class="buttons" type="button" value="SET CURRENT MODULE">
        <form id="form-values" method="post" hidden>
            <div class="form-group"> <label>Enter Current Module and Code</label> <input class="form-con
                    type="text" name="module" placeholder="e.g Programming 511" required><br>
            </div>
            <a href="StudentSignin.php"><input class="btn " type="Submit" value="Submit"></a>
        </form>
    </div>
    <div id="backlink">…
    </div>
</div>
<script>
    $(document).ready(function () {
        $("#setModule").click(function () {
            $("#form-values").toggle(1000);
        });
    });
</script>
```

After submitting the form it takes the lecturer to the window were student can sign in for class. It takes Student numbers,

- StudentSignin.php

```php
<?php
session_start();
require_once("connection.php");
$table =$_SESSION['login_TableName'];
    if($_SERVER["REQUEST_METHOD"]== "POST"){
    $sql = "SELECT * from Students Where StudentNumber = '". $_POST['StudentNumber']."'";
    $result = mysqli_query($conn,$sql);
    $row = mysqli_fetch_array($result,MYSQLI_ASSOC);
    $userSN = $row['StudentNumber'];
    $userName = $row['Name'];
    $userSurname = $row['Surname'];
    // $userQualification = $row['Qualification'];
    $userModule = $_SESSION['module'];
    $userYearOfStudy = $row['YearOfStudy'];
    $count = mysqli_num_rows($result);
    if($count === 1){
        // session_register("myusername");
        $sql = "INSERT INTO $table(StudentNo, Name,Surname,Module,YearOfStudy)VALUES ('" .$userSN . "','" .
$userName . "','" .$userSurname . "','".$userModule."','".$userYearOfStudy."')";
        mysqli_query($conn,$sql);
        $current_id = mysqli_insert_id($conn);
    }
    else {
        // wertyu
    //   header('location: error.php');
    }
  }
?>
<!DOCTYPE html>
```

```html
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
        <link rel="stylesheet" type="text/css" href="../css/main.css">
        <script src="../jquery-1.3.2.min.js/jquery-1.3.2.min.js"></script>
        <script src="../js/data.js"></script>
  <title>Student Sign in</title>
</head>
<body>
<div class="container">
                <div id="logo_container">
                        <img class="img-responsive" id="Logo" src="../images/home.png">
                </div>
                 <div class= "main_div">
                        <h3>WELCOME  <br>To <?php echo $_SESSION['module']; ?> <br> With <?php echo
$_SESSION['login_Name']." ". $_SESSION['login_Surname']; ?></h3>
        <BR>
      <form class="input_group" method="post">
                                <label>ENTER YOUR STUDENT NUMBER</label><br><br>
         <input id="input_box" type="text" name="StudentNumber"><br>
         <button type="submit" ondblclick="toRegister()">SUBMIT</button>
        </form>
</body>
</html>
```

After all student have signed in for class the lecturer can now double click the submit to check if the students that signed in for class were really the students in class

- checkAttendance.php

```php
<?php
session_start();

require_once('connection.php');
$date = date("Y-m-d");
// $date ="2019-12-04 01:29:44";
// echo $date;
$table = $_SESSION['login_TableName'];
if(isset($_POST['save'])){
        $checkbox = $_POST['check'];
        for($i=0;$i<count($checkbox);$i++){
        $del_id = $checkbox[$i];
        mysqli_query($conn,"DELETE FROM $table WHERE StudentNo='".$del_id."' && DateOfAttendance
LIKE '%$date%'");
  echo "Data deleted successfully !";
  header('location: Choose.php');
}
}
$result = mysqli_query($conn,"SELECT * FROM  $table WHERE DateOfAttendance LIKE '%$date%'");
```

```
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <link rel="stylesheet" type="text/css" href="../css/main.css">
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <script type="text/javascript" src="../js/jquery-1.3.2.min.js"></script>
    <script type="text/javascript" src="http://code.jquery.com/jquery-latest.min.js"></script>
    <title>Document</title>
    <style type="text/css">
        .page-header h2{
            margin-top: 0;
        }
        th{
            background-color: rgb(11, 19, 46);
            color:white;
        }
        table tr td:last-child a{
            margin-right: 10px;
        }
        body{
            padding:40px;
        }
        td{
            font-size:14px;
        }
        .addBTN{
            background-color: rgb(11, 19, 46);
            color:white;
        }
        tr{
            background-color: lightgray;
            color:black;
        }
        button{
            color:white;
        }
        .search-btn{
            width:50%;
            height:40px;
            border-radius:15px;
            border: 2px solid rgb(11, 19, 46);
            padding-left:20px;
            margin-left:4%;
        }
    </style>
</head>
<body>
```

```
<div class="page-header clearfix">
<a href="StudentSignin.php" class="btn pull-left " >Back</a>
                <h4 class="pull-right">Select Students not in class</h4>
            </div>
  <div>
  <form method="post" action="">
<table class="table table-bordered table-striped">
<thead>
<tr>


        <th>Student Number</th>
        <th>First Name</th>
        <th>Last Name</th>
  <th><input type="checkbox" id="checkAl"> Select All</th>
</tr>
</thead>
<?php
$i=0;
while($row = mysqli_fetch_array($result)) {
?>
<tr>
  <td><?php echo $row["StudentNo"]; ?></td>
        <td><?php echo $row["Name"]; ?></td>
  <td><?php echo $row["Surname"]; ?></td>
  <td><input type="checkbox" id="checkItem" name="check[]" value="<?php echo $row["StudentNo"]; ?>"></td>
</tr>
<?php
$i++;
}
?>
</table>
<button onclick="bye()"  name="save">DONE</button>
</form>
<script>
$("#checkAl").click(function () {
$('input:checkbox').not(this).prop('checked', this.checked);
});
</script>
    </div>
</body>
</html>
```

After checking it will take the lecture back to Choose.php where he can logout of the system or take another lecture or just check their register.

The Admin

After logging in the Admin is prompted to this **admin.php.** This admin page has frames that allow easy access to many web pages and the company logo.

```
<!DOCTYPE html>
<html>
<head>
        <meta charset='utf-8'>
        <meta http-equiv='X-UA-Compatible' content='IE=edge'>
        <title>administrator</title>
        <meta name='viewport' content='width=device-width, initial-scale=1'>
        <link rel='stylesheet' type='text/css' media='all' href='main.css'>
        <!-- <script src='main.js'></script> -->
        <style type="text/css">
                body {
                        margin: 0;
                        padding: 0;
                        overflow: hidden;/* hidden or*/
                        height: 100%;
                        max-height: 100%;
                        font-family:Sans-serif;
                        line-height: 1.5em;
                }
                #header {
                        position: absolute;
                        top: 0;
                        left: 0;
                        width: 100%;
                        height: 100px;
                        overflow: scroll; /* Disables scrollbars on the header frame. To enable scrollbars, change
"hidden" to "scroll" */
                        background: #BCCE98;
                }
                #nav {
                        position: absolute;
                        top: 100px;
                        left: 0;
                        bottom: 0;
                        width: 230px;
                        overflow: auto; /* Scrollbars will appear on this frame only when there's enough content to
require scrolling. To disable scrollbars, change to "hidden", or use "scroll" to enable permanent scrollbars */
                        background: #DAE9BC;
                }
                #logo {
                        padding:10px;
                }
                main {/*main*/
                        position: fixed;
                        top: 100px; /* Set this to the height of the header */
                        left: 230px;
                        right: 0;
                        bottom: 0;
                        overflow: auto;
                        background: #fff;
                }
```

```
        .innertube {
                margin: 15px; /* Provides padding for the content */
        }
        p {
                color: #555;
        }
        nav ul {
                list-style-type: none;
                margin: 0;
                padding: 0;
        }
        nav ul a {
                color: darkgreen;
                text-decoration: none;
        }
        /*IE6 fix*/
        * html body{
                padding: 100px 0 0 230px; /* Set the first value to the height of the header and last value to
the width of the nav */
        }
        * html main{
                height: 100%;
                width: 100%;
        }
        </style>
</head>
<FRAMESET ROWS="90%,10%" frameBorder=no>
<FRAMESET COLS="20%,80%" frameBorder=no>
<FRAMESET ROWS="18%,82%" frameBorder=no>
<FRAME SRC="logo.html" scrolling=no>
<FRAME SRC="menu.html" scrolling=no>
</FRAMESET>
<FRAME SRC="index.html" NAME="main" scrolling=auto>
</FRAMESET>
<FRAME SRC="footers.html" scrolling=no>
</FRAMESET>
</html>
```

The following are the already assigned pages to ***admin.php***

logo.html

```html
<!DOCTYPE html>
<html>
    <head>
        <style>
            img{
                width: 250px;
                height: 100px;
            }
            div{
                height: 100px;
                width: 100%;
            }
        </style>
    </head>
    <body>
        <div>
        <img src="home_rgi_logo.png" alt="">
        </div>
    </body>
</html>
```

menu.html

```html
1   <!DOCTYPE html>
2   <html>
3   <head>
4       <meta charset='utf-8'>
5       <meta http-equiv='X-UA-Compatible' content='IE=edge'>
6       <meta name='viewport' content='width=device-width, initial-scale=1'>
7       <link rel='stylesheet' type='text/css' media='screen' href='main.css'>
8   </head>
9   <body>
10      <style type="text/css">…
34          </style>
35      </head>
36      <body>
37      <!-- these are the buttons that are displayed on the left frame  -->
38      <div class="buttons">
39      <a href="index.html" target="main"><button>Home</button></a>
40      <a href="NewStudent.php" target="main"><button>Add Student</button></a>
41      <a href="NewLecturer.php" target="main"><button>ADD Lecturer</button></a>
42      <a href="Lecturers.php" target="main"><button>Lecturers</button></a>
43      <a href="Students.php" target="main"><button>Students</button></a>
44      <a href="Advanced.php" target="main"><button>Advanced</button></a>
45      <!-- <a href="timetable.html" target="main"><button>???</button></a> -->
46      </div>
47  </body>
48  </html>
```

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Home admin</title>
    <style>
        /*
This css is for the admin side of the attendance application
by Arnold Mubaiwa And Duncan Mthembu
*/
```

```css
/* Slideshow container */
.slideshow-container {
  max-width: 1000px;
  max-height: 400px;
  position: relative;
  margin: auto;
}
img{
  height: 350px;
    width:97%;
}
/* Hide the images by default */
.mySlides {
  display: none;
}

/* Next & previous buttons */
.prev, .next {
  cursor: pointer;
  position: absolute;
  top: 50%;
  width: auto;
  margin-top: -22px;
  padding: 16px;
  color: white;
  font-weight: bold;
  font-size: 18px;
  transition: 0.6s ease;
  border-radius: 0 3px 3px 0;
  user-select: none;

}

/* Position the "next button" to the right */
.next {
  right: 0;
  border-radius: 3px 0 0 3px;
}

/* On hover, add a black background color with a little bit see-through */
.prev:hover, .next:hover {
  background-color: rgba(0,0,0,0.8);
}

/* Caption text */
.text {
  color: #1d202e;
  font-size: 50px;
  padding: 8px 12px;
  position: absolute;
```

```css
    bottom: 40%;
    width: 100%;
    text-align: center;
  }

  /* Number text (1/3 etc) */
  .numbertext {
    color: #f2f2f2;
    font-size: 12px;
    padding: 8px 12px;
    position: absolute;
    top: 0;
  }

  /* The dots/bullets/indicators */
  .dot {
    cursor: pointer;
    height: 15px;
    width: 15px;
    margin: 0 2px;
    background-color: #bbb;
    border-radius: 50%;
    display: inline-block;
    transition: background-color 0.6s ease;
  }

  .active, .dot:hover {
    background-color: #717171;
  }

  /* Fading animation */
  .fade {
    -webkit-animation-name: fade;
    -webkit-animation-duration: 1.5s;
    animation-name: fade;
    animation-duration: 1.5s;
  }

  @-webkit-keyframes fade {
    from {opacity: .4}
    to {opacity: 1}
  }

  @keyframes fade {
    from {opacity: .4}
    to {opacity: 1}
  }
#logo{
    width: 100%;
    height: 200px;
}
```

```
a{
   background-color: black;
   font-weight: bolder;
   font-variant-caps: all-small-caps;
   text-decoration: none;
}
a:visited{
   background-color: black;
   font-weight: bolder;
   font-variant-caps: all-small-caps;
   text-decoration: none;
}
.logout_button{
font-weight: bolder;
width: 98%;
height: 50px;
background-color: #1d202e;
font-size: 24px;
font-weight: bold;
color: white;
border-radius: 15px;
}
.logout{
   padding-top: 5%;
   position: static;
   width: 96%;
   height: 50px;
   margin-left: 20px;

}
.safari{
   padding-top: 2%;
}
img{
   opacity: 0.6;
}
   </style>
</head>

<body id="main_body" class="safari">
   <div class="slideshow-container">
      <!-- Full-width images with number and caption text -->
      <a href="NewLecturer.php">
        <div class="nature" class="mySlides fade">
           <img src="a.png">
           <div class="text">ADD NEW LECTURE</div>
        </div>
      </a>
      <a href="NewStudent.php">
        <div class="nature" class="mySlides fade">
           <img src="b.png">
```

```
            <div class="text">ADD NEW STUDENT</div>
        </div>
    </a>
    <a href="Lecturers.php">
        <div class="nature" class="mySlides fade">
            <img src="c.png">
            <div class="text">VIEW LECTURERS</div>
        </div>
    </a>
    <a href="Students.php">
        <div class="nature" class="mySlides fade">
            <img src="d.png">
            <div class="text">VIEW STUDENTS</div>
        </div>
    </a>
    <a href="Advanced.html">
        <div class="nature" class="mySlides fade">
            <img src="e.png">
            <div class="text">ADVANCED OPTIONS</div>
        </div>
    </a>
</div>
<br>
<script>
    w3.slideshow(".nature", 2000);
</script>
<div class="logout">
    <!-- <a href="../../index.html"></a> -->
    <button class="logout_button" type="submit" onclick="logout()">LOGOUT</button>
</div>
<script>
    var slideIndex = 1;
    showSlides(slideIndex);

    // Next/previous controls
    function plusSlides(n) {
        showSlides(slideIndex += n);
    }

    // Thumbnail image controls
    function currentSlide(n) {
        showSlides(slideIndex = n);
    }

    function showSlides(n) {
        var i;
        var slides = document.getElementsByClassName("mySlides");
        var dots = document.getElementsByClassName("dot");
        if (n > slides.length) {
            slideIndex = 1
        }
```

```
        if (n < 1) {
            slideIndex = slides.length
        }
        for (i = 0; i < slides.length; i++) {
            slides[i].style.display = "none";
        }
        for (i = 0; i < dots.length; i++) {
            dots[i].className = dots[i].className.replace(" active", "");
        }
        slides[slideIndex - 1].style.display = "block";
        dots[slideIndex - 1].className += " active";
    }

    function logout() {
        window.top.document.location ="../index2.php";
        alert("hi there");
    }
  </script>

</body>

</html>
```

footers.html

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <title>footer</title>
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <link rel="stylesheet" type="text/css" media="screen" href="main.css" />
    <script src="main.js"></script>
    <style type="text/css">…
    </style>
</head>

<body>
    <div id="footer">
        <label>
            Developed by
            <a href="https://github.com/Arnold-A-Mubaiwa/Student_Register" target="_blank">
                Arnold Anotida Mubaiwa</a>
            &nbsp And &nbsp
            <a href="https://github.com/DuncantheeDuncan/Student_Register" target="_blank">
                Phumlani Duncan Mthembu</a>
            <h6>Durnolds Institute &nbsp &copy;</h6>
            <img id="bottom" src="bottom.png" alt="" />
        </label>
    </div>
</body>
</html>
```

- **The admin can add, delete, update and view lecturer records. For every operation the admin does to the lecturer, there is a success.php or an error.php. Here are the code snippets for both operations.**

SuccessLecturer.php

```html
<!DOCTYPE html>
<html>
<head>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        .wrapper{
            width: 750px;
            margin: 0 auto;
        }
    </style>
</head>
<body>
    <div class="wrapper">
        <div class="container-fluid">
            <div class="row">
                <div class="col-md-12">
                    <div class="page-header">
                        <h1>Success Request</h1>
                    </div>
                    <div class="alert alert-success fade in">
                        <p>Successfully Added New Lecturer. </br>
                        Thank you <a href="Lecturers.php" class="alert-link">Done</a></p>
                    </div>
                </div>
            </div>
        </div>
    </div>
</body>
</html>
```

error.php

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Error</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        .wrapper{
            width: 750px;
            margin: 0 auto;
        }
    </style>
</head>
<body>
    <div class="wrapper">
        <div class="container-fluid">
            <div class="row">
                <div class="col-md-12">
                    <div class="page-header">
                        <h1>Invalid Request</h1>
                    </div>
                    <div class="alert alert-danger fade in">
                        <p>Sorry, you've made an invalid request. Please <a href="Lecturers.php"
                        class="alert-link">go back</a> and try again.</p>
                    </div>
                </div>
            </div>
        </div>
    </div>
</body>
</html>
```

Now the crude operations on the lecturer

Lecturer Start up page with a table : Lecturer.php

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Dashboard</title>
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.4/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.js"></script>
  <link rel="stylesheet" href="main.css">
  <style type="text/css">
    .page-header h2{
      margin-top: 0;
    }
    th{
      background-color: rgb(11, 19, 46);
      color:white;
    }
    table tr td:last-child a{
      margin-right: 10px;
    }
    body{
```

```css
        padding:40px;
     }
     td{
        font-size:14px;
     }
     .addBTN{
        background-color: rgb(11, 19, 46);
        color:white;
      opacity: 0.9;
     }
     .addBTN:HOVER{
        color: black;
   background-color: cornflowerblue;
   text-decoration: none;
     }
     tr{
        background-color: lightgray;
        color:black;
     }

     .search-btn{
        width:50%;
        height:40px;
        border-radius:15px;
        border: 2px solid rgb(11, 19, 46);
        padding-left:20px;
        margin-left:4%;
     }
  </style>
  <script type="text/javascript">
     $(document).ready(function(){
        $('[data-toggle="tooltip"]').tooltip();
     });
  </script>
  <script>
function myFunction() {
 // Declare variables
 var input, filter, table, tr, td, i, txtValue;
 input = document.getElementById("myInput");
 filter = input.value.toUpperCase();
 table = document.getElementById("myTable");
 tr = table.getElementsByTagName("tr");

 // Loop through all table rows, and hide those who don't match the search query
 for (i = 0; i < tr.length; i++) {
  td = tr[i].getElementsByTagName("td")[0];
  if (td) {
    txtValue = td.textContent || td.innerText;
    if (txtValue.toUpperCase().indexOf(filter) > -1) {
     tr[i].style.display = "";
    } else {
```

```
      tr[i].style.display = "none";
    }
  }
 }
}
</script>
</head>
<body>
        <div class="row">
           <div class="col-md-12">
              <div class="page-header clearfix">
                 <h2 class="pull-left">Lecturers Details</h2>
                 <input type="text" id="myInput" class="search-btn" onkeyup="myFunction()" placeholder="Search
for Lecturer Number..">
                    <a href="NewLecturer.php" class="btn pull-right addBTN" >Add New Lecturer</a>
              </div>
              <?php
              require_once "connection.php";
              // Attempt select query execution
              $sql = "SELECT * FROM Lecturers";

              if($result = mysqli_query($conn, $sql)){
                 if(mysqli_num_rows($result) > 0){
                    echo "<table id='myTable' class='table table-bordered table-striped'>";
                       echo "<thead>";
                          echo "<tr>";
                             echo "<th>Lecture Number</th>";
                             echo "<th>Name</th>";
                             echo "<th>Surname</th>";;
                             echo "<th>Faculty</th>";
                            echo "<th>More</th>";
                          echo "</tr>";
                       echo "</thead>";
                       echo "<tbody>";
                       while($row = mysqli_fetch_array($result)){
                          echo "<tr>";
                             echo "<td>" . $row['LecturerNumber'] . "</td>";
                             echo "<td>" . $row['Name'] . "</td>";
                             echo "<td>" . $row['Surname'] . "</td>";
                             echo "<td>" . $row['Faculty'] . "</td>";
                             echo "<td>";
                                echo "<a href='LecturerDetails.php?LecturerNumber=". $row['LecturerNumber'] ."'
title='View Record' class='warning'> View</a>";
                                echo "<a href='DeleteLecture.php?LecturerNumber=". $row['LecturerNumber'] ."'
title='Delete Record'>Delete</a>";
                                echo "<a href='UpdateLecture.php?LecturerNumber=". $row['LecturerNumber'] ."'
title='Update Record'>Update</a>";
                             echo "</td>";
                          echo "</tr>";
                       }
                       echo "</tbody>";
```

```
                echo "</table>";
                // Free result set
                mysqli_free_result($result);
              } else{
                echo "<p class='lead'><em>No records were found.</em></p>";
              }
            } else{
              echo "ERROR: Could not able to execute $sql. " . mysqli_error($conn);
            }
            // Close connection
            mysqli_close($conn);
            ?>
          </div>
        </div>
</body>
</html>
```

NewLecturer.php

```php
<?php
if(count($_POST)>0) {
require_once("connection.php");
$TableName = $_POST['Name'].$_POST['Surname'];
$UniqueNo=abs( crc32( uniqid() ) ) );
$CreateTable = "CREATE TABLE $TableName (
ID INT(5) NOT NULL PRIMARY KEY AUTO_INCREMENT,
StudentNo INT(6) NOT NULL,
Name VARCHAR(30) NOT NULL,
Surname VARCHAR(30),
Module VARCHAR(30) NOT NULL,
YearOfStudy VARCHAR(30) NOT NULL,
DateOfAttendance  TIMESTAMP DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
)";
if ($conn->query($CreateTable) === TRUE) {
   header('location: successLecturer.php');
} else {
   echo "Error creating table: " . $conn->error;
}
$sql = "INSERT INTO Lecturers(LecturerNumber,UniqueNumber,
Name,Surname,Faculty,ContactNumber,Email,TableName)VALUES ('" .$_POST['LecturerNumber'] . "','".
$UniqueNo."','" .$_POST['Name'] . "','" . $_POST['Surname'] . "','" .$_POST['Faculty']. "','".
$_POST['ContactNumber']."','".$_POST['EmailAddress']."','".$TableName."')";
$sql1 = "INSERT INTO LectureTables(Name,Surname,tableName)VALUES ('" .$_POST['Name'] . "','" .
$_POST['Surname'] . "','".$TableName."')";

if( mysqli_query($conn,$sql)){
  // echo "Lecturer Added";
}
else{
  // echo "Lecturer not added". $conn->error;
}
```

```php
if( mysqli_query($conn,$sql1)){
   // echo "Lecturer Added";
 }
 else{
   // echo "Lecturer not added". $conn->error;
 }
// mysqli_query($conn,$sql);
         $current_id = mysqli_insert_id($conn);

$conn->close();
}
?>
```
```html
<!Doctype html>
<html>
<head>
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
<link rel="stylesheet" href="main.css">
</head>
<body>
<div class="wrapper">
     <div class="container-fluid">
        <div class="row">
           <div class="col-md-12">
              <div class="page-header">
                 <h2> Adding New Lecturer</h2>
              </div>
<form method="post" action="">
<div class="form-group">   <label for="LecturerNumber">Lecturer Number</label> <input class="form-control"
type="text" name="LecturerNumber" size="6" required><br>
   </div>
<div class="form-group"><label for="Name">First Name</label><input class="form-control" type="text"
name="Name" required><br>
 </div>
<div class="form-group"> <label for="Surname">Last Name</label><input class="form-control" type="text"
name="Surname" required><br>
 </div>
 <div class="form-group"><label for="Faculty">Faculty</label>
       <select name="Faculty" class="form-control" >
       <option>Select Faculty</option>
         <option>NP</option>
         <option>MICT</option>
         <option>BEMS</option>
         <option>PMLG</option>
       </select>
     </div>
<div class="form-group"><label for="ContactNumber">Contact Number</label><input class="form-control"
type="text" name="ContactNumber" required><br>
   </div>
<div class="form-group"><label for="EmailAddress">Email Address</label><input class="form-control"
type="email" name="EmailAddress" required><br>
   </div>
```

```
  <input type="submit" class="btn btnSubmit" value="Submit">
                  <a href="Lecturers.php" class="btn btn-default">Cancel</a></form>
</div></div></div></div>
</body>
</html>
```

Updating Lecture: **UpdateLecture.php**

```php
<?php
require_once('connection.php');
if(count($_POST)>0) {
mysqli_query($conn,"UPDATE Lecturers set Name='" . $_POST['Name'] . "', Surname='" . $_POST['Surname'] .
"' ,Email='" . $_POST['EmailAddress'] . "',Faculty='".$_POST['Faculty']."',ContactNumber='".
$_POST['ContactNumber']."' WHERE LecturerNumber='" . $_POST['LecturerNumber'] . "'");
header('location: successUL.php');
}
// $result = mysqli_query($conn,"SELECT * FROM MyGuests WHERE id='" . $_GET['id'] . "'");
// $row= mysqli_fetch_array($result);
?>
```

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Update Record</title>
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
  <link rel="stylesheet" href="main.css">
</head>
<body>
  <div class="wrapper">
    <div class="container-fluid">
      <div class="row">
        <div class="col-md-12">
          <div class="page-header">
            <h2>Update Lecturer</h2>
          </div>
          <p>Please edit the input values and submit to update the record.</p>
          <form action="" method="post">
          <div class="form-group">   <label for="LecturerNumber">Lecturer Number</label> <input class="form-
control" type="text" size="6" name="LecturerNumber" required><br>
  </div>
<div class="form-group"><label for="Name">First Name</label><input class="form-control" type="text"
name="Name" required><br>
 </div>
<div class="form-group"> <label for="Surname">Last Name</label><input class="form-control" type="text"
name="Surname" required><br>
 </div>
 <div class="form-group"><label for="Faculty">Faculty</label>
       <select name="Faculty" class="form-control" >
       <option>Select Faculty</option>
         <option>NP</option>
```

```
            <option>MICT</option>
            <option>BEMS</option>
            <option>PMLG</option>
          </select>
        </div>
<div class="form-group"><label for="ContactNumber">Contact Number</label><input class="form-control"
type="text" name="ContactNumber" required><br>
  </div>
<div class="form-group"><label for="EmailAddress">Email Address</label><input class="form-control"
type="email" name="EmailAddress" required><br>
  </div>
                <input type="submit" class="btn btnSubmit" value="Submit">
                <a href="Lecturers.php" class="btn btn-default">Cancel</a>
            </form>
          </div>
        </div>
      </div>
  </div>
</body>
</html>
```

Deleting lecturer: DeletinLecturer.php

```php
<?php
// Process delete operation after confirmation
if(isset($_POST["LecturerNumber"]) && !empty($_POST["LecturerNumber"])){
    // Include connection file
    require_once "connection.php";

    // Prepare a delete statement
    $sql = "DELETE FROM Lecturers WHERE LecturerNumber = ?";

    if($stmt = mysqli_prepare($conn, $sql)){
        mysqli_stmt_bind_param($stmt, "i", $param_id);
        $param_id = trim($_POST["LecturerNumber"]);
        if(mysqli_stmt_execute($stmt)){
            header("location: Lecturers.php");
            exit();
        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }
    }
    mysqli_stmt_close($stmt);
    mysqli_close($conn);
} else{
    if(empty(trim($_GET["LecturerNumber"]))){
        header("location: error.php");
        exit();
    }
}
?>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>View Record</title>
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
   <link rel="stylesheet" href="main.css">
</head>
<body>
   <div class="wrapper">
     <div class="container-fluid">
        <div class="row">
           <div class="col-md-12">
              <div class="page-header">
                 <h1>Delete Record</h1>
              </div>
              <form action="" method="post">
                 <div class="alert  fade in">
                    <input type="hidden" name="LecturerNumber" value="<?php echo
trim($_GET["LecturerNumber"]); ?>"/>
                    <p>Are you sure you want to delete this Lecturer?</p><br>
                    <p>
                       <input type="submit" value="Yes" class="btn btn-danger">
                       <a href="Lecturers.php" class="btn btn-default">No</a>
                    </p>
                 </div>
              </form>
           </div>
        </div>
     </div>
   </div>
</body>
</html>
```

Read Lecturer data: **LecturerDetails.php**

```php
<?php
session_start();
require_once "connection.php";

   // Prepare a select statement
   $sql = "SELECT * FROM Lecturers WHERE LecturerNumber = ?";

   if($stmt = mysqli_prepare($conn, $sql)){
      // Bind variables to the prepared statement as parameters
      mysqli_stmt_bind_param($stmt, "i", $param_id);

      // Set parameters
      $param_id = trim($_GET["LecturerNumber"]);

      // Attempt to execute the prepared statement
```

```php
    if(mysqli_stmt_execute($stmt)){
        $result = mysqli_stmt_get_result($stmt);

        if(mysqli_num_rows($result) == 1){
            /* Fetch result row as an associative array. Since the result set contains only one row, we don't need to use
while loop */
            $row = mysqli_fetch_array($result, MYSQLI_ASSOC);
            // Retrieve individual field value
            $Name = $row["Name"];
            $Surname = $row["Surname"];
            $Faculty = $row["Faculty"];
        } else{
            // URL doesn't contain valid id parameter. Redirect to error page
            header("location: error.php");
            exit();
        }
    } else{
        echo "Oops! Something went wrong. Please try again later.";
    }
  }
  // Close statement
  mysqli_stmt_close($stmt);
  // Close connection
  // mysqli_close($conn);
// } else{
//    // URL doesn't contain id parameter. Redirect to error page
//    header("location: error.php");
//    exit();
// }
?>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>View Record</title>
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
  <link rel="stylesheet" href="main.css">
  <style>
  fieldset {
 display: block;
 margin-left: 2px;
 margin-right: 2px;
 padding-top: 0.35em;
 padding-bottom: 0.625em;
 padding-left: 0.75em;
 padding-right: 0.75em;
 width: 48%;
 border: 2px solid rgb(11, 19, 46);

}
#Attendance{
```

```
    float:right;
}
#pers{
    float:left;
}
body{
    margin-left: 5%;
    margin-right: 5%;
}
#big-field{
    width: 100%;
    margin-top:40px;
}
        th{
        background-color: rgb(11, 19, 46);
        color:white;
        font-size:14px;
        padding-left:10px;
        padding-right:10px;
    }
    table tr td:last-child a{
        margin-right: 10px;
    }
    body{
        padding:40px;
    }
    td{
        font-size:12px;
    }
    .search-btn{
        width:50%;
        height:40px;
        border-radius:15px;
        border: 2px solid rgb(11, 19, 46);
        padding-left:20px;
        margin-left:4%;
    }
    </style>
    <script>
function myFunction() {
// Declare variables
var input, filter, table, tr, td, i, txtValue;
input = document.getElementById("myInput");
filter = input.value.toUpperCase();
table = document.getElementById("myTable");
tr = table.getElementsByTagName("tr");
// Loop through all table rows, and hide those who don't match the search query
for (i = 0; i < tr.length; i++) {gvc uhnj8 9hb9ui98y777787
td = tr[i].getElementsByTagName("td")[0];
if (td) {
  txtValue = td.textContent || td.innerText;
```

```
 if (txtValue.toUpperCase().indexOf(filter) > -1) {
  tr[i].style.display = "";
 } else {
  tr[i].style.display = "none";
 }
}
}
}
</script>
<script type="text/javascript" src="../js/jquery-1.3.2.min.js"></script>
  <script type="text/javascript" src="http://code.jquery.com/jquery-latest.min.js"></script>
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
</head>
<body>
<div>
<a href="Lecturers.php" class="btn">Back</a>
<button class="btn" id="prints">PRINT<i class="fa fa-print"style="color: rgb(11, 19, 46);"></i></button>
  </div>
<div>
  <fieldset id="pers">
    <legend>Personal Details</legend>
    <label> Lecturer Number :</label> <?php echo $row["LecturerNumber"]; ?><br>
    <label>Name :</label> <?php echo $row["Name"]; ?><br>
    <label>Surname :</label> <?php echo $row["Surname"]; ?><br>
    <label>Faculty :</label> <?php echo $row["Faculty"]; ?><br>
    <label>Register Name :</label>  <a href="Register.php"><?php echo $row["TableName"]; $_SESSION['table'] =
$row["TableName"]; ?></a> click to view register<br>
  </fieldset>
  <fieldset id="Attendance">
    <legend>Contact Details</legend>
    <label>Contact Number :</label> <?php echo $row["ContactNumber"]; ?><br>
    <label>Email Address:</label> <?php echo $row["Email"]; ?><br>
    <span id="uniCode"> <label>Unique Code:</label > <?php echo  $row['UniqueNumber']; ?></span><br>

  </fieldset>
  <fieldset id="big-field">
    <legend>Attendance</legend>
    <div class="wrapper">
  <div class="search-box">
  <input type="text" id="myInput" class="search-btn" onkeyup="myFunction()" placeholder="Search for Student
Number.."><br><br>
    <div class="result">
      <?php
      $table =$_SESSION['table'];
         $sql1 = "SELECT * FROM $table";
         if($result1 = mysqli_query($conn, $sql1)){
           if(mysqli_num_rows($result1) > 0){
             echo "<table id ='myTable' class='table table-bordered table-striped'>";
               echo "<thead>";
                 echo "<tr>";
                   echo "<th>Student Number</th>";
```

```php
                echo "<th>Name</th>";
                echo "<th>Surname</th>";;
                echo "<th>Module</th>";
                echo "<th>Year Of Study</th>";
                echo "<th>Date Of Attendance</th>";
              echo "</tr>";
            echo "</thead>";
            echo "<tbody>";
            while($row = mysqli_fetch_array($result1)){
              echo "<tr>";
                echo "<td>" . $row['StudentNo'] . "</td>";
                echo "<td>" . $row['Name'] . "</td>";
                echo "<td>" . $row['Surname'] . "</td>";
                echo "<td>" . $row['Module']. "</td>";
                echo "<td>" . $row['YearOfStudy'] . "</td>";
                echo "<td>" . $row['DateOfAttendance'] . "</td>";
                echo "</tr>";
            }
            echo "</tbody>";
          echo "</table>";
          // Free result set
          mysqli_free_result($result1);
        } else{
          echo "<p class='lead'><em>No records were found.</em></p>";
        }
      } else{
        echo "ERROR: Could not able to execute $sql1. " . mysqli_error($conn);
      }
      // Close connection
      mysqli_close($conn);
      ?>
       </div>
  </div>
    </div>
 </fieldset>
</div>
  <script>
    $(document).ready(function () {
        $("#prints").click(function () {
          $(this).hide();
          $('#uniCode').hide();
          window.print();
          $(this).show();
          $('#uniCode').show();
        });
    });
  </script>
</body>
</html>
```

- **The admin can add, update and view lecturer records. For every operation the admin does to the lecturer, there is a <u>success.php</u> or an <u>error.php</u>. Here are the code snippets for both operations.**

<u>Success.php</u>

```html
<!DOCTYPE html>
<html>
<head>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        .wrapper{
            width: 750px;
            margin: 0 auto;
        }
    </style>
</head>
<body>
    <div class="wrapper">
        <div class="container-fluid">
            <div class="row">
                <div class="col-md-12">
                    <div class="page-header">
                        <h1>Success Request</h1>
                    </div>
                    <div class="alert alert-success fade in">
                        <p>Successfully Added New Student. </br>
                        Thank you <a href="Students.php" class="alert-link">Done</a></p>
                    </div>
                </div>
            </div>
        </div>
    </div>
</body>
</html>
```

error.php

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Error</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style type="text/css">
        .wrapper{
            width: 750px;
            margin: 0 auto;
        }
    </style>
</head>
<body>
    <div class="wrapper">
        <div class="container-fluid">
            <div class="row">
                <div class="col-md-12">
                    <div class="page-header">
                        <h1>Invalid Request</h1>
                    </div>
                    <div class="alert alert-danger fade in">
                        <p>Sorry, you've made an invalid request. Please <a href="Lecturers.php"
                        class="alert-link">go back</a> and try again.</p>
                    </div>
                </div>
            </div>
        </div>
    </div>
</body>
</html>
```

Now the crude operations on the Students

Te student loading page

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Dashboard</title>
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.4/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.js"></script>
  <link rel="stylesheet" href="main.css">
  <style type="text/css">
    .page-header h2{
      margin-top: 0;
    }
    th{
      background-color: rgb(11, 19, 46);
      color:white;
    }
    table tr td:last-child a{
      margin-right: 10px;
    }
    body{
      padding:40px;
    }
    td{
```

```css
                font-size:14px;
            }
            .addBTN{
                background-color: rgb(11, 19, 46);
                color:white;
            }
            tr{
                background-color: lightgray;
                color:black;
            }

            .search-btn{
                width:50%;
                height:40px;
                border-radius:15px;
                border: 2px solid rgb(11, 19, 46);
                padding-left:20px;
                margin-left:4%;
            }
        </style>
```

```html
        <script type="text/javascript">
            $(document).ready(function(){
                $('[data-toggle="tooltip"]').tooltip();
            });
        </script>
         <script>
```

```javascript
function myFunction() {
 // Declare variables
 var input, filter, table, tr, td, i, txtValue;
 input = document.getElementById("myInput");
 filter = input.value.toUpperCase();
 table = document.getElementById("myTable");
 tr = table.getElementsByTagName("tr");

 // Loop through all table rows, and hide those who don't match the search query
 for (i = 0; i < tr.length; i++) {
  td = tr[i].getElementsByTagName("td")[0];
  if (td) {
   txtValue = td.textContent || td.innerText;
   if (txtValue.toUpperCase().indexOf(filter) > -1) {
    tr[i].style.display = "";
   } else {
    tr[i].style.display = "none";
   }
  }
 }
}
```

```html
</script>
</head>
<body>
        <div class="row">
```

```
          <div class="col-md-12">
            <div class="page-header clearfix">
              <h2 class="pull-left">Students Details</h2>
              <input type="text" id="myInput" class="search-btn" onkeyup="myFunction()" placeholder="Search
For Student Number..">
                <a href="NewStudent.php" class="btn pull-right addBTN" >Add New Student</a>
            </div>

            <?php
            // Include config file
            require_once "connection.php";

            // Attempt select query execution
            $sql = "SELECT * FROM Students";

            if($result = mysqli_query($conn, $sql)){
              if(mysqli_num_rows($result) > 0){
                echo "<table id='myTable' class='table table-bordered table-striped'>";
                  echo "<thead>";
                    echo "<tr>";
                      echo "<th>Student Number</th>";
                      echo "<th>Name</th>";
                      echo "<th>Surname</th>";
                      // echo "<th>Contact Number</th>";
                      echo "<th>Faculty</th>";
                      echo "<th>Qualification</th>";
                      echo "<th>Year Of Study</th>";
                      echo "<th>More</th>";
                    echo "</tr>";
                  echo "</thead>";
                  echo "<tbody>";
                  while($row = mysqli_fetch_array($result)){
                    echo "<a href='SearchLecturer.php?StudentNumber=". $row['StudentNumber'] ."' > ";
                    echo "<tr>";
                      echo "<td>" . $row['StudentNumber'] . "</td>";
                      echo "<td>" . $row['Name'] . "</td>";
                      echo "<td>" . $row['Surname'] . "</td>";
                      // echo "<td>" . $row['ContactNumber'] . "</td>";
                      echo "<td>" . $row['Faculty'] . "</td>";
                      echo "<td>" . $row['Qualification'] . "</td>";
                      echo "<td>" . $row['YearOfStudy'] . "</td>";
                      echo "<td>";
                      echo "<a href='StudentDetails.php?StudentNumber=". $row['StudentNumber'] ."' title='View
Record' class='warning'> View</a>";
                        echo "<a href='UpdateStudent.php?StudentNumber=". $row['StudentNumber'] ."'
title='Update Record'>Update</a>";
                      echo "</td>";
                      echo "</tr>";
                      echo "</a>";
                    }
                  echo "</tbody>";
```

```
                echo "</table>";
                // Free result set
                mysqli_free_result($result);
             } else{
                echo "<p class='lead'><em>No records were found.</em></p>";
             }
          } else{
             echo "ERROR: Could not able to execute $sql. " . mysqli_error($conn);
          }
          // Close connection
          mysqli_close($conn);
          ?>
      </div>
    </div>
</body>
</html>
```

NewStudent.php

```php
<?php
if(count($_POST)>0) {
require_once("connection.php");

$sql = "INSERT INTO Students(StudentNumber,
Name,Surname,Faculty,Qualification,YearOfStudy,ContactNumber,Email,GuardianContactNo,GuardianEmailAd)VA
LUES ('" .$_POST['StudentNumber'] . "','" .$_POST['Name'] . "','" . $_POST['Surname'] . "','" .$_POST['Faculty'].
"','".$_POST['Qualification']."','".$_POST['YearOfStudy']."','".$_POST['ContactNumber']."','".$_POST['Email']."','".
$_POST['GuardianContactNo']."','".$_POST['GuardianEmailAd']."')";

if( mysqli_query($conn,$sql)){
   header('location: success.php');
}
else{
   // echo "Student not added";

}
   // mysqli_query($conn,$sql);
   $current_id = mysqli_insert_id($conn);
}
 ?>
<!Doctype html>
<html>
<head>
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
<link rel="stylesheet" href="main.css">
</head>
<body>
<div class="wrapper">
    <div class="container-fluid">
      <div class="row">
        <div class="col-md-12">
          <div class="page-header">
```

```
            <h2>Adding New Student</h2>
          </div>
<form method="post" action="">
<div class="form-group">   <label for="StudentNumber">Student Number</label> <input class="form-control"
type="text" size="6" name="StudentNumber" required><br>
   </div>
<div class="form-group"><label for="Name">First Name</label><input class="form-control" type="text"
name="Name" required><br>
 </div>
<div class="form-group"> <label for="Surname">Last Name</label><input class="form-control" type="text"
name="Surname" required><br>
 </div>
 <div class="form-group"><label for="Faculty">Faculty</label>
       <select name="Faculty" class="form-control" >
         <option>Select Faculty</option>
         <option>NP</option>
         <option>MICT</option>
         <option>BEMS</option>
         <option>PMLG</option>
       </select>
     </div>
<div class="form-group"><label for="Qualification">Qualification</label><input class="form-control" type="text"
name="Qualification" required><br>
  </div>
  <div class="form-group"><label for="YearOfStudy">Year Of Study</label>
       <select class="form-control" name="YearOfStudy">
         <option>1st Year</option>
         <option>2nd Year</option>
         <option>3rd Year</option>
       </select>
     </div>
<div class="form-group"><label for="ContactNumber">Contact Number</label><input class="form-control"
type="text" name="ContactNumber" required><br>
   </div>
<div class="form-group"><label for="Email">Email</label><input class="form-control" type="email"
name="Email" required><br>
  </div>
<div class="form-group"><label for="GuardianContactNo">Guardian ContactNo</label><input class="form-control"
type="text" name="GuardianContactNo" required><br>
   </div>
<div class="form-group"><label for="GuardianEmailAd">Guardian Email Address</label><input class="form-
control" type="email" name="GuardianEmailAd" required><br>
  </div>
  <input type="submit" class="btn btnSubmit" value="Submit">
              <a href="Students.php" class="btn btn-default">Cancel</a></form>
</div></div></div></div>
</body>
</html>
```

Read Student Details: StudentDeatails.php

```php
<?php
session_start();
require_once "connection.php";

    // Prepare a select statement
    $sql = "SELECT * FROM Students WHERE StudentNumber = ?";

    if($stmt = mysqli_prepare($conn, $sql)){
        // Bind variables to the prepared statement as parameters
        mysqli_stmt_bind_param($stmt, "i", $param_id);

        // Set parameters
        $param_id = trim($_GET["StudentNumber"]);

        // Attempt to execute the prepared statement
        if(mysqli_stmt_execute($stmt)){
            $result = mysqli_stmt_get_result($stmt);

            if(mysqli_num_rows($result) == 1){
                /* Fetch result row as an associative array. Since the result set contains only one row, we don't need to use
while loop */
                $row = mysqli_fetch_array($result, MYSQLI_ASSOC);

                // Retrieve individual field value
                $Name = $row["Name"];
                $Surname = $row["Surname"];
                $Faculty = $row["Faculty"];
            } else{
                // URL doesn't contain valid id parameter. Redirect to error page
                header("location: error.php");
                exit();
            }

        } else{
            echo "Oops! Something went wrong. Please try again later.";
        }
    }

    // Close statement
    mysqli_stmt_close($stmt);

    // Close connection
    // mysqli_close($conn);
// } else{
//     // URL doesn't contain id parameter. Redirect to error page
//     header("location: error.php");
//     exit();
// }
?>
<!DOCTYPE html>
```

```html
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>View Record</title>
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
   <link rel="stylesheet" href="main.css">
   <script type="text/javascript" src="../js/jquery-1.3.2.min.js"></script>
   <script type="text/javascript" src="http://code.jquery.com/jquery-latest.min.js"></script>
   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
   <style>
   fieldset {
 display: block;
 margin-left: 2px;
 margin-right: 2px;
 padding-top: 0.35em;
 padding-bottom: 0.625em;
 padding-left: 0.75em;
 padding-right: 0.75em;
 width: 48%;
 border: 2px solid rgb(11, 19, 46);

}
#Attendance{
   float:right;
}
#pers{
   float:left;
}
body{
   margin-left: 5%;
   margin-right: 5%;
}
#big-field{
   width: 100%;
}
.search-btn{
      width:50%;
      height:40px;
      border-radius:15px;
      border: 2px solid rgb(11, 19, 46);
      padding-left:20px;
      margin-left:4%;
    }
    <style type="text/css">
    .page-header h2{
      margin-top: 0;
    }
    th{
      background-color: rgb(11, 19, 46);
      color:white;
    }
```

```css
        table tr td:last-child a{
            margin-right: 10px;
        }
        body{
            padding:40px;
        }
        td{
            font-size:14px;
        }
        .addBTN{
            background-color: rgb(11, 19, 46);
            color:white;
        }
        tr{
            background-color: lightgray;
            color:black;
        }
    </style>
     <script>
```

```javascript
function myFunction() {
 // Declare variables
 var input, filter, table, tr, td, i, txtValue;
 input = document.getElementById("myInput");
 filter = input.value.toUpperCase();
 table = document.getElementById("myTable");
 tr = table.getElementsByTagName("tr");

 // Loop through all table rows, and hide those who don't match the search query
 for (i = 0; i < tr.length; i++) {
  td = tr[i].getElementsByTagName("td")[5];
  if (td) {
    txtValue = td.textContent || td.innerText;
    if (txtValue.toUpperCase().indexOf(filter) > -1) {
     tr[i].style.display = "";
    } else {
     tr[i].style.display = "none";
    }
  }
 }
}
</script>
```

```html
</head>
<body>
<div>
<a href="Students.php" class="btn">Back</a>
<button class="btn" id="prints">PRINT<i class="fa fa-print"style="color: rgb(11, 19, 46);"></i></button>
   </div>
<div>
   <fieldset id="pers">
      <legend>Personal Details</legend>
```

```
    <label> Student Number :</label> <?php echo $row["StudentNumber"]; $studentno=$row["StudentNumber"];?
><br>
    <label>Name :</label> <?php echo $row["Name"]; ?><br>
    <label>Surname :</label> <?php echo $row["Surname"]; ?><br>
    <label>Faculty :</label> <?php echo $row["Faculty"]; ?><br>
    <label>Qualification:</label> <?php echo $row['Qualification']; ?><br>
  </fieldset>
  <fieldset id="Attendance">
    <legend>Contact Details</legend>
    <label>Contact Number :</label> <?php echo $row["ContactNumber"]; ?><br>
    <label>Email :</label> <?php echo $row["Email"]; ?><br>
    <label>Guardian Contact No :</label> <?php echo $row["GuardianContactNo"]; ?><br>
    <label>Guardian Email Address:</label> <?php echo $row['GuardianEmailAd']; ?><br>
  </fieldset>
  <fieldset id="big-field" scrolling="yes">
  <legend> Attendance</legend>
  <div align="center">
  <input type="text" id="myInput" class="search-btn" onkeyup="myFunction()" placeholder="Search By Date..">
  </div>
  <?php
require_once('connection.php');
$sqlT = "SELECT TableName FROM Lecturers";
if($resultT = mysqli_query($conn, $sqlT)){
 if(mysqli_num_rows($resultT) > 0){
   echo "<table id ='myTable' class='table table-bordered table-striped'>";
   echo "<thead>";
     echo "<tr>";
       echo "<th>Student Number</th>";
       echo "<th>Name</th>";
       echo "<th>Surname</th>";;
       echo "<th>Module</th>";
       echo "<th>Year Of Study</th>";
       echo "<th>Date Of Attendance</th>";

     echo "</tr>";
   echo "</thead>";
   echo "<tbody>";
   while($row = mysqli_fetch_array($resultT)){
     // echo $row['TableName'];
     $table= $row['TableName'];
     // echo $table;
     $sql1 = "SELECT * FROM $table Where StudentNo = $studentno ";
       if($result1 = mysqli_query($conn, $sql1)){
       if(mysqli_num_rows($result1) > 0){

         while($row1 = mysqli_fetch_array($result1)){
           echo "<tr>";
             echo "<td>" . $row1['StudentNo'] . "</td>";
             echo "<td>" . $row1['Name'] . "</td>";
             echo "<td>" . $row1['Surname'] . "</td>";
             echo "<td>" . $row1['Module'] . "</td>";
```

```
                echo "<td>" . $row1['YearOfStudy'] . "</td>";
                echo "<td>" . $row1['DateOfAttendance'] . "</td>";
                echo "</tr>";
            }

        }
    }
    }
        }
    }

?>
</fieldset>
</div>


    <script>
        $(document).ready(function () {
            $("#prints").click(function () {
                $(this).hide();
                window.print();
                $(this).show();


            });
        });
    </script>
</body>
</html>
```

UpdateStudent.php

```php
<?php
require_once('connection.php');
if(count($_POST)>0) {
mysqli_query($conn,"UPDATE Students set  Name='" . $_POST['Name'] . "', Surname='" . $_POST['Surname'] .
"' ,Faculty='" . $_POST['Faculty'] . "',Qualification='".$_POST['Qualification']."',YearOfStudy='".
$_POST['YearOfStudy']."',ContactNumber='".$_POST['ContactNumber']."',Email='".
$_POST['Email']."',GuardianContactNo ='".$_POST['GuardianContactNo']."',GuardianEmailAd ='".
$_POST['GuardianEmailAd']."' WHERE StudentNumber='" .$_POST['StudentNumber']. "'");
header('location: successUS.php');
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Update Record</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <link rel="stylesheet" href="main.css">
</head>
<body>
```

```
   <div class="wrapper">
     <div class="container-fluid">
       <div class="row">
         <div class="col-md-12">
           <div class="page-header">
             <h2>Update Student</h2>
           </div>
           <p>Please edit the input values and submit to update the record.</p>
           <form action="" method="post">
           <div class="form-group">   <label for="StudentNumber">Student Number</label> <input class="form-
control" type="text" name="StudentNumber" size="6" required><br>
  </div>
<div class="form-group"><label for="Name">First Name</label><input class="form-control" type="text"
name="Name" ><br>
 </div>
<div class="form-group"> <label for="Surname">Last Name</label><input class="form-control" type="text"
name="Surname" ><br>
 </div>
 <div class="form-group"><label for="Faculty">Faculty</label>
       <select name="Faculty" class="form-control" >
       <option>Select Faculty</option>
         <option>NP</option>
         <option>MICT</option>
         <option>BEMS</option>
         <option>PMLG</option>
       </select>
     </div>
<div class="form-group"><label for="Qualification">Qualification</label><input class="form-control" type="text"
name="Qualification" ><br>
  </div>
  <div class="form-group"><label for="YearOfStudy">Faculty</label>
       <select class="form-control" name="YearOfStudy">
         <option>1st Year</option>
         <option>2nd Year</option>
         <option>3rd Year</option>
       </select>
     </div>
<div class="form-group"><label for="ContactNumber">Contact Number</label><input class="form-control"
type="text" name="ContactNumber" ><br>
  </div>
<div class="form-group"><label for="Email">Email</label><input class="form-control" type="email"
name="Email" ><br>
  </div>
<div class="form-group"><label for="GuardianContactNo">Guardian ContactNo</label><input class="form-control"
type="text" name="GuardianContactNo" ><br>
  </div>
<div class="form-group"><label for="GuardianEmailAd">Guardian Email Address</label><input class="form-
control" type="email" name="GuardianEmailAd" ><br>
  </div>
                <input type="submit" class="btn btnSubmit" value="Submit">
                <a href="index.php" class="btn btn-default">Cancel</a>
```

```
            </form>
          </div>
        </div>
      </div>
    </div>
</body>
</html>
```

Now that we are done with the lecturer and students we add the additional functions the admin can perform

Advanced.php Has 3 main functions add new admin, update unique code and show all tables.

```php
<?php
session_start();
?>
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>Advanved Options</title>
    <link rel="stylesheet" href="main.css">
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <script type="text/javascript" src="../js/jquery-1.3.2.min.js"></script>
    <script type="text/javascript" src="http://code.jquery.com/jquery-latest.min.js"></script>

    <style>

th{
        background-color: rgb(11, 19, 46);
        color:white;
        font-size:14px;
        padding-left:10px;
        padding-right:10px;
      }
    table tr td:last-child a{
        margin-right: 10px;
      }
    td{
        font-size:12px;
      }
    .wrapper {
        width: 50%;
        /* padding-top: 3%; */
      }

    .inputs {
```

```
            margin-left: 5px;
            margin-right: 5%;
            width: 80%;
            border: 2px solid rgb(11, 19, 46);
        }

      .unq-code {
            width: 80%;
            border: none;
            background-color: rgb(11, 19, 46);
            padding: 15px;
            color: #fff;
            margin-top: 10px;
            margin-bottom: 10px;
            font-size: 20px;
            border-radius: 15px;
        }
    </style>
</head>

<body>
    <script>
      $(document).ready(function () {
        $("#unq-code").click(function () {
            $("#change-uc").toggle(1000);
            $("#add-admin").hide();
            $("#lecturerTables").hide();
          }),
          $("#add-ad").click(function () {
            $("#add-admin").toggle(1000);
            $("#change-uc").hide(1000);
            $("#lecturerTables").hide();
          }),
          $("#show-lecturers").click(function () {
            $("#lecturerTables").toggle(1000);
            $("#change-uc").hide(1000);
            $("#add-admin").hide();

          });
      });
    </script>
    <div class="wrapper">
        <div class="page-header clearfix">
            <h2 class="pull-left">Select Operation</h2>
             </div>
      <button id="unq-code" class="unq-code">Change The Unique Code</button>
      <div id="change-uc" hidden>
        <form method="POST" action="updateUniqueNo.php">
          <div class="form-group">
            <label>User Icas No</label><input required name="LecturerNumber" type="text" size="6" class="inputs
form-control">
```

```
        </div>
        <div class="form-group">
          <label>Name</label><input required type="text" class="inputs form-control">
        </div>
        <div class="form-group">
          <label>Surname</label><input required type="text" class="inputs form-control">
        </div>
        <input type="submit" class="btn btnSubmit" value="Submit">
      </form>
    </div>
    <button class="unq-code" id="add-ad">Add new Administrator</button>
    <div id="add-admin" hidden>
      <form method="POST" action="addAdmin.php">
        <div class="form-group">
          <label>Admin Employee Number</label><input required name="IcasNo" type="text" size="6"
class="inputs form-control">
        </div>
        <div class="form-group">
          <label>Name</label><input name="Name" type="text" class="inputs form-control"required>
        </div>
        <div class="form-group">
          <label>Surname</label><input required name="Surname" type="text" class="inputs form-control">
        </div>
        <div class="form-group">
          <label>Contact Number</label><input name="ContactNo" type="text" class="inputs form-control">
        </div>
        <input type="submit" class="btn btnSubmit" value="Submit">
      </form>
    </div>
    <button class="unq-code" id="show-lecturers">Lecturer Tables</button>
    <div id="lecturerTables" hidden >
      <?php
      require_once('connection.php');
      $sqlT = "SELECT * FROM LectureTables";
      if($resultT = mysqli_query($conn, $sqlT)){
       if(mysqli_num_rows($resultT) > 0){
         echo "<table id ='myTable' class='table table-bordered table-striped'>";
         echo "<thead>";
           echo "<tr>";
             echo "<th>Name</th>";
             echo "<th>Surname</th>";
             echo "<th>Lecturer Tables</th>";
           echo "</tr>";
         echo "</thead>";
         echo "<tbody>";
         while($row = mysqli_fetch_array($resultT)){
           $_SESSION['table_name'] = $row['tableName'];
           $tbl = $_SESSION['table_name'];
                   echo "<tr>";
                   echo "<td>" . $row['Name'] . "</td>";
                   echo "<td>" . $row['Surname'] . "</td>";
```

```
                echo "<td><a href='Register.php'>" .$tbl . "</a></td>";
               echo "</tr>";
             }
          }
       }

     ?>
    </div>

  </div>
</body>

</html>
```

Adding a new administrator: <u>addAdmin.php</u>

```php
<?php
if(count($_POST)>0) {
require_once("connection.php");
$UniqueNo=abs( crc32( uniqid() ) );
$sql = "INSERT INTO Admin(IcasNo,UniqueID,Name,Surname,ContactNo)VALUES ('" .$_POST['IcasNo'] . "','".
$UniqueNo."','" .$_POST['Name'] . "','" . $_POST['Surname'] . "','" . $_POST['ContactNo'] . "')";
if( mysqli_query($conn,$sql)){
}
else{
        header("location: error.php");
}
  $current_id = mysqli_insert_id($conn);
  $conn->close();
}
?>
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
        <link rel="stylesheet" href="main.css">
  <style type="text/css">
    .wrapper{
      width: 750px;
      margin: 0 auto;
    }
  </style>
</head>
<body>
  <div class="wrapper">
    <div class="container-fluid">
      <div class="row">
        <div class="col-md-12">
          <div class="page-header">
            <h1>Success Request</h1>
          </div>
```

```html
            <div class="alert alert-success fade in">
               <p>You have successfully added a new admin. </br>
             The new admin will be provided their Unique Code through sms shortly. </br>
               </p>
            </div><a href="Advanced.html">
                                        <button class="btn btnSubmit">
                                        DONE
                                        </button></a>
         </div>
       </div>
     </div>
   </div>
</body>
</html>
```

UpdateUniqueCode.php

```php
<?php
if(count($_POST)>0) {
   require_once('connection.php');
   $UniqueNo=abs( crc32( uniqid() ) );
   $sql="UPDATE Lecturers set UniqueNumber='" . $UniqueNo . "' WHERE LecturerNumber='" .
$_POST['LecturerNumber'] . "'";
   if( mysqli_query($conn,$sql)){

   }
   else{
      header("location: error.php");
   }
}
?>
<!DOCTYPE html>
<html>
<head>
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
        <link rel="stylesheet" href="main.css">
   <style type="text/css">
     .wrapper{
        width: 750px;
        margin: 0 auto;
     }
   </style>
</head>
<body>
   <div class="wrapper">
     <div class="container-fluid">
        <div class="row">
          <div class="col-md-12">
             <div class="page-header">
               <h1>Success Request</h1>
             </div>
```

```
            <div class="alert alert-success fade in">
               <p>You have successfully assigned a new Code. </br>
             The Staff member will be provided with their Unique Code through sms shortly. </br>
               </p>
            </div><a href="Advanced.html">
                                                <button class="btn btnSubmit">
                                                DONE
                                                </button></a>
         </div>
       </div>
     </div>
   </div>
</body>
</html>
```

Show Lecturers tables

```php
    <button class="unq-code" id="show-lecturers">Lecturer Tables</button>
    <div id="lecturerTables" hidden >
        <?php
        require_once('connection.php');
        $sqlT = "SELECT * FROM LectureTables";
        if($resultT = mysqli_query($conn, $sqlT)){
         if(mysqli_num_rows($resultT) > 0){
            echo "<table id ='myTable' class='table table-bordered table-striped'>";
            echo "<thead>";
                echo "<tr>";
                    echo "<th>Name</th>";
                    echo "<th>Surname</th>";
                    echo "<th>Lecturer Tables</th>";
                echo "</tr>";
            echo "</thead>";
            echo "<tbody>";
            while($row = mysqli_fetch_array($resultT)){
                $_SESSION['table_name'] = $row['tableName'];
                $tbl = $_SESSION['table_name'];
                        echo "<tr>";
                        echo "<td>" . $row['Name'] . "</td>";
                        echo "<td>" . $row['Surname'] . "</td>";
                            echo "<td><a href='Register.php'>" .$tbl . "</a></td>";
                        echo "</tr>";
                }
            }
        }

        ?>
    </div>
```

When the admin clicks the lecturer table it takes them to the **Register.php**

Register.php

```php
<?php
session_start();
require_once('connection.php');
$table= $_SESSION['table_name'];
// echo $table;
?>
```
```html
<!Doctype html>
<html>

  <head>
 <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
    <style>

      th{
      background-color: rgb(11, 19, 46);
      color:white;
      font-size:14px;
      padding-left:10px;
      padding-right:10px;
      }
     table tr td:last-child a{
        margin-right: 10px;
      }
     body{
        padding:40px;
      }
     td{
        font-size:12px;
      }
     .search-btn{
        width:50%;
        height:40px;
        border-radius:15px;
        border: 2px solid rgb(11, 19, 46);
        padding-left:20px;
        margin-left:4%;
      }
     </style>
     <script>
function myFunction() {
  // Declare variables
  var input, filter, table, tr, td, i, txtValue;
  input = document.getElementById("myInput");
  filter = input.value.toUpperCase();
  table = document.getElementById("myTable");
  tr = table.getElementsByTagName("tr");

  // Loop through all table rows, and hide those who don't match the search query
  for (i = 0; i < tr.length; i++) {
    td = tr[i].getElementsByTagName("td")[0];
    if (td) {
```

```
    txtValue = td.textContent || td.innerText;
    if (txtValue.toUpperCase().indexOf(filter) > -1) {
      tr[i].style.display = "";
    } else {
      tr[i].style.display = "none";
    }
  }
 }
}
</script>
  </head>
  <body>
    <div>
      <a href="Advanced.php" class="btn">Back</a>
    <div class="wrapper">
  <div class="search-box">
  <input type="text" id="myInput" class="search-btn" onkeyup="myFunction()" placeholder="Search for Student
Number.."><br><br>
     <div class="result">
       <?php
          $sql = "SELECT * FROM $table";
          if($result = mysqli_query($conn, $sql)){
            if(mysqli_num_rows($result) > 0){
              echo "<table id ='myTable' class='table table-bordered table-striped'>";
                echo "<thead>";
                  echo "<tr>";
                    echo "<th>Student Number</th>";
                    echo "<th>Name</th>";
                    echo "<th>Surname</th>";;
                    echo "<th>Module</th>";
                    echo "<th>Year Of Study</th>";
                    echo "<th>Date Of Attendance</th>";

                  echo "</tr>";
                echo "</thead>";
                echo "<tbody>";
                while($row = mysqli_fetch_array($result)){
                  echo "<tr>";
                    echo "<td>" . $row['StudentNo'] . "</td>";
                    echo "<td>" . $row['Name'] . "</td>";
                    echo "<td>" . $row['Surname'] . "</td>";
                    echo "<td>" . $row['Module']. "</td>";
                    echo "<td>" . $row['YearOfStudy'] . "</td>";
                    echo "<td>" . $row['DateOfAttendance'] . "</td>";
                    echo "</tr>";
                }
                echo "</tbody>";
              echo "</table>";
              // Free result set
              mysqli_free_result($result);
            } else{
```

```
            echo "<p class='lead'><em>No records were found.</em></p>";
          }
      } else{
          echo "ERROR: Could not able to execute $sql. " . mysqli_error($conn);
      }
      // Close connection
      mysqli_close($conn);
      ?>
       </div>
   </div>
      </div>
   </div>
  </body>
</html>
```

BELOW IS THE CSS CODE THAT WE USED.

Index.css

```css
/*
This css is for the admin side of the attendance application
by Arnold Mubaiwa And Duncan Mthembu
*/

 /* COLORS ARE CHNANGED FOR TESTING REASONS */

 @media only screen and (min-width: 768px) {
  /* tablets and desktop */

  /* .container {
     margin-left: 1px;
     margin-right: 1px;
     padding: 1%;
     border: 1px solid #df0808;
}
#Logo{
       width: 100%;
} */

}

@media only screen and (max-width: 767px) {
   /* phones */
   /* .container {
     margin-left: 1px;
     margin-right: 1px;
     padding: 1%;
     border: 1px solid #680db3;
}
#Logo{
       width: 100%;
```

```
} */

}


@media only screen and (max-width: 767px) and (orientation: portrait) {

  /* portrait phones */
  /* .container {
     margin-left: 1px;
     margin-right: 1px;
     padding: 1%;
     border: 1px solid #e9b013;
}
#Logo{
        width: 100%;
} */

}

#displaytimerr{

 font-family: 'Merienda';font-size: 22px;

}

#logo_container{
/* padding-top: 4%; */
padding-bottom:7%;
        width: 60%;
        height: 101px;
        margin-left:20%;
}
#Logo{
                width: 100%;
                height: 170px;
}
.main_div{
        text-align: center;
        font-size: 20px;
        font-family: all;
        margin-left: 20px;
        margin-right: 20px;


}

h2 {
/* padding:3%; */
        /* margin-bottom: 20px; */
        color: rgb(11, 17, 49);
```

```css
        /*font-style: italic;*/
        font-family: 'Times New Roman', Times, serif;
        /*font-family: Impact, Haettenschweiler, 'Arial Narrow Bold', sans-serif*/;
}



#backlink{
        height: 20px;
        padding-top:20px;
        padding-bottom: 20px;
        margin: 20px;
        text-align: right;

    }


#input_box{
        width: 50%;
        height: 50px;
        border: 2px solid black;
        font-size: 20px;
        /*border-radius: 110px;*/
}
#lOGOUT{
        background-color: lightgrey;
        padding: 20px;
        text-decoration: none;
        margin-top: 40px;
}
.Lecture_img{
        width: 210px;
        height: 210px;
        border: 2px solid black;
        border-radius: 150px;

}
.photo{
        width:auto;
        height: 100%;
}
 button,.button{
        margin-top:50px;
        padding: 20px;
        width: 50%;
        background-color: rgb(11, 19, 46);
        font-variant-caps: all-petite-caps;
        font-weight: bolder;
        font-size: 22px;
        color:#fff ;
        border-radius: 9px;
```

```
}

#Timetable{
        width: 100%;

}
#Timetable tr td{
        width: 50%;
        border-top: 2px solid black;

}

#avail_students{
        width: 100%;
        text-align: center;
        font-size:14px;
}
a:visited{
        color: rgb(10, 10, 10);
}
a{
        width: 100px;
        text-decoration: none;
}

table{
        text-align: left;
}
```

main.css

```
/*
This css is for the admin side of the attendance application
by Arnold Mubaiwa And Duncan Mthembu
*/

   #logo_container{
     /* padding-top: 3%; */
     padding-bottom: 7%;
       width: 60%;
       height: 101px;
       margin-left:20%;
     }
       #Logo{
          width: 100%;
          height: 170px;


       }
     .main_div{
        text-align: center;
        font-size: 20px;
```

```css
    font-family: all;
    margin-left: auto;
    margin-right: auto;
    padding-top: 5%;

}

span {
   margin-bottom: 50px;
   color: rgb(11, 17, 49);
   /*font-style: italic;*/
   /*font-family: Impact, Haettenschweiler, 'Arial Narrow Bold', sans-serif;*/
   font-family: Copperplate / Copperplate Gothic Light, sans-serif;

}

#backlink{
   height: 20px;
   padding-top:20px;
   padding-bottom: 20px;
   margin: 20px;
   text-align: right;


     }
#input_box{
   width: 50%;
   height: 50px;
   border: 2px solid black;
   font-size: 20px;
}
#lOGOUT{
   background-color: lightgrey;
   padding: 20px;
   text-decoration: none;
   margin-top: 40px;
}
.Lecture_img{
   width: 210px;
   height: 210px;
   border: 1px solid black;
   border-radius: 150px;

}
.photo{
   width:auto;
   height: 100%;
}
 button{
   margin-top:50px;
   padding: 20px;
   width: 50%;
```

```css
    background-color: rgb(11, 19, 46);
    font-variant-caps: all-petite-caps;
    font-weight: bolder;
    font-size: 22px;
    color:#fff ;
    border-radius: 9px;
}

#avail_students{
    width: auto;
 margin-left:9%;
}
#avail_students tr td{
    width: 24%;
    border-top: 1.0px solid lightgrey;

}

#avail_students{
    width: 80%;
    text-align: center;
    font-size:14px;
    text-align :center;
}
a:visited{
    color: rgb(10, 10, 10);
}
a{
    width: 100px;
    text-decoration: none;
}

table{
    text-align: left;
}


#myTable {
  border-collapse: collapse; /* Collapse borders */
  width: 69%; /* Full-width */
  border: 1px solid #ddd; /* Add a grey border */
  font-size: 18px; /* Increase font-size */
  margin-left: auto;
    margin-right: auto;
    padding-top: 5%;
}
#myTable th, #myTable td {
  text-align: left; /* Left-align text */
  padding: 12px; /* Add padding */
}
#myTable tr {
```

```
      /* Add a bottom border to all table rows */
      border-bottom: 1px solid #ddd;
    }
    #myTable tr.header, #myTable tr:hover {
      /* Add a grey background color to the table header and on hover */
      background-color: rgb(54, 60, 94);
    }
    /* #myTable{

    } */
    #myTable li {
   /*    bottom-border to all table rows*/
      border-bottom: 1px solid #ddd;
    }
    #myTable li {
      text-align: left; /* Left-align text */
      padding: 12px; /* Add padding */
    }
```

home.css

```
/*
This css is for the admin side of the attendance application
by Arnold Mubaiwa And Duncan Mthembu
*/

/* Slideshow container */
.slideshow-container {
  max-width: 1000px;
  max-height: 400px;
  position: relative;
  margin: auto;
}
 img{
  height: 350px;
   width:97%;
}
/* Hide the images by default */
.mySlides {
  display: none;
}

/* Next & previous buttons */
.prev, .next {
  cursor: pointer;
  position: absolute;
  top: 50%;
  width: auto;
  margin-top: -22px;
  padding: 16px;
  color: white;
```

```css
  font-weight: bold;
  font-size: 18px;
  transition: 0.6s ease;
  border-radius: 0 3px 3px 0;
  user-select: none;

}

/* Position the "next button" to the right */
.next {
  right: 0;
  border-radius: 3px 0 0 3px;
}

/* On hover, add a black background color with a little bit see-through */
.prev:hover, .next:hover {
  background-color: rgba(0,0,0,0.8);
}

/* Caption text */
.text {
  color: #1d202e;
  font-size: 50px;
  padding: 8px 12px;
  position: absolute;
  bottom: 40%;
  width: 100%;
  text-align: center;
}

/* Number text (1/3 etc) */
.numbertext {
  color: #f2f2f2;
  font-size: 12px;
  padding: 8px 12px;
  position: absolute;
  top: 0;
}

/* The dots/bullets/indicators */
.dot {
  cursor: pointer;
  height: 15px;
  width: 15px;
  margin: 0 2px;
  background-color: #bbb;
  border-radius: 50%;
  display: inline-block;
  transition: background-color 0.6s ease;
}
```

```css
 .active, .dot:hover {
   background-color: #717171;
 }

 /* Fading animation */
 .fade {
   -webkit-animation-name: fade;
   -webkit-animation-duration: 1.5s;
   animation-name: fade;
   animation-duration: 1.5s;
 }

 @-webkit-keyframes fade {
   from {opacity: .4}
   to {opacity: 1}
 }

 @keyframes fade {
   from {opacity: .4}
   to {opacity: 1}
 }
#logo{
   width: 100%;
   height: 200px;
}
a{
   background-color: black;
   font-weight: bolder;
   font-variant-caps: all-small-caps;
   text-decoration: none;
}
a:visited{
   background-color: black;
   font-weight: bolder;
   font-variant-caps: all-small-caps;
   text-decoration: none;
}
.logout_button{
font-weight: bolder;
width: 98%;
height: 50px;
background-color: #1d202e;
font-size: 24px;
font-weight: bold;
color: white;

}
.logout{
   position: static;
   width: 96%;
   height: 50px;
```

```
    margin-left: 20px;

}
```

formAdmin.css

```css
/*
This css is for the admin side of the attendance application
by Arnold Mubaiwa And Duncan Mthembu
*/
#form_container
{
        background:#fff;
        border:1px solid #ccc;
        margin:0 auto;
        text-align:left;
        width:auto;
}

#top
{
        display:block;
        height:10px;
        margin:10px auto 0;
        width:auto;
}

/* #footer
{

        clear:both;
        color:#999999;
        text-align:center;
        width:auto;
        padding-bottom: 15px;
        font-size: 85%;
}

#footer a{
        color:#999999;
        text-decoration: none;
        border-bottom: 1px dotted #999999;
} */
/*
#bottom
{
        display:block;
        height:10px;
        margin:0 auto;
        width:650px;
} */
```

```
form.appnitro
{
        margin:20px 20px 0;
        padding:0 0 20px;
}

/**** Logo Section  *****/
h1
{
        background-color:#dedede;
        margin:0;
        min-height:0;
        padding:0;
        text-decoration:none;
        text-indent:-8000px;

}

h1 a
{

        display:block;
        height:100%;
        min-height:40px;
        overflow:hidden;
}


img
{
        behavior:url(css/iepngfix.htc);
        border:none;
}


/**** Form Section ****/
.appnitro
{
        font-family:Lucida Grande, Tahoma, Arial, Verdana, sans-serif;
        font-size:small;
}

.appnitro li
{
        width:61%;
}

form ul
{
        font-size:100%;
```

```
        list-style-type:none;
        margin:0;
        padding:0;
        width:100%;
}

form li
{
        display:block;
        margin:0;
        padding:4px 5px 2px 9px;
        position:relative;
}

form li:after
{
        clear:both;
        content:".";
        display:block;
        height:0;
        visibility:hidden;
}

.buttons:after
{
        clear:both;
        content:".";
        display:block;
        height:0;
        visibility:hidden;
}

.buttons
{
        clear:both;
        display:block;
        margin-top:10px;
}

* html form li
{
        height:1%;
}

* html .buttons
{
        height:1%;
}

* html form li div
{
```

```
        display:inline-block;
}

form li div
{
        color:#444;
        margin:0 4px 0 0;
        padding:0 0 8px;
}

form li span
{
        color:#444;
        float:left;
        margin:0 4px 0 0;
        padding:0 0 8px;
}

form li div.left
{
        display:inline;
        /* float:left;
        width:48%; */
}

form li div.right
{
        display:inline;
        /* float:right;
        width:48%; */
}

form li div.left .medium
{
        width:100%;
}

form li div.right .medium
{
        width:100%;
}

.clear
{
        clear:both;
}

form li div label
{
        clear:both;
        color:#444;
```

```css
        display:block;
        font-size:9px;
        line-height:9px;
        margin:0;
        padding-top:3px;
}

form li span label
{
        clear:both;
        color:#444;
        display:block;
        font-size:9px;
        line-height:9px;
        margin:0;
        padding-top:3px;
}

form li .datepicker
{
        cursor:pointer !important;
        float:left;
        height:16px;
        margin:.1em 5px 0 0;
        padding:0;
        width:16px;
}

.form_description
{
        border-bottom:1px dotted #ccc;
        clear:both;
        display:inline-block;
        margin:0 0 1em;
}

.form_description[class]
{
        display:block;
}

.form_description h2
{
        clear:left;
        font-size:160%;
        font-weight:400;
        margin:0 0 3px;
}

.form_description p
{
```

```
        font-size:95%;
        line-height:130%;
        margin:0 0 12px;
}

form hr
{
        display:none;
}

form li.section_break
{
        border-top:1px dotted #ccc;
        margin-top:9px;
        padding-bottom:0;
        padding-left:9px;
        padding-top:13px;
        width:97% !important;
}

form ul li.first
{
        border-top:none !important;
        margin-top:0 !important;
        padding-top:0 !important;
}

form .section_break h3
{
        font-size:110%;
        font-weight:400;
        line-height:130%;
        margin:0 0 2px;
}

form .section_break p
{
        font-size:85%;

        margin:0 0 10px;
}

/**** Buttons ****/
input.button_text
{
        overflow:visible;
        padding:0 7px;
        width:auto;
}

.buttons input
```

```css
{
        font-size:120%;
        margin-right:5px;
}

/**** Inputs and Labels ****/
label.description
{
        border:none;
        color:#222;
        display:block;
        font-size:95%;
        font-weight:700;
        line-height:150%;
        padding:0 0 1px;
}

span.symbol
{
        font-size:115%;
        line-height:130%;
}

input.text
{
        background:#fff url(../../../images/shadow.gif) repeat-x top;
        border-bottom:1px solid #ddd;
        border-left:1px solid #c3c3c3;
        border-right:1px solid #c3c3c3;
        border-top:1px solid #7c7c7c;
        color:#333;
        font-size:100%;
        margin:0;
        padding:2px 0;
}

input.file
{
        color:#333;
        font-size:100%;
        margin:0;
        padding:2px 0;
}

textarea.textarea
{
        background:#fff url(../../../images/shadow.gif) repeat-x top;
        border-bottom:1px solid #ddd;
        border-left:1px solid #c3c3c3;
        border-right:1px solid #c3c3c3;
        border-top:1px solid #7c7c7c;
```

```
        color:#333;
        font-family:"Lucida Grande", Tahoma, Arial, Verdana, sans-serif;
        font-size:100%;
        margin:0;
        width:99%;
}

select.select
{
        color:#333;
        font-size:100%;
        margin:1px 0;
        padding:1px 0 0;
        background:#fff url(../../../images/shadow.gif) repeat-x top;
        border-bottom:1px solid #ddd;
        border-left:1px solid #c3c3c3;
        border-right:1px solid #c3c3c3;
        border-top:1px solid #7c7c7c;
}


input.currency
{
        text-align:right;
}

input.checkbox
{
        display:block;
        height:13px;
        line-height:1.4em;
        margin:6px 0 0 3px;
        width:13px;
}

input.radio
{
        display:block;
        height:13px;
        line-height:1.4em;
        margin:6px 0 0 3px;
        width:13px;
}

label.choice
{
        color:#444;
        display:block;
        font-size:100%;
        line-height:1.4em;
        margin:-1.55em 0 0 25px;
```

```css
        padding:4px 0 5px;
        width:90%;
}

select.select[class]
{
        margin:0;
        padding:1px 0;
}

*:first-child+html select.select[class]
{
        margin:1px 0;
}

.safari select.select
{
        font-size:120% !important;
        margin-bottom:1px;
}

input.small
{
        width:25%;
}

select.small
{
        width:25%;
}

input.medium
{
        width:50%;
}

select.medium
{
        width:50%;
}

input.large
{
        width:99%;
}

select.large
{
        width:100%;
}
```

```css
textarea.small
{
        height:5.5em;
}

textarea.medium
{
        height:10em;
}

textarea.large
{
        height:20em;
}

/**** Errors ****/
#error_message
{
        background:#fff;
        border:1px dotted red;
        margin-bottom:1em;
        padding-left:0;
        padding-right:0;
        padding-top:4px;
        text-align:center;
        width:99%;
}

#error_message_title
{
        color:#DF0000;
        font-size:125%;
        margin:7px 0 5px;
        padding:0;
}

#error_message_desc
{
        color:#000;
        font-size:100%;
        margin:0 0 .8em;
}

#error_message_desc strong
{
        background-color:#FFDFDF;
        color:red;
        padding:2px 3px;
}

form li.error
```

```css
{
        background-color:#FFDFDF !important;
        border-bottom:1px solid #EACBCC;
        border-right:1px solid #EACBCC;
        margin:3px 0;
}

form li.error label
{
        color:#DF0000 !important;
}

form p.error
{
        clear:both;
        color:red;
        font-size:10px;
        font-weight:700;
        margin:0 0 5px;
}

form .required
{
        color:red;
        float:none;
        font-weight:700;
}

/**** Guidelines and Error Highlight ****/
form li.highlighted
{
        background-color:#fff7c0;
}

form .guidelines
{
        background:#f5f5f5;
        border:1px solid #e6e6e6;
        color:#444;
        font-size:80%;
        left:100%;
        line-height:130%;
        margin:0 0 0 8px;
        padding:8px 10px 9px;
        position:absolute;
        top:0;
        visibility:hidden;
        width:42%;
        z-index:1000;
}
```

```css
form .guidelines small
{
        font-size:105%;
}

form li.highlighted .guidelines
{
        visibility:visible;
}

form li:hover .guidelines
{
        visibility:visible;
}

.no_guidelines .guidelines
{
        display:none !important;
}

.no_guidelines form li
{
        width:97%;
}

.no_guidelines li.section
{
        padding-left:9px;
}

/*** Success Message ****/
.form_success
{
        clear: both;
        margin: 0;
        padding: 90px 0pt 100px;
        text-align: center
}

.form_success h2 {
  clear:left;
  font-size:160%;
  font-weight:normal;
  margin:0pt 0pt 3px;
}

/*** Password ****/
ul.password{
  margin-top:60px;
  margin-bottom: 60px;
  text-align: center;
```

```css
}
.password h2{
   color:#DF0000;
   font-weight:bold;
   margin:0pt auto 10px;
}

.password input.text {
  font-size:170% !important;
  width:380px;
  text-align: center;
}
.password label{
  display:block;
  font-size:120% !important;
  padding-top:10px;
  font-weight:bold;
}

#li_captcha{
  padding-left: 5px;
}


#li_captcha span{
        float:none;
}

/** Embedded Form **/

.embed #form_container{
        border: none;
}

.embed #top, .embed #bottom, .embed h1{
        display: none;
}

.embed #form_container{
        width: 100%;
}

/* .embed #footer{
        text-align: left;
        padding-left: 10px;
        width: 99%;
}

.embed #footer.success{
        text-align: center;
} */
```

```
.embed form.appnitro
{
        margin:0px 0px 0;

}



/*** Calendar ********************/
div.calendar { position: relative; }

.calendar table {
cursor:pointer;
border:1px solid #ccc;
font-size: 11px;
color: #000;
background: #fff;
font-family:"Lucida Grande", Tahoma, Arial, Verdana, sans-serif;
}

.calendar .button {
text-align: center;
padding: 2px;
}

.calendar .nav {
background:#f5f5f5;
}

.calendar thead .title {
font-weight: bold;
text-align: center;
background: #dedede;
color: #000;
padding: 2px 0 3px 0;
}

.calendar thead .headrow {
background: #f5f5f5;
color: #444;
font-weight:bold;
}

.calendar thead .daynames {
background: #fff;
color:#333;
font-weight:bold;
}

.calendar thead .name {
```

```css
border-bottom: 1px dotted #ccc;
padding: 2px;
text-align: center;
color: #000;
}

.calendar thead .weekend {
color: #666;
}

.calendar thead .hilite {
background-color: #444;
color: #fff;
padding: 1px;
}

.calendar thead .active {
background-color: #d12f19;
color:#fff;
padding: 2px 0px 0px 2px;
}


.calendar tbody .day {
width:1.8em;
color: #222;
text-align: right;
padding: 2px 2px 2px 2px;
}
.calendar tbody .day.othermonth {
font-size: 80%;
color: #bbb;
}
.calendar tbody .day.othermonth.oweekend {
color: #fbb;
}

.calendar table .wn {
padding: 2px 2px 2px 2px;
border-right: 1px solid #000;
background: #666;
}

.calendar tbody .rowhilite td {
background: #FFF1AF;
}

.calendar tbody .rowhilite td.wn {
background: #FFF1AF;
}
```

```css
.calendar tbody td.hilite {
padding: 1px 1px 1px 1px;
background:#444 !important;
color:#fff !important;
}

.calendar tbody td.active {
color:#fff;
background: #529214 !important;
padding: 2px 2px 0px 2px;
}

.calendar tbody td.selected {
font-weight: bold;
border: 1px solid #888;
padding: 1px 1px 1px 1px;
background: #f5f5f5 !important;
color: #222 !important;
}

.calendar tbody td.weekend {
color: #666;
}

.calendar tbody td.today {
font-weight: bold;
color: #529214;
background:#D9EFC2;
}

.calendar tbody .disabled { color: #999; }

.calendar tbody .emptycell {
visibility: hidden;
}

.calendar tbody .emptyrow {
display: none;
}

.calendar tfoot .footrow {
text-align: center;
background: #556;
color: #fff;
}

.calendar tfoot .ttip {
background: #222;
color: #fff;
font-size:10px;
border-top: 1px solid #dedede;
```

```
padding: 3px;
}

.calendar tfoot .hilite {
background: #aaf;
border: 1px solid #04f;
color: #000;
padding: 1px;
}

.calendar tfoot .active {
background: #77c;
padding: 2px 0px 0px 2px;
}

.calendar .combo {
position: absolute;
display: none;
top: 0px;
left: 0px;
width: 4em;
border: 1px solid #ccc;
background: #f5f5f5;
color: #222;
font-size: 90%;
z-index: 100;
}

.calendar .combo .label,
.calendar .combo .label-IEfix {
text-align: center;
padding: 1px;
}

.calendar .combo .label-IEfix {
width: 4em;
}

.calendar .combo .hilite {
background: #444;
color:#fff;
}

.calendar .combo .active {
border-top: 1px solid #999;
border-bottom: 1px solid #999;
background: #dedede;
font-weight: bold;
}
```

BELLOW IS THE JAVASCRIPT THAT WE USED

home.js

```javascript
"use strict";
var w3 = {};
w3.hide = function (sel) {
 w3.hideElements(w3.getElements(sel));
};
w3.hideElements = function (elements) {
 var i, l = elements.length;
 for (i = 0; i < l; i++) {
  w3.hideElement(elements[i]);
 }
};
w3.hideElement = function (element) {
 w3.styleElement(element, "display", "none");
};
w3.show = function (sel, a) {
 var elements = w3.getElements(sel);
 if (a) {w3.hideElements(elements);}
 w3.showElements(elements);
};
w3.showElements = function (elements) {
 var i, l = elements.length;
 for (i = 0; i < l; i++) {
  w3.showElement(elements[i]);
 }
};
w3.showElement = function (element) {
 w3.styleElement(element, "display", "block");
};
w3.addStyle = function (sel, prop, val) {
 w3.styleElements(w3.getElements(sel), prop, val);
};
w3.styleElements = function (elements, prop, val) {
 var i, l = elements.length;
 for (i = 0; i < l; i++) {
  w3.styleElement(elements[i], prop, val);
 }
};
w3.styleElement = function (element, prop, val) {
 element.style.setProperty(prop, val);
};
w3.toggleShow = function (sel) {
 var i, x = w3.getElements(sel), l = x.length;
 for (i = 0; i < l; i++) {
  if (x[i].style.display == "none") {
   w3.styleElement(x[i], "display", "block");
  } else {
   w3.styleElement(x[i], "display", "none");
```

```
   }
  }
};
w3.addClass = function (sel, name) {
  w3.addClassElements(w3.getElements(sel), name);
};
w3.addClassElements = function (elements, name) {
  var i, l = elements.length;
  for (i = 0; i < l; i++) {
    w3.addClassElement(elements[i], name);
  }
};
w3.addClassElement = function (element, name) {
  var i, arr1, arr2;
  arr1 = element.className.split(" ");
  arr2 = name.split(" ");
  for (i = 0; i < arr2.length; i++) {
    if (arr1.indexOf(arr2[i]) == -1) {element.className += " " + arr2[i];}
  }
};
w3.removeClass = function (sel, name) {
  w3.removeClassElements(w3.getElements(sel), name);
};
w3.removeClassElements = function (elements, name) {
  var i, l = elements.length, arr1, arr2, j;
  for (i = 0; i < l; i++) {
    w3.removeClassElement(elements[i], name);
  }
};
w3.removeClassElement = function (element, name) {
  var i, arr1, arr2;
  arr1 = element.className.split(" ");
  arr2 = name.split(" ");
  for (i = 0; i < arr2.length; i++) {
    while (arr1.indexOf(arr2[i]) > -1) {
      arr1.splice(arr1.indexOf(arr2[i]), 1);
    }
  }
  element.className = arr1.join(" ");
};
w3.toggleClass = function (sel, c1, c2) {
  w3.toggleClassElements(w3.getElements(sel), c1, c2);
};
w3.toggleClassElements = function (elements, c1, c2) {
  var i, l = elements.length;
  for (i = 0; i < l; i++) {
    w3.toggleClassElement(elements[i], c1, c2);
  }
};
w3.toggleClassElement = function (element, c1, c2) {
  var t1, t2, t1Arr, t2Arr, j, arr, allPresent;
```

```
t1 = (c1 || "");
t2 = (c2 || "");
t1Arr = t1.split(" ");
t2Arr = t2.split(" ");
arr = element.className.split(" ");
if (t2Arr.length == 0) {
  allPresent = true;
  for (j = 0; j < t1Arr.length; j++) {
    if (arr.indexOf(t1Arr[j]) == -1) {allPresent = false;}
  }
  if (allPresent) {
    w3.removeClassElement(element, t1);
  } else {
    w3.addClassElement(element, t1);
  }
} else {
  allPresent = true;
  for (j = 0; j < t1Arr.length; j++) {
    if (arr.indexOf(t1Arr[j]) == -1) {allPresent = false;}
  }
  if (allPresent) {
    w3.removeClassElement(element, t1);
    w3.addClassElement(element, t2);
  } else {
    w3.removeClassElement(element, t2);
    w3.addClassElement(element, t1);
  }
}
};
w3.getElements = function (id) {
  if (typeof id == "object") {
    return [id];
  } else {
    return document.querySelectorAll(id);
  }
};
w3.filterHTML = function(id, sel, filter) {
  var a, b, c, i, ii, iii, hit;
  a = w3.getElements(id);
  for (i = 0; i < a.length; i++) {
    b = a[i].querySelectorAll(sel);
    for (ii = 0; ii < b.length; ii++) {
      hit = 0;
      if (b[ii].innerText.toUpperCase().indexOf(filter.toUpperCase()) > -1) {
        hit = 1;
      }
      c = b[ii].getElementsByTagName("*");
      for (iii = 0; iii < c.length; iii++) {
        if (c[iii].innerText.toUpperCase().indexOf(filter.toUpperCase()) > -1) {
          hit = 1;
        }
```

```
    }
    if (hit == 1) {
      b[ii].style.display = "";
    } else {
      b[ii].style.display = "none";
    }
   }
  }
};
w3.sortHTML = function(id, sel, sortvalue) {
  var a, b, i, ii, y, bytt, v1, v2, cc, j;
  a = w3.getElements(id);
  for (i = 0; i < a.length; i++) {
   for (j = 0; j < 2; j++) {
     cc = 0;
     y = 1;
     while (y == 1) {
      y = 0;
      b = a[i].querySelectorAll(sel);
      for (ii = 0; ii < (b.length - 1); ii++) {
       bytt = 0;
       if (sortvalue) {
        v1 = b[ii].querySelector(sortvalue).innerText;
        v2 = b[ii + 1].querySelector(sortvalue).innerText;
       } else {
        v1 = b[ii].innerText;
        v2 = b[ii + 1].innerText;
       }
       v1 = v1.toLowerCase();
       v2 = v2.toLowerCase();
       if ((j == 0 && (v1 > v2)) || (j == 1 && (v1 < v2))) {
        bytt = 1;
        break;
       }
      }
      if (bytt == 1) {
       b[ii].parentNode.insertBefore(b[ii + 1], b[ii]);
       y = 1;
       cc++;
      }
     }
    }
    if (cc > 0) {break;}
   }
  }
};
w3.slideshow = function (sel, ms, func) {
  var i, ss, x = w3.getElements(sel), l = x.length;
  ss = {};
  ss.current = 1;
  ss.x = x;
  ss.ondisplaychange = func;
```

```
 if (!isNaN(ms) || ms == 0) {
   ss.milliseconds = ms;
 } else {
   ss.milliseconds = 1000;
 }
 ss.start = function() {
   ss.display(ss.current)
   if (ss.ondisplaychange) {ss.ondisplaychange();}
   if (ss.milliseconds > 0) {
     window.clearTimeout(ss.timeout);
     ss.timeout = window.setTimeout(ss.next, ss.milliseconds);
   }
 };
 ss.next = function() {
   ss.current += 1;
   if (ss.current > ss.x.length) {ss.current = 1;}
   ss.start();
 };
 ss.previous = function() {
   ss.current -= 1;
   if (ss.current < 1) {ss.current = ss.x.length;}
   ss.start();
 };
 ss.display = function (n) {
   w3.styleElements(ss.x, "display", "none");
   w3.styleElement(ss.x[n - 1], "display", "block");
 }
 ss.start();
 return ss;
};
w3.includeHTML = function(cb) {
 var z, i, elmnt, file, xhttp;
 z = document.getElementsByTagName("*");
 for (i = 0; i < z.length; i++) {
   elmnt = z[i];
   file = elmnt.getAttribute("w3-include-html");
   if (file) {
     xhttp = new XMLHttpRequest();
     xhttp.onreadystatechange = function() {
       if (this.readyState == 4) {
         if (this.status == 200) {elmnt.innerHTML = this.responseText;}
         if (this.status == 404) {elmnt.innerHTML = "Page not found.";}
         elmnt.removeAttribute("w3-include-html");
         w3.includeHTML(cb);
       }
     }
     xhttp.open("GET", file, true);
     xhttp.send();
     return;
   }
 }
```

```
 if (cb) cb();
};
w3.getHttpData = function (file, func) {
 w3.http(file, function () {
  if (this.readyState == 4 && this.status == 200) {
   func(this.responseText);
  }
 });
};
w3.getHttpObject = function (file, func) {
 w3.http(file, function () {
  if (this.readyState == 4 && this.status == 200) {
   func(JSON.parse(this.responseText));
  }
 });
};
w3.displayHttp = function (id, file) {
 w3.http(file, function () {
  if (this.readyState == 4 && this.status == 200) {
   w3.displayObject(id, JSON.parse(this.responseText));
  }
 });
};
w3.http = function (target, readyfunc, xml, method) {
 var httpObj;
 if (!method) {method = "GET"; }
 if (window.XMLHttpRequest) {
  httpObj = new XMLHttpRequest();
 } else if (window.ActiveXObject) {
  httpObj = new ActiveXObject("Microsoft.XMLHTTP");
 }
 if (httpObj) {
  if (readyfunc) {httpObj.onreadystatechange = readyfunc;}
  httpObj.open(method, target, true);
  httpObj.send(xml);
 }
};
w3.getElementsByAttribute = function (x, att) {
 var arr = [], arrCount = -1, i, l, y = x.getElementsByTagName("*"), z = att.toUpperCase();
 l = y.length;
 for (i = -1; i < l; i += 1) {
  if (i == -1) {y[i] = x;}
  if (y[i].getAttribute(z) !== null) {arrCount += 1; arr[arrCount] = y[i];}
 }
 return arr;
};
w3.dataObject = {},
w3.displayObject = function (id, data) {
 var htmlObj, htmlTemplate, html, arr = [], a, l, rowClone, x, j, i, ii, cc, repeat, repeatObj, repeatX = "";
 htmlObj = document.getElementById(id);
 htmlTemplate = init_template(id, htmlObj);
```

```
  html = htmlTemplate.cloneNode(true);
  arr = w3.getElementsByAttribute(html, "w3-repeat");
 l = arr.length;
 for (j = (l - 1); j >= 0; j -= 1) {
   cc = arr[j].getAttribute("w3-repeat").split(" ");
   if (cc.length == 1) {
    repeat = cc[0];
   } else {
    repeatX = cc[0];
    repeat = cc[2];
   }
   arr[j].removeAttribute("w3-repeat");
   repeatObj = data[repeat];
   if (repeatObj && typeof repeatObj == "object" && repeatObj.length != "undefined") {
    i = 0;
    for (x in repeatObj) {
     i += 1;
     rowClone = arr[j];
     rowClone = w3_replace_curly(rowClone, "element", repeatX, repeatObj[x]);
     a = rowClone.attributes;
     for (ii = 0; ii < a.length; ii += 1) {
      a[ii].value = w3_replace_curly(a[ii], "attribute", repeatX, repeatObj[x]).value;
     }
     (i === repeatObj.length) ? arr[j].parentNode.replaceChild(rowClone, arr[j]) :
arr[j].parentNode.insertBefore(rowClone, arr[j]);
    }
   } else {
    console.log("w3-repeat must be an array. " + repeat + " is not an array.");
    continue;
   }
 }
 html = w3_replace_curly(html, "element");
 htmlObj.parentNode.replaceChild(html, htmlObj);
 function init_template(id, obj) {
  var template;
  template = obj.cloneNode(true);
  if (w3.dataObject.hasOwnProperty(id)) {return w3.dataObject[id];}
  w3.dataObject[id] = template;
  return template;
 }
 function w3_replace_curly(elmnt, typ, repeatX, x) {
  var value, rowClone, pos1, pos2, originalHTML, lookFor, lookForARR = [], i, cc, r;
  rowClone = elmnt.cloneNode(true);
  pos1 = 0;
  while (pos1 > -1) {
   originalHTML = (typ == "attribute") ? rowClone.value : rowClone.innerHTML;
   pos1 = originalHTML.indexOf("{{", pos1);
   if (pos1 === -1) {break;}
   pos2 = originalHTML.indexOf("}}", pos1 + 1);
   lookFor = originalHTML.substring(pos1 + 2, pos2);
   lookForARR = lookFor.split("||");
```

```
    value = undefined;
   for (i = 0; i < lookForARR.length; i += 1) {
    lookForARR[i] = lookForARR[i].replace(/^\s+|\s+$/gm, ''); //trim
    if (x) {value = x[lookForARR[i]];}
    if (value == undefined && data) {value = data[lookForARR[i]];}
    if (value == undefined) {
     cc = lookForARR[i].split(".");
     if (cc[0] == repeatX) {value = x[cc[1]]; }
    }
    if (value == undefined) {
     if (lookForARR[i] == repeatX) {value = x;}
    }
    if (value == undefined) {
     if (lookForARR[i].substr(0, 1) == "'") {
      value = lookForARR[i].replace(/'/g, "");
     } else if (lookForARR[i].substr(0,1) == '"') {
      value = lookForARR[i].replace(/"/g, "");
     }
    }
    if (value != undefined) {break;}
   }
   if (value != undefined) {
    r = "{{" + lookFor + "}}";
    if (typ == "attribute") {
     rowClone.value = rowClone.value.replace(r, value);
    } else {
     w3_replace_html(rowClone, r, value);
    }
   }
   pos1 = pos1 + 1;
  }
  return rowClone;
 }
 function w3_replace_html(a, r, result) {
  var b, l, i, a, x, j;
  if (a.hasAttributes()) {
   b = a.attributes;
   l = b.length;
   for (i = 0; i < l; i += 1) {
    if (b[i].value.indexOf(r) > -1) {b[i].value = b[i].value.replace(r, result);}
   }
  }
  x = a.getElementsByTagName("*");
  l = x.length;
  a.innerHTML = a.innerHTML.replace(r, result);
 }
};
```

5.3 Testing and 5.4 System Testing

The Administrator Site
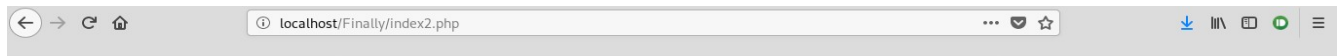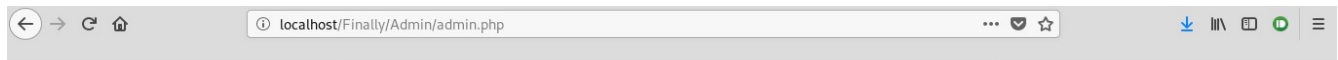
Adding New Student

Student Number

121589

First Name

Arnold

Last Name

Mubaiwa

Faculty

MICT

Qualification

DIT 3 YEARS

Developed by Arnold Anotida Mubaiwa   And   Phumlani Duncan Mthembu

Durnolds Institute   ©

Success Request

Successfully Added New Lecturer.
Thank you **Done**

Developed by Arnold Anotida Mubaiwa   And   Phumlani Duncan Mthembu

Durnolds Institute   ©

localhost/Finally/Admin/admin.php

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HOME

ADD STUDENT

ADD LECTURER

LECTURERS

STUDENTS

ADVANCED

Lecturers Details

200012

Add New Lecturer

Lecture Number	Name	Surname	Faculty	More
200012	Jack	Mabaso	MICT	View Delete Update

Developed by Arnold Anotida Mubaiwa And Phumlani Duncan Mthembu

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---

localhost/Finally/Admin/admin.php

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HOME

ADD STUDENT

ADD LECTURER

LECTURERS

STUDENTS

ADVANCED

Back   PRINT🖨

Personal Details

Lecturer Number : 200012
Name : Jack
Surname : Mabaso
Faculty : MICT
Register Name : JackMabaso click to view register

Contact Details

Contact Number : 0839658874
Email Address: jackmabaso@gmail.com
Unique Code: 2188337848

Attendance

Search for Student Number..

Student Number	Name	Surname	Module	Year Of Study	Date Of Attendance
100001	Arnold	Mubaiwa	Programming 512	3rd Year	2019-12-09 19:49:07
100002	Samual	Zagabe	Programming 512	3rd Year	2019-12-09 19:49:16
100003	Duncan	Mthembu	Programming 512	3rd Year	2019-12-09 19:49:24

Developed by Arnold Anotida Mubaiwa And Phumlani Duncan Mthembu

Durnolds Institute ©

jack.pdf   100% ▼

Personal Details

Lecturer Number : 200012
Name : Jack
Surname : Mabaso
Faculty : MICT
Register Name : JackMabaso
(Register.php) click to view register

Contact Details

Contact Number : 0839658874
Email Address:
jackmabaso@gmail.com

Attendance

Search for Student Number..

Student Number	Name	Surname	Module	Year Of Study	Date Of Attendance
100001	Arnold	Mubaiwa	Programming 512	3rd Year	2019-12-09 19:49:07
100002	Samual	Zagabe	Programming 512	3rd Year	2019-12-09 19:49:16
100003	Duncan	Mthembu	Programming 512	3rd Year	2019-12-09 19:49:24

---

localhost/Finally/Admin/admin.php

DURNOLDS INSTITUTE
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HOME

ADD STUDENT

ADD LECTURER

LECTURERS

STUDENTS

ADVANCED

Delete Record

Are you sure you want to delete this Lecturer?

Yes   No

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For the client
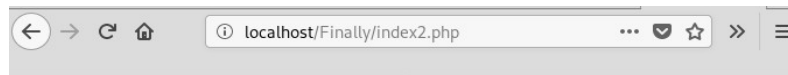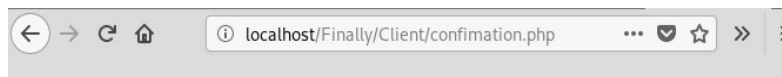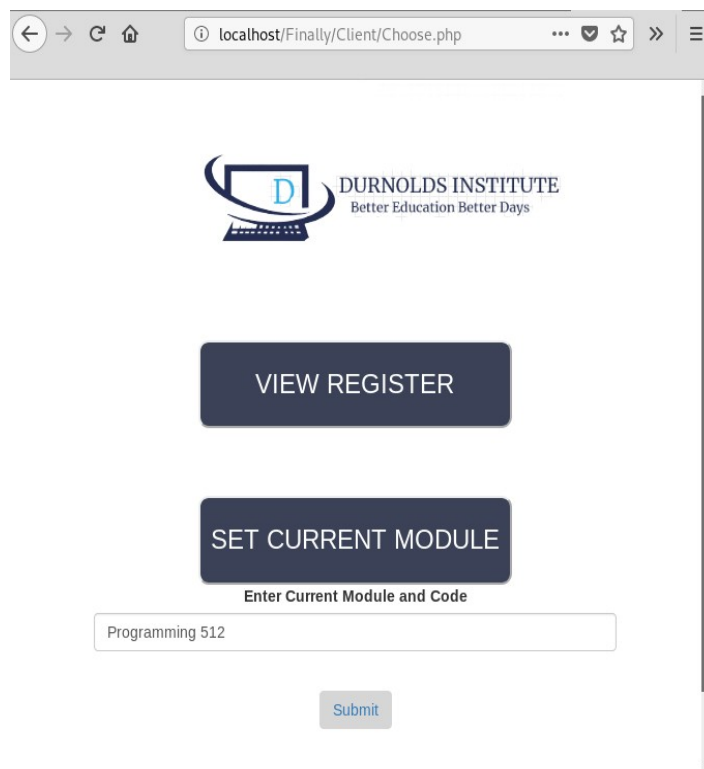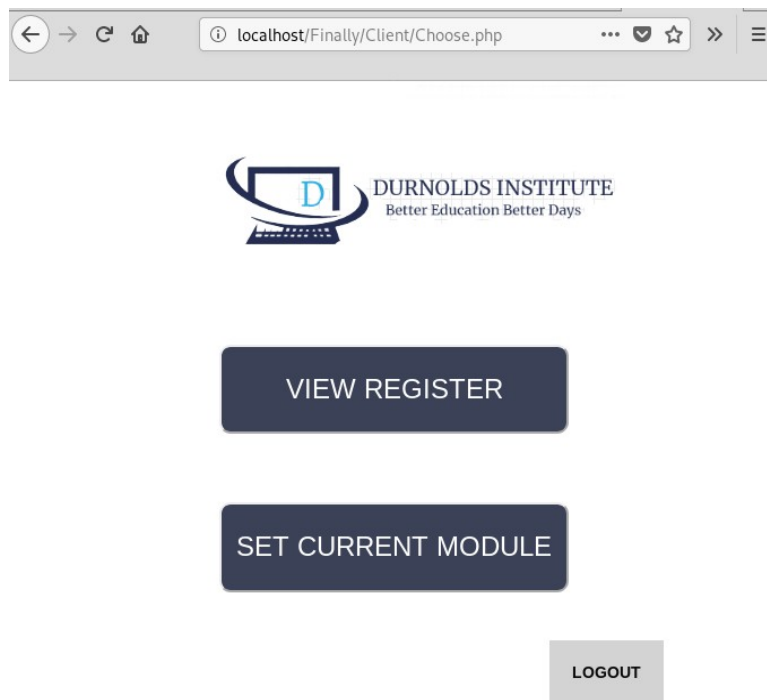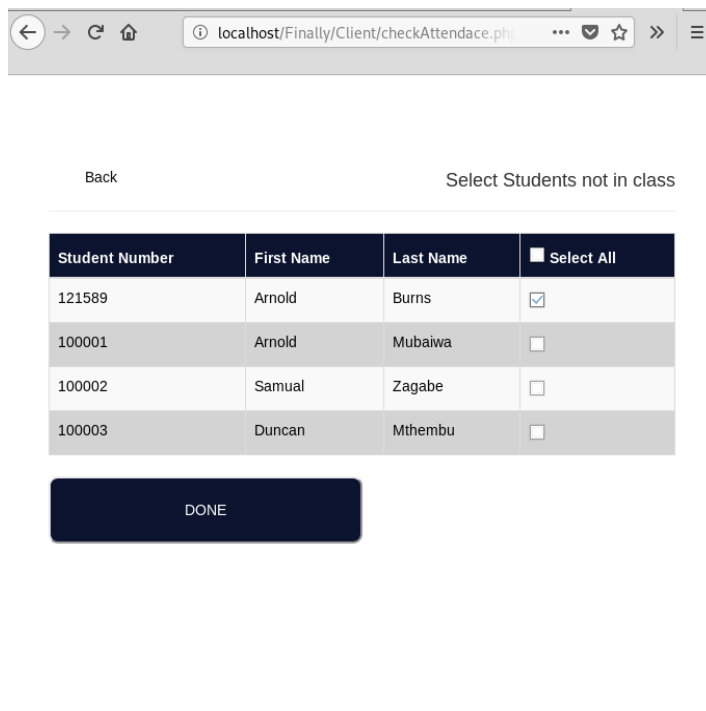
WELCOME
To Programming 512
With Jack Mabaso

ENTER YOUR STUDENT NUMBER

100001

SUBMIT

Back   Select Students not in class

Student Number	First Name	Last Name	☐ Select All
121589	Arnold	Burns	☑
100001	Arnold	Mubaiwa	☐
100002	Samual	Zagabe	☐
100003	Duncan	Mthembu	☐

DONE
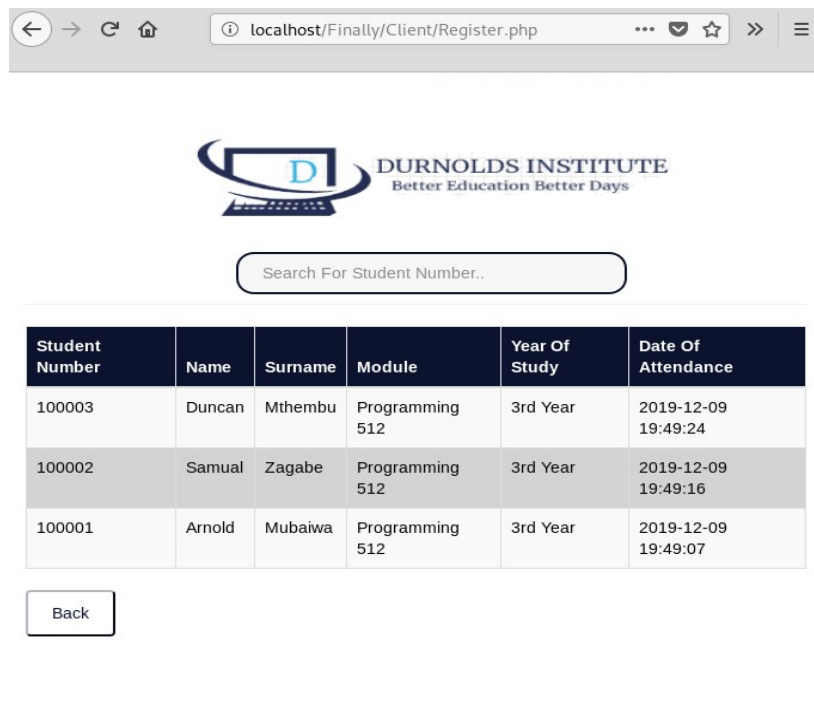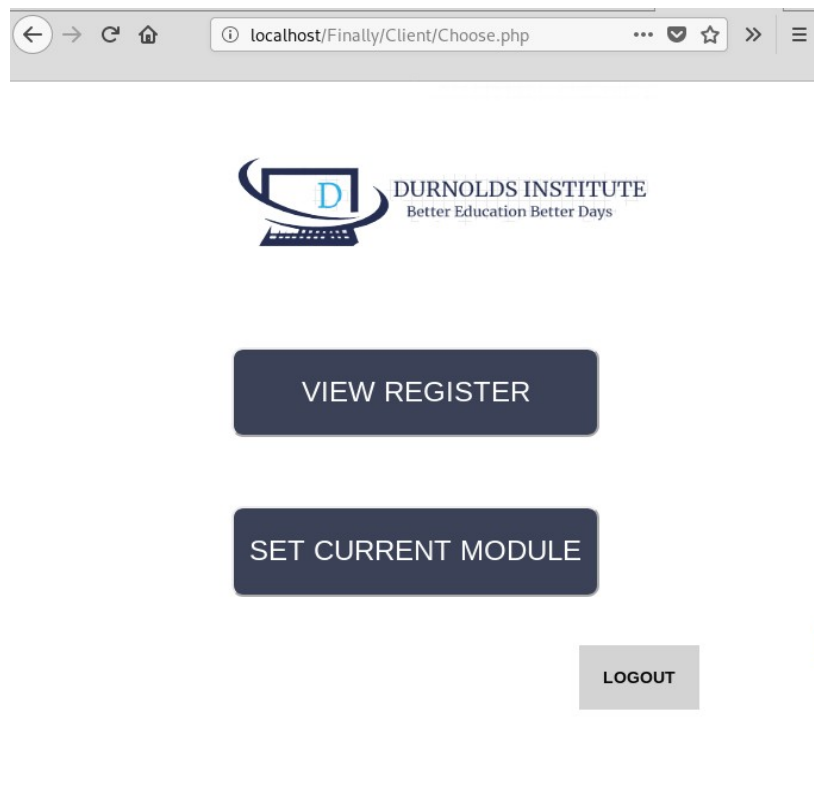
5.5 Installations Instructions

The following are the steps are to take when installing this software:

First you need to install Xampp on your local machine. We have provided you with 2 of Xampp installation files in the directory */Finally/Xampp/...*

These files are for Computers using Linux and Windows 64 bit OS

To get Xampp that is suitable for your system visit https://www.apachefriends.org/download.html

Here is Xampp's installation processes

- Right click on the file suitable for your system

- Click "run"

The installation process will begin
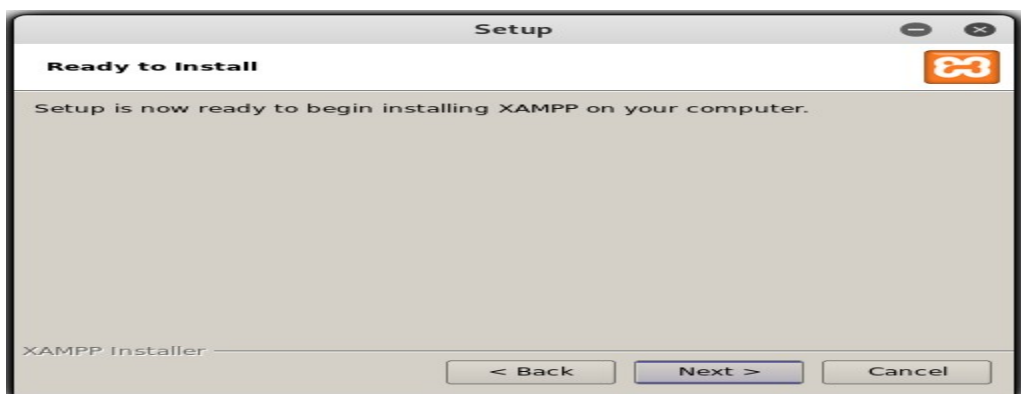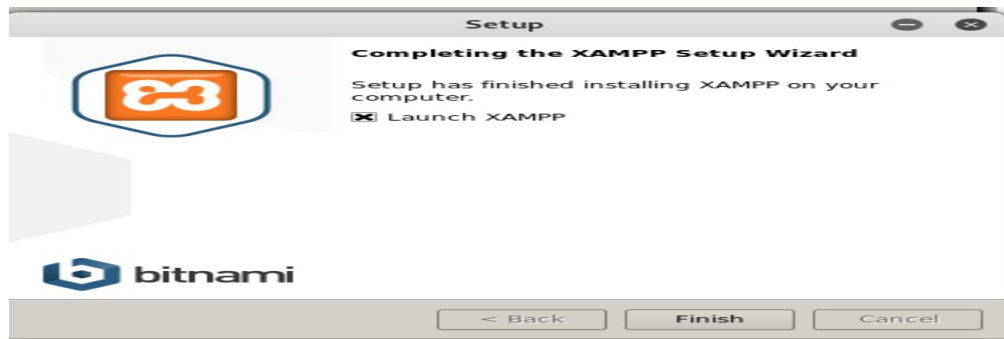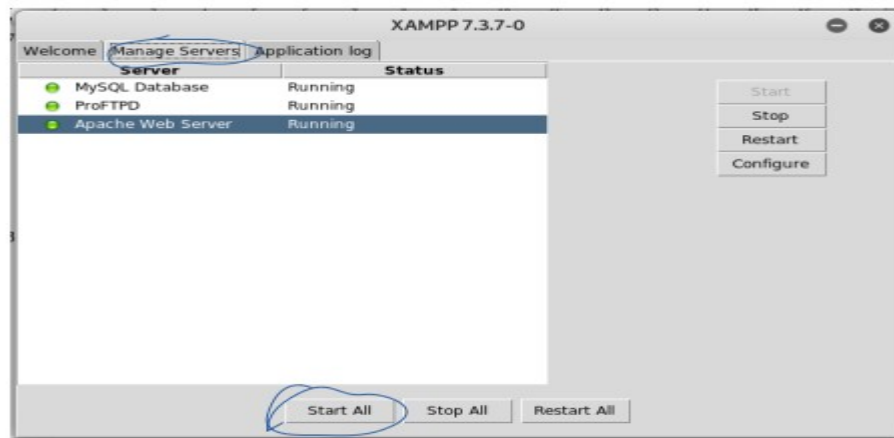
(1)
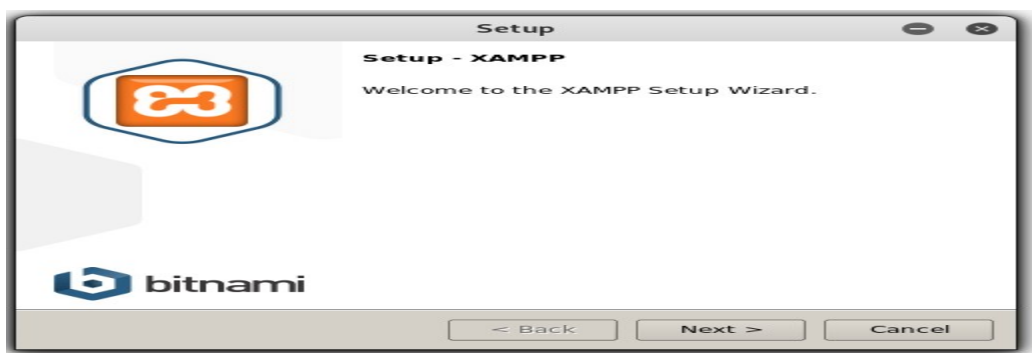
2
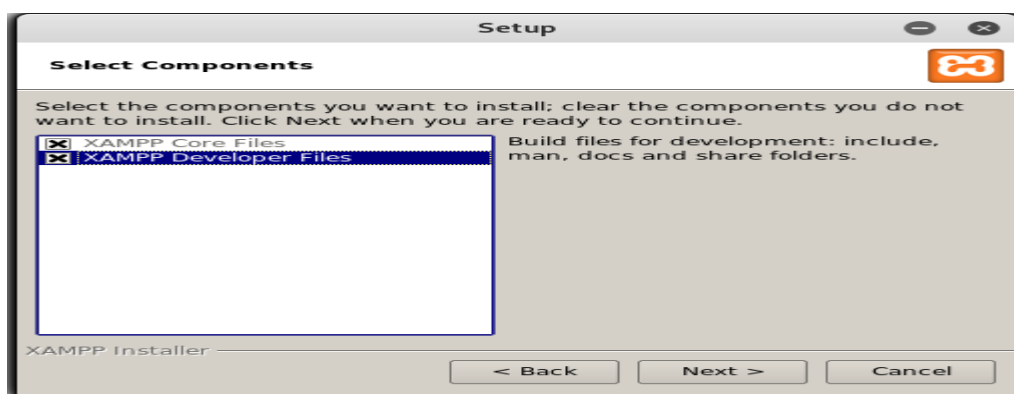
3
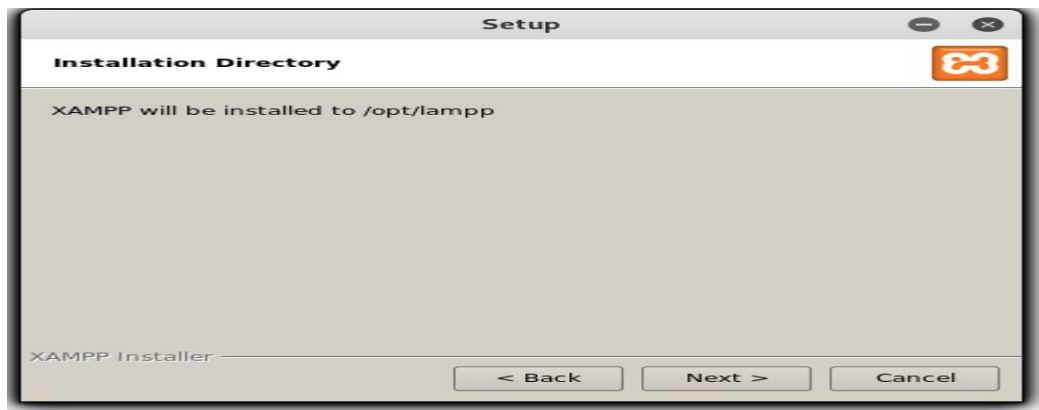
4
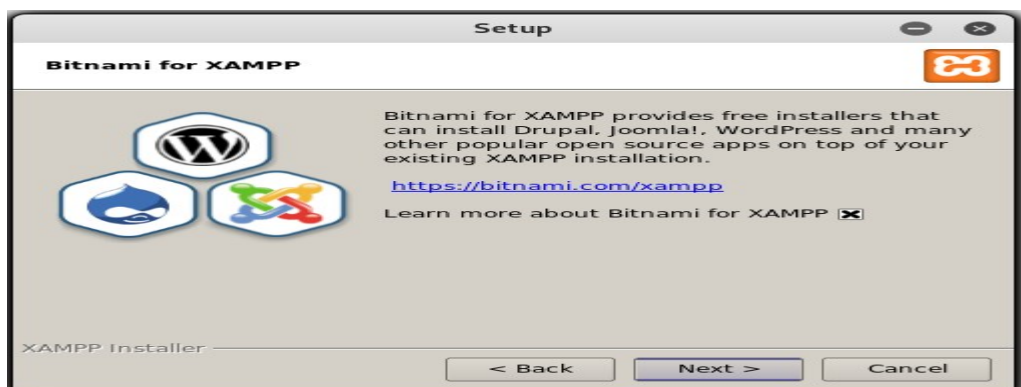
5

6

7

8

Now Xampp is running on your computer

To start Xampp on Linux you can type: /*opt*/lampp/lampp start

Manually start the Xampp app on Windows

Create an empty "register" database.

Import the Register.sql provided in the Finally folder into your Register database you just created

On Linux

- manually move the Finally file to the: /o*pt*/lampp/htdocs/ folder

On Windows

- manually move the file to: cd\ htdocs\

Open Your Browser Firefox or Chrome and type

- root/Finally/index2.php

- or localhost/Finally/index2.php

Then you are good to go..

5.6 Maintenance Activities (Corrective, Adaptive, Perfective)

Corrective change, most commonly referred to as "bugs," is the most typical change associated with maintenance work. Corrective changes address errors and faults in your software that could affect various areas of your software; design, logic or code.(Noemi Quezada May 23rd, 2019, Nuances of

Software Maintenance, viewed 18 October 2019, https://endertech.com/blog/maintenance-bug-fixing-4-types-maintenance)

We have incorporated most of exception handles in the code so that the system can prompt the error that might have occurred. The designs will also be involving to suit new needs.

Adaptive change is triggered by changes in the environment your software lives in. An adaptive change can be triggered by changes to the operating system, hardware, software dependencies and even organizational business rules and policies.(Noemi Quezada May 23rd, 2019, Nuances of Software Maintenance, viewed 18 October 2019, https://endertech.com/blog/maintenance-bug-fixing-4-types-maintenance)

Since the system a web based, it can be handled by most technology available. Every change in the technology can be looked upon to see if it is really necessary to conduct the change. If the change is regarded as necessary then it will be incorporated.

Perfective changes refers to the evolution of requirements and features in your existing system. As your software gets exposed to users they will think of different ways to expand the system or suggest new features that they would like to see as part of the software, which in turn can become future enhancements to the system. (Noemi Quezada May 23rd, 2019, Nuances of Software Maintenance, viewed 18 October 2019, https://endertech.com/blog/maintenance-bug-fixing-4-types-maintenance)

New suggestions from the users will be documented for future reference in case the system wants to be upgraded due to number of certain influences, such as bugs hardware and even the design.

5.7. System Back-up

We created a table named "TableNames" which keeps all data about all lecturers either deleted or still on the institution. This table cannot be deleted by any of the users and no one has access to it. The administration can only view the data in it. This runs on the server local machine database.

Lecturer Tables

Name	Surname	Lecturer Tables
Lifa	Madikane	LifaMadikane
Duncan	Mthembu	DuncanMthembu
Jack	Mabaso	JackMabaso

5.8 System evaluation

Using valid data the system proved to be a success and it has also receive critics which we will visit in the upgrades of the system

5.9 Constraints

We had planned to use email, sms and geolocation APIs that didn,t turn in our favour. All the data that will be entered into the machine will be through forms of which it data validation which might take a while to process.

We are using frameworks such as bootstrap, jQuery and W3S that need fast internet to load. So the network should be as fast as possible.

5,10 Recommendation

We as a group would recommend you to consider online attendance because it fast, efficient and reliable at any time. Many institution and businesses are now using these system because it has proven to be better that the old manual systems.

5.11 Conclusion

To be able to built a system a system it requires team work, knowledge of the information system you want to build, focus and willingness. If you do not have these goals as a team you are bound to fail because the effort that you put in is the result you get. We have learn that it is much easier to do everything according to time and that time is valuable.

We have built a system that is functional and best of our abilities and to our knowledge.

Bibliography

1. M. Joseph GordonJr., in Six Sigma Quality for Business and Manufacture, 2002,viewed on 15 August 2019, https://www.sciencedirect.com/topics/engineering/problem-definition

2. Mahfudzah Othman, An adaptation of the web-based system architecture in the development of the online attendance system 2012,viewed 15 August 2019, https://ieeexplore. ieee.org/abstract/ document /6417619 / authors#authors

3. IRJET Journal,Online College Portal, Implementation Of Student Attendance Management System 2018, viewed 20 August 2019, https://www.irjet.net/archieves/V4/i1/IRJET-V4I1315.pdf

4. Temitope Adeoye, Development of A Computerized Control Examination Screening, Software requirements specification forattendance management systems 2017, viewed 22 August 2019, https://ieeexplore.ieee.org/abstract/document/6417619/authors#authors

5. Goerge Tommy, System Architecture Designs 2018, viewed 26 September 2019, https://www.sebokwiki.org/ wiki/System Architecture

6. Progect Docs, System Design Documents 2019, viewed 26 September 2019, https://www.projectmanagementdocs.com/template/project-documents/system-design-document/

7. Global Dictionary, What is System Evaluation 2018, viewed 30 October 2019, https://www.igi-global.com/dictionary/design-and-build-a-wizard-of-oz-woz-telemedicine-simulator-platform/54580

8. Engr Rana M Shakeeel, RFID Based Students Attendance System 2019, viewed 1 November 2019, https://www.RFID/Bstudents_Systems.com

9. International Journal for Scientifi, Students ManagementSystem 2019, viewed 3 November 2019,https://www.academia.edu/7760318/STUDENTS_ATTENDANCE_MANAGEMENT_SYSTEM_MINI_PROJECT_REPORT_MASTER_OF_COMPUTER_APPLICATIONS

10. [ACADAMIA] Attendance Management System, available 2015, viewed 12 October 2019, https://www.academia.edu/9697549/Attendance_Management_Systemlast

11. [GOOGLE SCHOLAR] Asghar MZ, Ahmad H, Ahmad S, Saqib SM, Ahmad B, Asghar MJ. Simplified Neural Network Design for Hand Written Digit Recognition. International Journal of Computer Science and Information Security 2017,viewed 14 October 2019, https://www.academia.edu/9697549/Attendance_Management_Systemlast