

# Online QR Code Attendance Tracking System

## 1. Introduction

With the rise of technological advances, there have been many ways to enhance the ease of the educational process. Utilizing digital means in the field of education can improve routines that students and teachers have been using. However, many institutions still use the traditional methods despite the efforts of keeping up with the latest technology.

In this existing situation, we have recognized the need to improve the University of Rizal System's attendance system by implementing a digital platform such as an Online QR Code Attendance Tracking System to simplify the process of taking attendance and manage the student's records efficiently. This proposed system can effectively manage attendance records and minimize the use of papers for attendance sheets.

### 1.1 Purpose of System

The manual process of taking a student's attendance is time consuming especially for large classes. Attendance monitoring is a routine that teachers and students have to go through every day in each lecture. Normally, professors need to check their student's attendance by calling out their names during class or having them write their names through paper. Due to this, they also have to compile their student's attendance sheet which becomes another inconvenience professors have to manage in their already busy schedules.

By recognizing the needs to improve this routine, we have proposed a system that could reform the school's attendance monitoring through the use of QR Code which can reduce time consumption during each lectures and provide better management in compiling attendance records through this system.

The main purpose of this system is to produce an application that will provide practical and efficient attendance monitoring system for University of Rizal System using QR codes. Students can simply have their generated QR codes scanned by the guards on duty for their gate attendance and mark their records by the professors in each lecture in order to have their class attendance without having to consume too much time or use a lot of papers.

This system also aims to generate summary reports of attendance records which will then be stored within the database of the system and provide the user the option to view their performance and print out the attendance record sheet which accomplishes the purpose of the system to improve better management of attendance tracking.

## **1.2 Scope of System**

The scope of this system covers the attendance tracking of University of Rizal System, Morong. Target users involve the students, guards, professors and staff/administrators of the school with each having their roles within the system.

## **1.3 Objectives**

- I. To improve current attendance monitoring by automating it through the proposed Online QR Code Attendance Tracking System.
- II. To efficiently manage attendance records of multiple classes stored in an organized system.
- III. To minimize paper consumption by eliminating the use of attendance sheets.
- IV. To eliminate false or multiple registrations by only allowing the administrator to create an account per student.
- V. To prevent students from cheating their attendance by allowing the professors to verify and check the attendance remarks whether the students have attended their class.
- VI. To increase the transparency of attendance records by enabling students to check their performance and the professors to view their student's attendance anytime.
- VII. To boost productivity, provide better management and safety regarding the attendance system.

## **1.4 Definitions, acronyms and abbreviations**

- QR Code – Abbreviation for Quick Response Code, is a two-dimensional version of the barcode that can be read easily and is capable of holding a great deal of information.
- Remarks – Refers to the state of being marked as present, absent, late or excused in a class.
- Students – The one who checks in for guard attendance and participates in class to have their attendance recorded.
- Guards – The one who scans QR Code to inform the system of the time in and time out of students.
- Professors – The one who can view student list and manage student attendance by marking present, absent, late or excused.
- Staff/Administrators – The one who are given the means to create, view, update, and delete accounts and to manage overall data.
- Gate attendance – Process where the system verifies whether the student have entered school grounds by scanning the QR code. This process is taken care of the guards.

- Subject attendance – Process where professors record whether a student is present, absent, late or excused in class.
- Badge – An icon indicating the type of user and their status in the system.
  - Colored badge: The user is active.
    - Yellow – Indicates that the user is a student.
    - Green – Indicates that the user is a professor.
    - Violet – Indicates that the user is an administrator/staff.
    - Blue - Indicates that the user is a guard.
  - Black badge: The user is either inactive or archived.
- Appointment – a feature in the system that allows the student to create scheduled visits in school which will then be reviewed by the admin for approval.

## **2. Current System**

The current system of recording attendance in the University of Rizal System involves the manual method of professors calling out the student's name to mark whether they attended the lecture. For a university such as this, having large classes is unavoidable that is why some professors resort to having the students write their names on an attendance sheet which will then be collected at the end of the lecture. They will then have to manage and compile those records in order to computerize the data.

This has always been the method the students and professors are accustomed to. However, this current system pose problems such as time consumption, heavier workload in managing attendance records per class, and the possibility of students who have not attend class cheat by having their classmate sign the attendance sheet on their behalf.

## **3. Proposed System**

The proposed system was developed by recognizing the need to improve the current attendance system of the University of Rizal System. By the use of QR technology, we were able to implement a system that can reduce consumption of papers due to attendance sheets and help students as well as professors have an application that manages the overall attendance system of the school with ease.

As improvement for the current system, we have kept in mind that the proposed system must not entirely replace all human effort, rather give the school an attendance system that maximize those efforts into an efficient and manageable application.

The system targets 4 users namely the students, guard, professors, and the administrator/staff with their own role in handling the application which is explained further in the system's functional requirements. QR codes are used to provide students their own unique ID that will be used to check their attendance. This generated code is only scanned during the gate

attendance taken care of by the guard on duty. The data would then be stored real time in the system where professors can then manage student attendance by recording their remarks per subject. Students can also view their enrolled subject and overall percentage of performance. On the other hand, administrators can manage overall data existing in the system such as being able to add subjects or users, update details, delete existing users and the likes.

### **3.1 Overview**

The proposed system of attendance management is implemented using QR codes which provide ease of management compared to the traditional methods of the current attendance system, including eliminating chances of students logging in for others who may not be present.

### **3.2 Functional Requirements (“shall lists”)**

#### **3.2.1 Students:**

- i. The system shall be able to let students view their performance
  - a. The system shall be able to show percentage of subject overall performance
  - b. The system shall be able to show remarks per subject enrolled
- ii. The system shall be able to show currently enrolled subjects
  - a. The system shall be able to provide the option of printing out or convert the attendance record into various files such as pdf, csv and excel.
  - b. The system shall be able to provide ease in viewing data by allowing a search bar and adjust column visibility.
- iii. The system shall be able to show the user's classmates and their badge status regarding whether they are inside campus.
- iv. The system shall be able to create scheduled appointments and show the entries of their appointments, search records, change its column visibility and allow the options of formatting records to various files.
- v. The system shall be able to allow the student a second way of logging in by scanning their own QR code or the company QR code for checking in gate attendance, however this process can only be used one time.

#### **3.2.2 Guard:**

- i. The system shall be able to scan QR codes to record gate attendance.
  - a. The system shall be able to check in students.
  - b. The system shall be able to log out students.
- ii. The system shall be able to show the student's photo as authentication after scanning the QR code.

- iii. The system shall be able to show results of gate attendance.
  - a. The system shall be to provide turning the attendance option on or off.
  - b. The system shall be to provide turning the real time option on or off.
- iv. The system shall be able to allow the user to compose a message for announcements and select whether to send it to the students, the staffs or select both as the recipients.
- v. The system shall be able to show the check in of students who self-scanned their QR codes in order to confirm their gate attendance.

#### 3.2.3 Professor:

- i. The system shall be able to manage student attendance
  - a. The system shall be able to view student list
  - b. The system shall be able to record the student's remarks
- ii. The system shall be able to allow the user to compose a message for announcements and select whether to send it to the students, the staffs or select both as the recipients.
- iii. The system shall be able to show lists such as subject attendance, gate attendance, students subject list, and professor's subject list.
  - a. The system shall be able to provide the option of printing out or convert the list into various files such as pdf, csv and excel.
  - b. The system shall be able to provide ease in viewing data by allowing a search bar and adjust column visibility.

#### 3.2.4 Administrator/Staff:

- i. The system shall be able to manage overall data such as the attendance, QR code, year, section, courses, subjects, account lists, students, staff, enrolled subjects, account photos, professor and subject list
  - a. The system shall be able to create data
  - b. The system shall be able to read or search for data
  - c. The system shall be able to update data
  - d. The system shall be able to delete data
- ii. The system shall be able to review appointments issued by the students.
  - a. The system shall be able to approve or reject the scheduled appointment.
  - b. The system shall be able to show the organized list of appointment, search records, change its column visibility and allow the options of formatting records to various files.

- iii. The system shall be able to allow the user to compose a message for announcements and select whether to send it to the students, the staffs or select both as the recipients.
- iv. The system shall be able to log out students from the gate attendance if the guard is unavailable.
- v. The system shall be able to change the domain name and automatically update the QR codes of the company and every user.
- vi. The system shall be able to send account credentials in the user's given Gmail.
- vii. The system shall be able to resend the user's credential in their Gmail if forgotten.

#### 3.2.5 Overall:

- i. The system shall be able to change user's credential such as their username and password in account settings.
- ii. The system shall be able to show announcements in the user's respective homepage.
- iii. The system shall be able to show the documentation of the proposed application.
- iv. The system shall be able to display user's badge to indicate their type and status.
- v. The system shall be able to display the user's photos whenever they log in.

## 3.3 Nonfunctional Requirements

### 3.3.1 Usability

- i. The system must be easy to use by target users even without aid from the system manual.
- ii. The system must be able to provide effortless navigation with an interface easily understood by the user.

### 3.3.2 Reliability

- i. The system must be able to give accurate attendance records and authentication of data to prevent corruption.
- ii. The system must be able to sanitize and validate data including the prevention of SQL injections, Prepared statements, Session Hijacking, Session Fixation, Cross-Site Scripting (XSS), Cross-Site Request Forgery (CSRF), Page Restrictions, Record Validation, HTTPS implementation, Header Expiry, Password Encryption (Bcrypt Algorithm) and the likes.

### 3.3.3 Performance

- i. The system must be capable to handle data as time progresses conformed to the population of a state university.
- ii. The system must be able to optimize the way storage is stored and accessed without delay.

### 3.3.4 Supportability

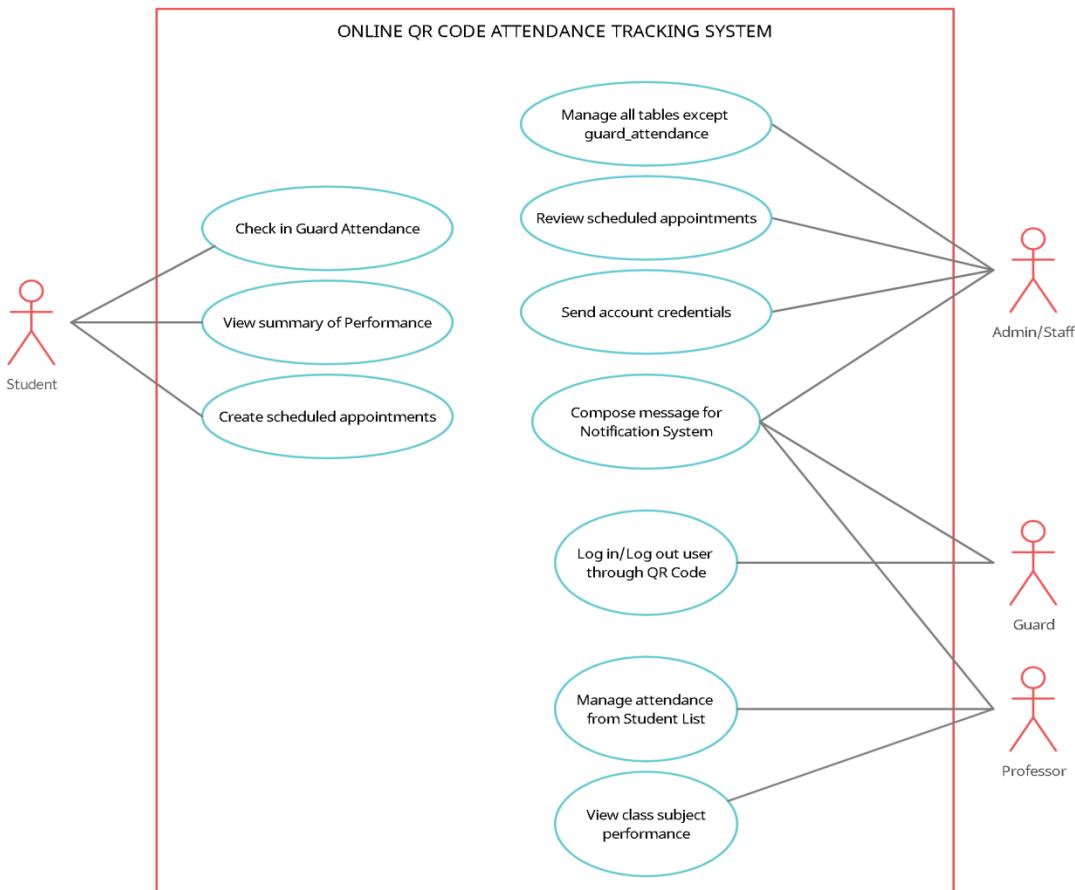
- i. The system must be able to allow modifications for maintenance and repairs of the application.
- ii. The system is adaptable even if additional features or modifications are added at a later point.

### 3.3.5 Implementation

- i. The system must be readily available to target users upon its implementation.
- ii. The system must be must be accessible from any device across all platforms.

## 3.4 Systems Models

### 3.4.1 Use case model



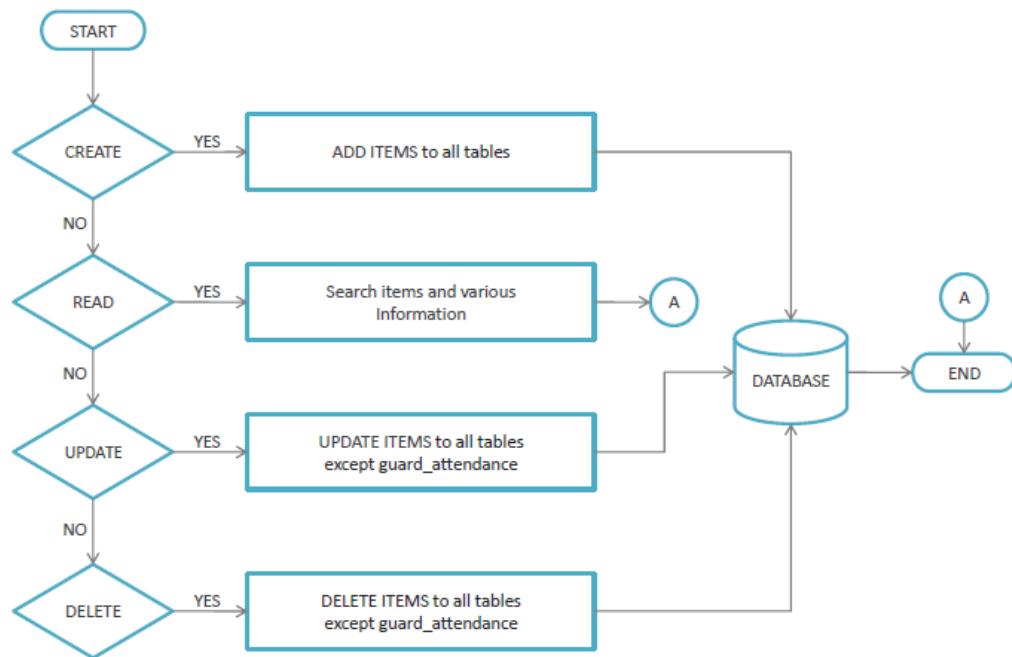
### 3.4.2 Flowchart

## TABLE CATEGORIZATION

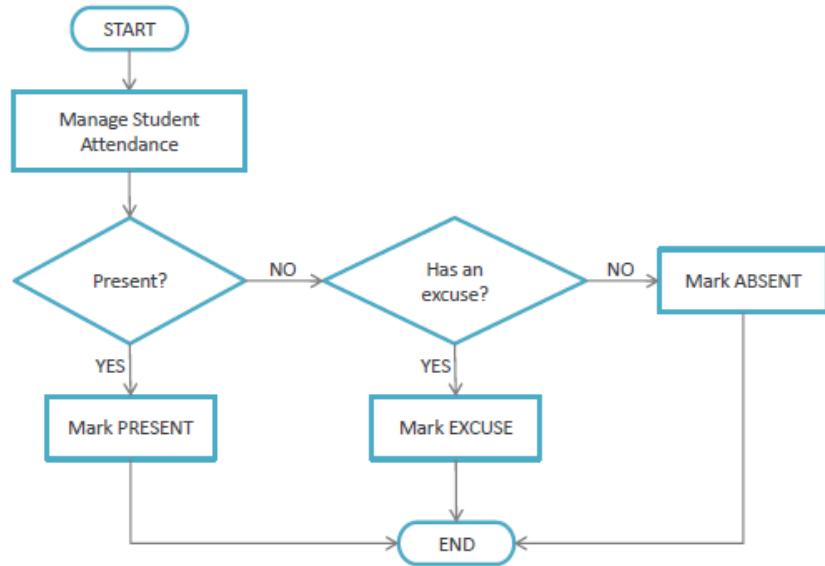
INDEPENDENT TABLES
year
sections
courses
subjects
staffs
accountlist
account_photos
notifications
settings

DEPENDENT TABLES
students
subject_attendance
enrolled_subjects
professor_subject_list
guard_attendance
qr_codes
schedules

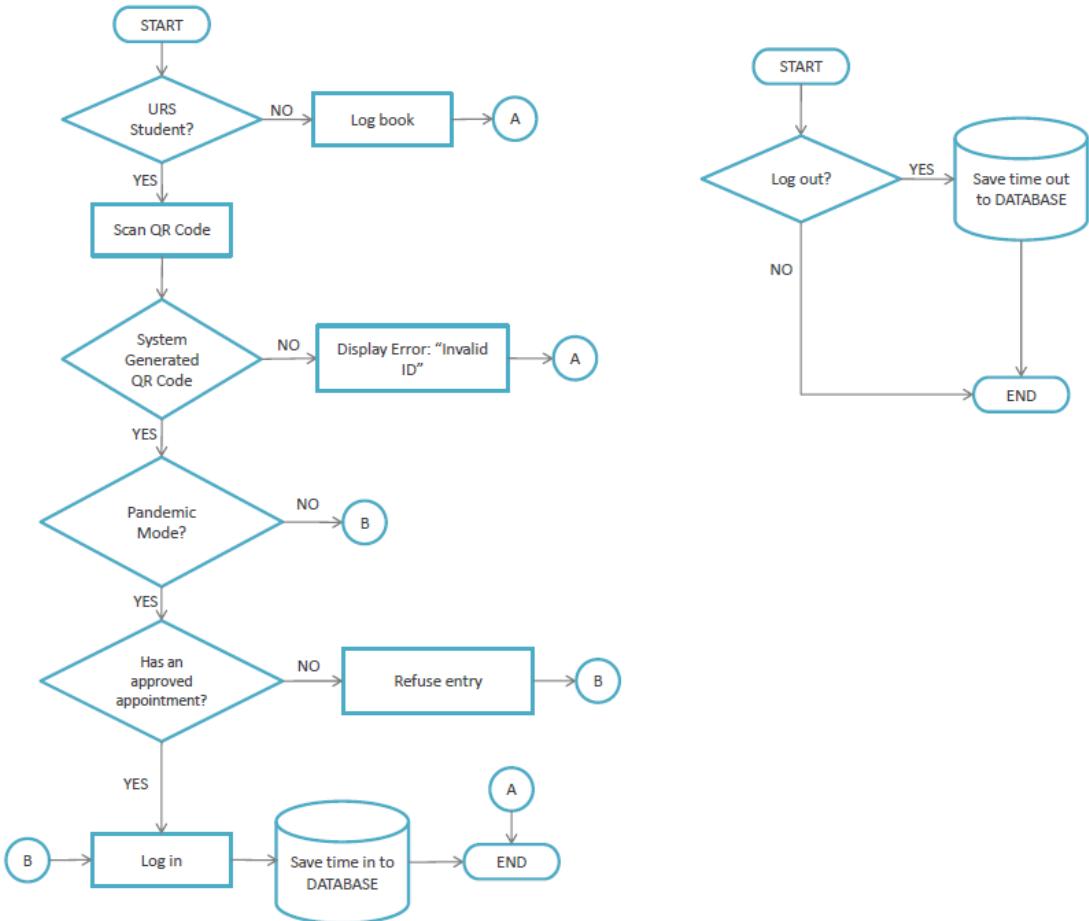
ADMIN/STAFF



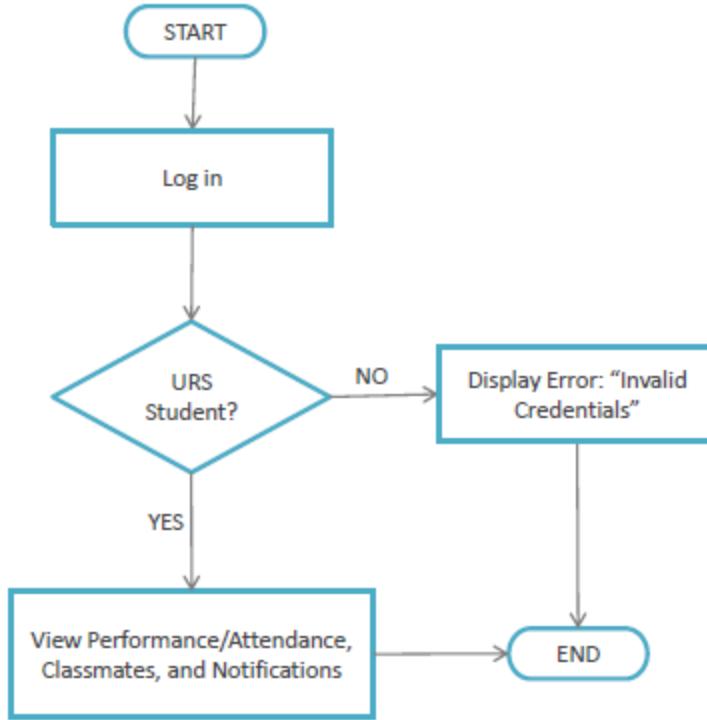
## PROFESSOR



## GUARD

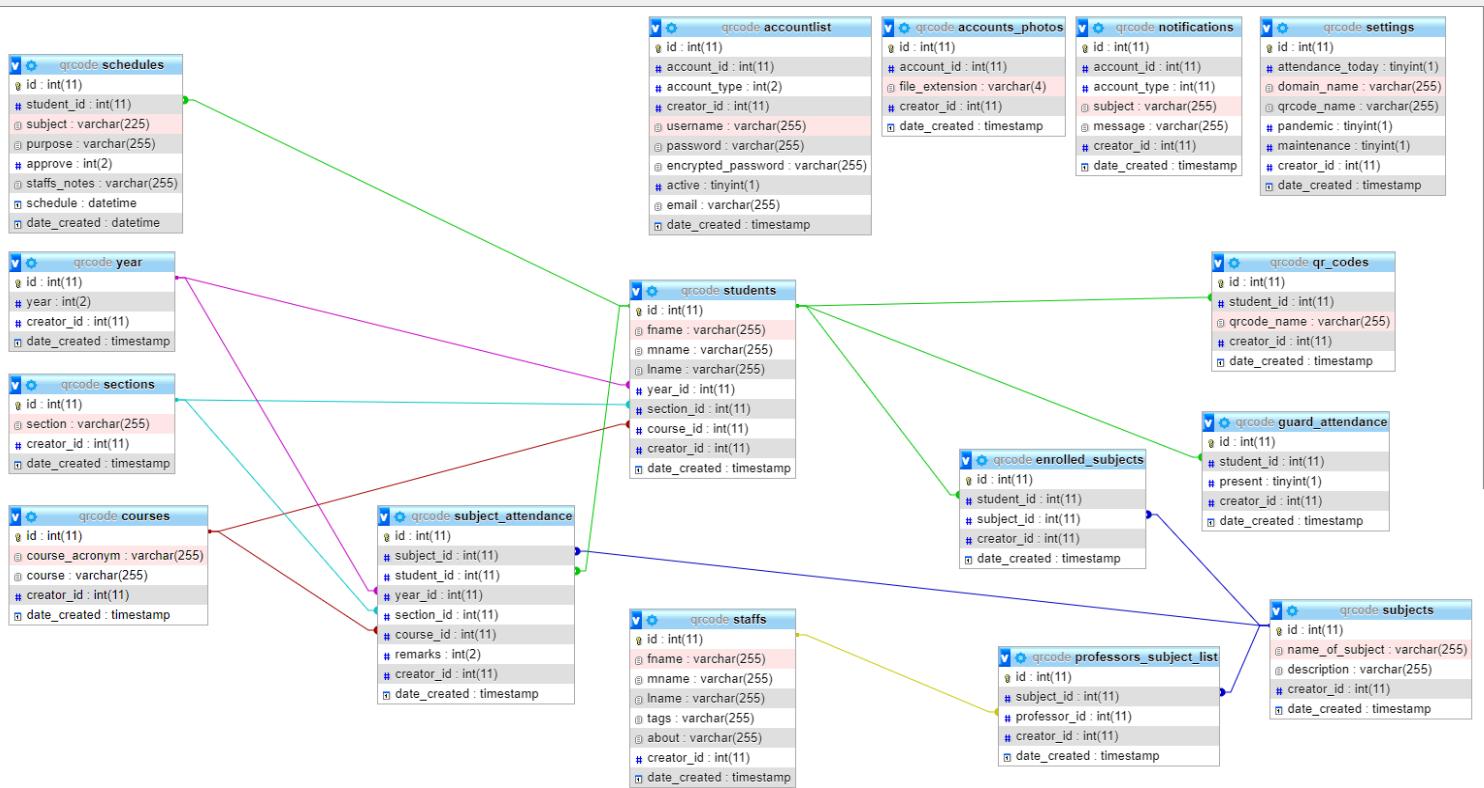


# STUDENT



### 3.4.3 Database Design

QRDANCE v1.0.0 April 17, 2021



### 3.4.4 User Interface

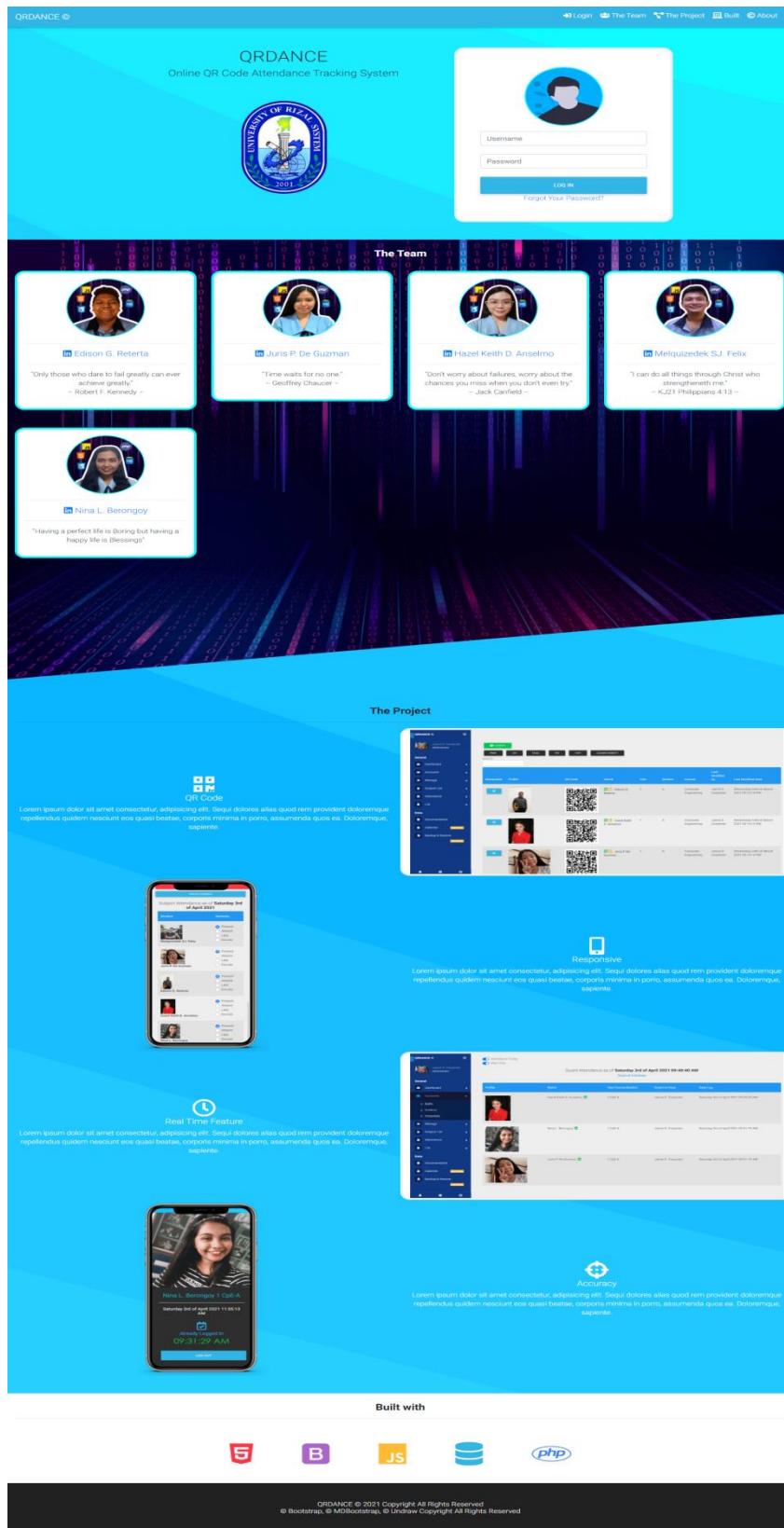


Figure 3.4.4.1 Login Page

This screenshot shows the main dashboard for an administrator. The left sidebar contains a navigation menu with sections like General (Dashboard, Accounts, Manage, Subject List, Attendance, List, My Account Settings), Extra (Documentation, Calendar, Backup & Restore), and a notification bell. The main area features an announcement from Jaime S. Carpenter about updated QR codes, followed by a table of account statistics (Active: 9, Archived: 0, Administrators: 1, Professors: 2, Guards: 1, Students: 5). Below this is a summary card for QRDANCE showing 14 users, 208 sessions, and an Opera browser icon.

This screenshot shows the dashboard after selecting the 'Attendance' option from the sidebar. It displays staff activity logs for various users, such as adding a new student, marking present, and tracking time. A 'VIEW FULL REPORT' button is available at the bottom of this section.

This screenshot shows the dashboard after selecting the 'Backup & Restore' option from the sidebar. It displays SEO statistics for keywords like Attendance, Tracking, and QR Code Attendance, along with browser usage data for Google Chrome, Mozilla Firefox, Safari, and Opera. A 'VIEW FULL REPORT' button is available at the bottom of this section.

This screenshot shows the dashboard after selecting the 'Backup & Restore' option from the sidebar. It displays staff activity logs for various users, such as adding a new student, marking present, and tracking time. A 'VIEW FULL REPORT' button is available at the bottom of this section.

Figure 3.4.4.2 Admin: Dashboard

Figure 3.4.4.3 Admin: Appointment

Figure 3.4.4.4 Admin: Add Year

Section	Last Modified by	Last Modified Date
C	Lana P. Allison	Wednesday 7th of April 2021 05:52:46 PM
D	Lana P. Allison	Wednesday 7th of April 2021 05:52:46 PM
B	Jaime S. Carpenter	Wednesday 7th of April 2021 05:52:46 PM
A	Lana P. Allison	Wednesday 7th of April 2021 05:52:46 PM

Figure 3.4.4.5 Admin: Add Section

Course Acronym	Course	Last Modified by	Last Modified Date
CE	Civil Engineering	Lana P. Allison	Wednesday 7th of April 2021 05:52:46 PM
EE	Electrical Engineering	Jaime S. Carpenter	Wednesday 7th of April 2021 05:52:46 PM
ECE	Electronics Engineering	Lana P. Allison	Wednesday 7th of April 2021 05:52:46 PM
ME	Mechanical Engineering	Jaime S. Carpenter	Wednesday 7th of April 2021 05:52:46 PM
CpE	Computer Engineering	Jaime S. Carpenter	Wednesday 7th of April 2021 05:52:46 PM

Figure 3.4.4.6 Admin: Add Course

Figure 3.4.4.7 Admin: Add Subject

Figure 3.4.4.8 Admin: Default Staff

**STUDENTS**

Nina L. Berongoy successfully created

Manipulate	Profile	QR Code	Name	Year	Section	Course	Last Modified by	Last Modified Date
			Nina L. Berongoy	1	A	Computer Engineering	Jaime S. Carpenter	Wednesday 14th of April 2021 03:09:59 PM
			Hazel Keith D. Anselmo	1	A	Computer Engineering	Jaime S. Carpenter	Wednesday 14th of April 2021 03:09:42 PM
			Edison G. Reterta	1	A	Computer Engineering	Jaime S. Carpenter	Wednesday 14th of April 2021 03:09:20 PM

Figure 3.4.4.9 Admin: Student List

**STUDENTS**

Show 10 entries

Manipulate	Profile	QR Code	Name	Year	Section	Course	Last Modified by	Last Modified Date
			Nina L. Berongoy	1	A	Computer Engineering	Jaime S. Carpenter	Wednesday 1 of April 2021 03:09:59 PM
			Hazel Keith D. Anselmo	1	A	Computer Engineering	Jaime S. Carpenter	Wednesday 1 of April 2021 03:09:42 PM
			Edison G. Reterta	1	A	Computer Engineering	Jaime S. Carpenter	Wednesday 1 of April 2021 03:09:20 PM
			Juris P. De	1	A	Computer	Jaime S.	Wednesday 1

Figure 3.4.4.10 Admin: Student List with QR CODE

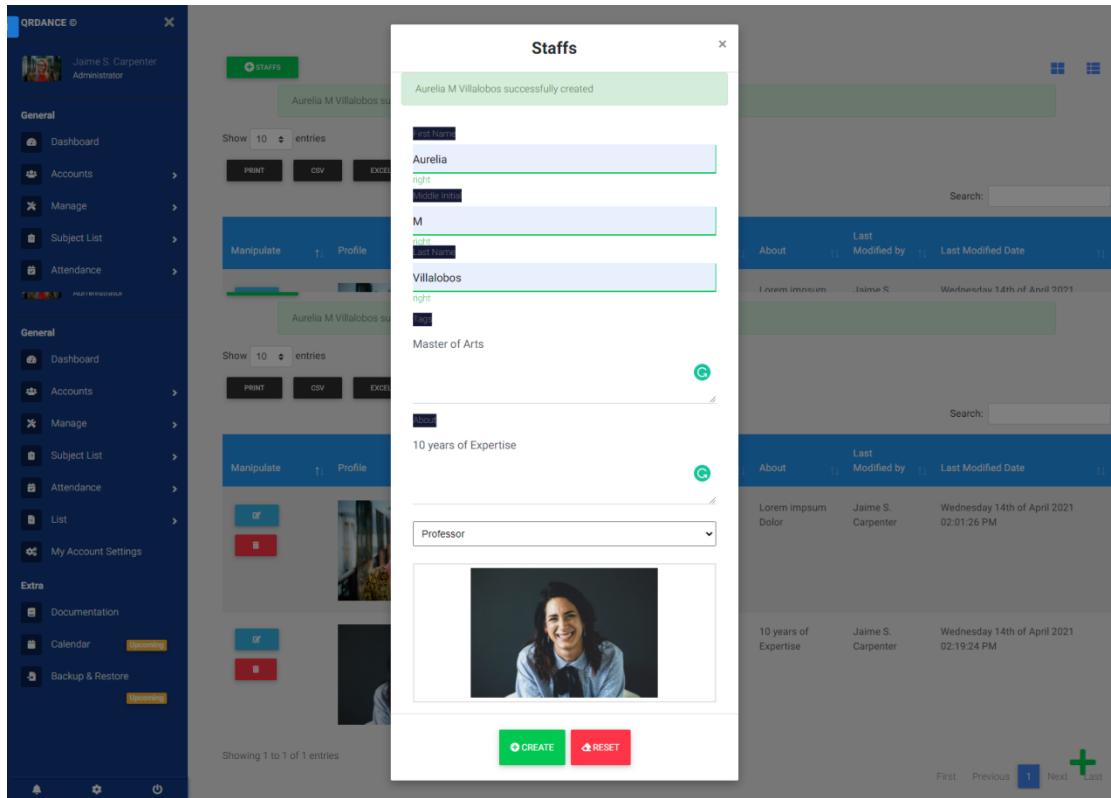


Figure 3.4.4.11 Admin: Add Staff

Manipulate	Profile	Name	Account Type	Position	About	Last Modified by	Last Modified Date
			Administrator	Master of Arts	Lorem ipsum Dolor	Jaime S. Carpenter	Wednesday 14th of April 2021 02:01:26 PM
			Professor	Master of Arts	10 years of Expertise	Jaime S. Carpenter	Wednesday 14th of April 2021 02:19:24 PM
			Professor	Master of Computer Science	Former Software Engineer at Facebook	Jaime S. Carpenter	Wednesday 14th of April 2021 02:23:40 PM
			Guard	Former Navy SEALS	Retired NAVY SEAL Medic with 20 years of Experience	Jaime S. Carpenter	Wednesday 14th of April 2021 02:24:48 PM

Figure 3.4.4.12 Admin: Staff Badge

The screenshot shows the 'Account' list page. At the top, there are buttons for PRINT, CSV, EXCEL, PDF, COPY, and COLUMN VISIBILITY. A search bar is present with the placeholder 'Search: student'. The main table has columns: Name, Account Type, Active, Username, Password, and Email. The table contains five entries:

Name	Type	Active	Username	Password	Email
Nina L. Berongoy	Student	true	username-60769547ab02c	\$2y\$10\$PaaprytYyMLN8plfXP9wTJM7weKJuAkLUUlanDFoyL3qQbOPeZW	ninyaberongoy20@gmail.com
Hazel Keith D. Anselmo	Student	true	username-60769536d1c9	\$2y\$10\$Ss.ab66e0uEe/wmgmNH-72ulv5hnJLX3KWOM/V29mevtP2HT7gAdqa	hazelkateanselmo@gmail.com
Edision G. Reterta	Student	true	username-607695208753c	\$2y\$10\$d7m05wSnYFb.Uck2PXNe0tufOK3awjoe1cF6LV4Sdq7QzVZGUjwa	becooper23@gmail.com
Juris P. De Guzman	Student	true	username-607695055ba24	\$2y\$10\$zyDjdSS54N8Fd9l2lVoavOVo0laRzNcOQ37DwMgk2qaA16gjpSDWe	jurisdeguzmanxx@gmail.com
Melquizedek S.J. Felix	Student	true	username-607694efdd9a0	\$2y\$10\$Q6NtwNoQ0MoXhD65ktovFuPmrMFMFaNmVL9UbwGu/zeMeYqvFYeG	<span style="color:red;">✉️</span>

Showing 1 to 5 of 5 entries (filtered from 9 total entries)

First Previous 1 Next Last

Figure 3.4.4.13 Admin: Account List

The screenshot shows the 'Account' list page with a modal dialog open. The modal title is 'Account'. It displays the account details for 'zedekfelix7@gmail.com' (Guard type, active). Below the details is a section labeled 'Active' with radio buttons for 'YES' and 'NO'. At the bottom of the modal are 'UPDATE' and 'RESET' buttons.

The background table has columns: Name, Account Type, Active, Username, Password, and Email. The table contains four entries:

Name	Type	Active	Username	Password	Email
Justin K. Denvery	Guard	true	staff-60768ab03dc5b	<span style="color:blue;">🔒</span>	ppREKwJ/zHJK
BARBARA K. SANDERS	Professor	true	zedekfelix7@gmail.com	<span style="color:green;">🔓</span>	T2h2vAjS
Aurelia M. Villalobos	Professor	true	right	<span style="color:blue;">🔒</span>	0gbjN.I2866
Jaime S. Carpenter	Administrator	true	Jaime S. Carpenter	<span style="color:blue;">🔒</span>	YJuAhTferXu

Showing 1 to 4 of 4 entries

First Previous 1 Next Last

Figure 3.4.4.14 Admin: Account List (Active)

Manipulate	Name	Account Type	Active	Username	Password	Email	Last Modified by
	Justin K. Denvery	Guard	false	staff-60768ab03dc5b	\$2y\$10\$v0BrMUNgAUoyDYUfo7TJj.Wz49Y5ui8f.mR4gp3QCF4PCPBJuWIVS	zedekfelix7@gmail.com	Jaime S Carpenter
	BARBARA K. SANDERS	Professor	true	staff-60768ab6c663b7	\$2y\$10\$.bNBHyGSG4Eusq6kq6gYhus/ktyaoKYLm/AKILeBw3CgbjN.I2866		Jaime S Carpenter
	Aurelia M Villalobos	Professor	true	staff-6076896c67849	\$2y\$10\$fiqzZmi6E/iHujBwnxqe9.wVl/pY9LpKbRH0z2ZqV2iT2h2vAjDS		Jaime S Carpenter
	Jaime S. Carpenter	Administrator	true	adminQRDANCE	\$2y\$10\$2DXZEjlGrzvdVMIKtL9eOR4m/oapvYOPE0bFWJtZYJuAhTferXu	admin@gmail.com	Jaime S Carpenter

Showing 1 to 4 of 4 entries

First Previous Next Last

Manipulate	Name	Account Type	Active	Username	Password	Email	Last Modified by
	Justin K. Denvery	Guard	true	staff-60768ab03dc5b	\$2y\$10\$MhxZ1n083Oytetmkd7PdcIRl6d3/6T4wnLGAa0gtkPHLYphGCHC	zedekfelix7@gmail.com	Jaime S Carpenter
	BARBARA K. SANDERS	Professor	true	staff-60768ab6c663b7	\$2y\$10\$.bNBHyGSG4Eusq6kq6gYhus/ktyaoKYLm/AKILeBw3CgbjN.I2866		Jaime S Carpenter
	Aurelia M Villalobos	Professor	true	staff-6076896c67849	\$2y\$10\$fiqzZmi6E/iHujBwnxqe9.wVl/pY9LpKbRH0z2ZqV2iT2h2vAjDS		Jaime S Carpenter
	Jaime S. Carpenter	Administrator	true	adminQRDANCE	\$2y\$10\$2DXZEjlGrzvdVMIKtL9eOR4m/oapvYOPE0bFWJtZYJuAhTferXu	admin@gmail.com	Jaime S Carpenter

Showing 1 to 4 of 4 entries

First Previous Next Last

Figure 3.4.4.15 Admin: View Accounts

Primary Social Promotions

QRDANCE 2:57 PM

Login Credentials - Username: staff-60768ab03dc5b Password: \$2y\$10\$zOUQXGnvycxqJbnR3OT7M0v/3hbgtqD.xpcQBbsESggREKwj/zHJK

2:57 PM (3 minutes ago)

QRDANCE to me

Username: staff-60768ab03dc5b  
Password: \$2y\$10\$zOUQXGnvycxqJbnR3OT7M0v/3hbgtqD.xpcQBbsESggREKwj/zHJK  
Active: False  
[Log In Here](#)

Reply Forward

Figure 3.4.4.16 Account Credentials Emailed

QRDANCE ©

Jaime S. Carpenter  
Administrator

**General**

- Dashboard
- Accounts
- Manage
- Subject List
- Attendance
- List
- My Account Settings

**Extra**

- Documentation
- Calendar
- Backup & Restore

**Upcoming**

**Subjects**

Search For Professors Subject List

**PHYSICAL EDUCATION 3**

Assigned Professors

- Jaime S. Carpenter X
- Aurelia M Villalobos X
- BARBARA K. SANDERS X

**DIFFERENTIAL EQUATIONS**

Assigned Professors

- Jaime S. Carpenter X
- Aurelia M Villalobos X
- BARBARA K. SANDERS X

**Professors**

Search For Professors

Professor	Subject	Description
Jaime S. Carpenter	Master of Arts	Lorem ipsum Dolor
Aurelia M Villalobos	Master of Arts	10 years of Expertise
BARBARA K. SANDERS	Master of Computer Science	Former Software Engineer at Facebook

Figure 3.4.4.17 Admin: Manage Professor Subject List

QRDANCE ©

Jaime S. Carpenter  
Administrator

**General**

- Dashboard
- Accounts
- Manage
- Subject List
- Professors Subjects
- Students Enrolled Subjects
- Attendance
- List
- My Account Settings

**Extra**

- Documentation
- Calendar
- Backup & Restore

**Upcoming**

**Subjects**

Search For Enrolled Students

**PHYSICAL EDUCATION 3**

Enrolled Students

- Melquizedek S.J. Felix X
- Juris P. De Guzman X
- Edison G. Reterta X
- Hazel Keith D. Anselmo X
- Nina L. Berongoy X

**DIFFERENTIAL EQUATIONS**

Enrolled Students

- Melquizedek S.J. Felix X
- Juris P. De Guzman X
- Edison G. Reterta X
- Hazel Keith D. Anselmo X
- Nina L. Berongoy X

**Students**

Search For Students

Student	Subject	Description
Melquizedek S.J. Felix	1 CpE-A	
Juris P. De Guzman	1 CpE-A	
Edison G. Reterta	1 CpE-A	
Hazel Keith D. Anselmo	1 CpE-A	
Nina L. Berongoy	1 CpE-A	

Figure 3.4.4.18 Admin: Manage Students Enrolled Subjects

Students Enrolled Subjects				
Show 10 entries <input type="button" value="PRINT"/> <input type="button" value="CSV"/> <input type="button" value="EXCEL"/> <input type="button" value="PDF"/> <input type="button" value="COPY"/> <input type="button" value="COLUMN VISIBILITY"/> Search: <input type="text"/>				
Student	Subject	Last Modified by	Last Modified Date	
Edison G. Reterta	Differential Equations	Jaime S. Carpenter	Wednesday 14th of April 2021 03:19:39 PM	
Edison G. Reterta	Physical Education 3	Jaime S. Carpenter	Wednesday 14th of April 2021 03:19:22 PM	
Hazel Keith D. Anselmo	Differential Equations	Jaime S. Carpenter	Wednesday 14th of April 2021 03:19:39 PM	
Hazel Keith D. Anselmo	Physical Education 3	Jaime S. Carpenter	Wednesday 14th of April 2021 03:19:22 PM	
Juris P. De Guzman	Differential Equations	Jaime S. Carpenter	Wednesday 14th of April 2021 03:19:39 PM	
Juris P. De Guzman	Physical Education 3	Jaime S. Carpenter	Wednesday 14th of April 2021 03:19:22 PM	
Melquizedek SJ.	Differential	Jaime S.	Wednesday 14th of April	

Professors Subject List				
Show 10 entries <input type="button" value="PRINT"/> <input type="button" value="CSV"/> <input type="button" value="EXCEL"/> <input type="button" value="PDF"/> <input type="button" value="COPY"/> <input type="button" value="COLUMN VISIBILITY"/> Search: <input type="text"/>				
Professor	Subject	Last Modified by	Last Modified Date	
Aurelia M. Villalobos	Differential Equations	Jaime S. Carpenter	Wednesday 14th of April 2021 03:20:04 PM	
Aurelia M. Villalobos	Physical Education 3	Jaime S. Carpenter	Wednesday 14th of April 2021 03:20:00 PM	
BARBARA K. SANDERS	Differential Equations	Jaime S. Carpenter	Wednesday 14th of April 2021 03:20:04 PM	
BARBARA K. SANDERS	Physical Education 3	Jaime S. Carpenter	Wednesday 14th of April 2021 03:20:00 PM	
Jaime S. Carpenter	Differential Equations	Jaime S. Carpenter	Wednesday 14th of April 2021 03:20:04 PM	
Jaime S. Carpenter	Physical Education 3	Jaime S. Carpenter	Wednesday 14th of April 2021 03:20:00 PM	
Melquizedek SJ.	Differential	Jaime S.	Wednesday 14th of April	

Showing 1 to 6 of 6 entries

**Figure 3.4.4.19 Admin: View Students Enrolled Subjects and Professor Subject List**



**Figure 3.4.4.20 Guard: Log in Student**

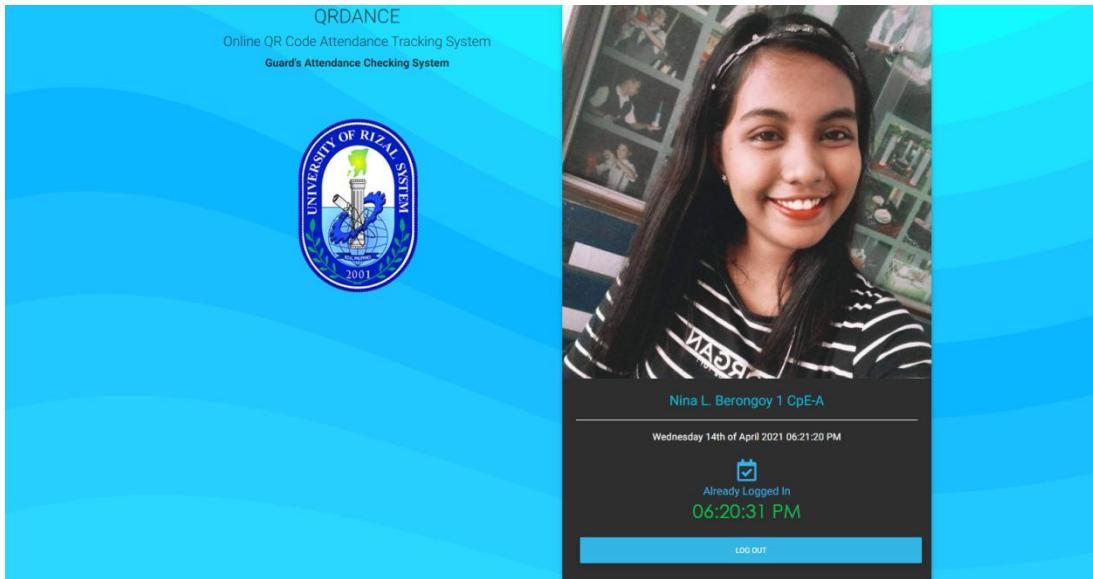


Figure 3.4.4.21 Guard: Log out Student

The screenshot shows the QRDANCE Admin interface. On the left, there is a sidebar with navigation options: General (Dashboard, Accounts, Manage, Subject List, Attendance, List, My Account Settings), Extra (Documentation, Calendar, Backup & Restore). The "Backup & Restore" option is highlighted with a yellow box. The main area displays a list of "Guard Attendance" entries. The header of the table says "Guard Attendance as of Wednesday 14th of April 2021 04:24:26 PM Total of 5 Entries". The table has columns: Profile, Name, Year Course Section, Guard on Duty, Date Log. The data rows are:

Profile	Name	Year Course Section	Guard on Duty	Date Log
	Nina L. Berongoy	1 CpE-A	Jaime S. Carpenter	Wednesday 14th of April 2021 04:19:47 PM
	Melquizedek SJ. Felix	1 CpE-A	Jaime S. Carpenter	Wednesday 14th of April 2021 04:17:39 PM
	Juris P. De Guzman	1 CpE-A	Jaime S. Carpenter	Wednesday 14th of April 2021 04:17:39 PM
	Hazel Keith D. Anselmo	1 CpE-A	Jaime S. Carpenter	Wednesday 14th of April 2021 04:17:39 PM

Figure 3.4.4.22 Admin: View Gate Attendance

The screenshot shows the 'Subject Attendance' page for the subject 'Differential Equations'. The interface includes a sidebar with general and extra settings, and a main panel with search, filter, and export buttons. The data table lists students with their attendance status (Present, Absent, Late, Excuse) indicated by radio buttons.

Student	Remarks
	<input type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Late <input type="radio"/> Excuse
	<input checked="" type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Late <input type="radio"/> Excuse

Figure 3.4.4.23 Admin: Subject Attendance

This screenshot is similar to Figure 3.4.4.23, but it shows two students marked as present: Edison G. Reterta and Hazel Keith D. Anselmo. The 'Present' radio button is selected for both students in the remarks column.

Student	Remarks
	<input checked="" type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Late <input type="radio"/> Excuse
	<input checked="" type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Late <input type="radio"/> Excuse

Figure 3.4.4.24 Admin: Subject Attendance with Remarks

The screenshot shows the 'Subject Attendance' and 'Gate Attendance' sections of the admin dashboard.

**Subject Attendance:**

Subject	Student	Remarks	Mark by	Date
Differential Equations	Edison G. Reterta	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:39:44 PM
Differential Equations	Melquizedek S.J. Felix	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:39:38 PM
Differential Equations	Hazel Keith D. Anselmo	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:39:37 PM
Differential Equations	Nina L. Berongoy	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:37:33 PM
Differential Equations	Juris P. De Guzman	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:37:32 PM

**Gate Attendance:**

Remarks	Student	Guard on Duty	Date
TIME OUT	Nina L. Berongoy	Jaime S. Carpenter	Wednesday 14th of April 2021 04:19:47 PM
TIME OUT	Edison G. Reterta	Jaime S. Carpenter	Wednesday 14th of April 2021 04:19:29 PM
TIME IN	Hazel Keith D. Anselmo	Jaime S. Carpenter	Wednesday 14th of April 2021 04:17:39 PM
TIME IN	Juris P. De Guzman	Jaime S. Carpenter	Wednesday 14th of April 2021 04:17:39 PM
TIME IN	Melquizedek S.J. Felix	Jaime S. Carpenter	Wednesday 14th of April 2021 04:17:39 PM

Figure 3.4.4.25 Admin: Attendance List

The screenshot shows the 'View Class Performance' section of the admin dashboard.

**Overall Class Performance:**

Name	Percentage	P	A	L	E
Melquizedek S.J. Felix	100%	1	0	0	0
Juris P. De Guzman	100%	1	0	0	0
Edison G. Reterta	100%	1	0	0	0
Hazel Keith D. Anselmo	100%	1	0	0	0
Nina L. Berongoy	100%	1	0	0	0

**Overall Class Performance Statistics:**

- Percentage: 100%
- Performance: Excellent

Figure 3.4.4.26 Admin: View Class Performance

**ORDANCE**

Jaime S. Carpenter  
Administrator

**General**

- Dashboard
- Accounts
- Manage
- Subject List
- Attendance
- List
- My Account Settings

**Extra**

- Documentation
- Calendar
- Backup & Restore

**Nina L. Berongoy Records**

2 in Enrolled Subjects  
1 in Guard Attendance  
1 in Subject Attendance  
1 in QR Codes

Deletable:  Archivable:  Active:   
Email: ninyaberongoy20@gmail.com

Subjects Taken

Differential Equations	Physical Education 3
P100% A0% L0% E0%	P0% A0% L0% E0%
P1 A0 L0 E0	P0 A0 L0 E0
PERFORMANCE: EXCELLENT	
PERFORMANCE: NOT GOOD :(	

Subject OverAll Performance

Present 100 %	Absent 0 %	Late 0 %	Excuse 0 %
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**ORDANCE**

Jaime S. Carpenter  
Administrator

**General**

- Dashboard
- Accounts
- Manage
- Subject List
- Attendance
- List
- My Account Settings

**Extra**

- Documentation
- Calendar
- Backup & Restore

**PERFORMANCE: EXCELLENT**      **PERFORMANCE: NOT GOOD :(**

Subject OverAll Performance

Present 100 %	Absent 0 %	Late 0 %	Excuse 0 %
---------------	------------	----------	------------

**EXCELLENT**

Subject Attendance

Show 10 entries	PRINT	CSV	EXCEL	PDF	COPY	COLUMN VISIBILITY
Search:						
Subject	Remarks	Mark by	Date			
Differential Equations	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:37:33 PM			

Showing 1 to 1 of 1 entries

First Previous **1** Next Last

Gate Attendance

Show 10 entries	PRINT	CSV	EXCEL	PDF	COPY	COLUMN VISIBILITY
Search:						
Remarks	Guard on Duty	Date				
TIME OUT	Jaime S. Carpenter	Wednesday 14th of April 2021 04:19:47 PM				

Showing 1 to 1 of 1 entries

First Previous **1** Next Last

Figure 3.4.4.27 Admin: View Student Performance

The screenshot shows the QRDANCE Admin interface. On the left is a dark blue sidebar with a user profile for "Jaime S. Carpenter, Administrator" and a navigation menu:

- General**: Dashboard, Accounts, Manage, Subject List, Attendance, List, My Account Settings.
- Extra**: Documentation, Calendar (marked as **Upcoming**), Backup & Restore (marked as **Upcoming**).

The main content area has two tabs at the top: "5 Record(s) Found" and "0 Record(s) Found". Below them is a section titled "Subject Attendance" with a table:

Subject	Remarks	Mark by	Date
Differential Equations	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:39:44 PM
Differential Equations	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:39:38 PM
Differential Equations	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:39:37 PM
Differential Equations	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:37:33 PM
Differential Equations	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:37:32 PM

At the bottom of the table area, it says "Showing 1 to 5 of 5 entries" and includes navigation buttons: First, Previous, Next, Last. There is also a search bar at the top right.

The screenshot shows the QRDANCE Admin interface. The sidebar is identical to the previous screenshot. The main content area is titled "Jaime S. Carpenter Records" and displays the following information:

- Relationships:** 4 in Staffs, 6 in Professor Subject List, 2 in Subjects, 5 in Subject Attendance, 10 in Enrolled Subjects, 2 in Courses, 4 in Year, 4 in Sections, 5 in Students, 5 in Guard Attendance, 4 in QR Codes, 9 in Accountlist, 9 in Accounts Photos, 2 in Notifications, 1 in Settings.
- Status:** Deletable (red icon), Archivable (green icon), Active (purple icon), Email: admin@gmail.com.
- Subjects Assigned:** A grid showing assigned subjects:
  - Differential Equations: 5 Record(s) Found
  - Physical Education 3: 0 Record(s) Found

Figure 3.4.4.28 Admin: View Staffs

Add Appointment

Subject \_\_\_\_\_

Purpose \_\_\_\_\_

Schedule  
mm/dd/yyyy --:--

**CREATE** **UPDATE** **RESET**

Manipulate	Subject	Purpose	Schedule	Approved	Message	Date Requested
	Registrar	Subject Remove and AddnPayment of Remaining Balance	2021-04-15 04:56:00	<input checked="" type="checkbox"/> Yes	Please Observe the health protocols	Thursday 15th of April 2021 07:08:34 AM

Figure 3.4.4.29 Student: Add Appointment

Review Appointment

Subject:Registrar - Subjects

Purpose:Payment of Additional Subjects

Student:Hazel Keith D. Anselmo

Please Observe the health Protocols

Approve

YES  NO

**UPDATE** **RESET**

Manipulate	Student	Subject	Purpose	Schedule	Approved	Message	Date Requested
	Hazel Keith D. Anselmo	Registrar - Subjects	Payment of Additional Subjects	2021-04-20 08:57:00	<input checked="" type="checkbox"/> Yes	Saturday 17th of April 2021 03:53:27 AM	

Figure 3.4.4.30 Admin: Review Appointment

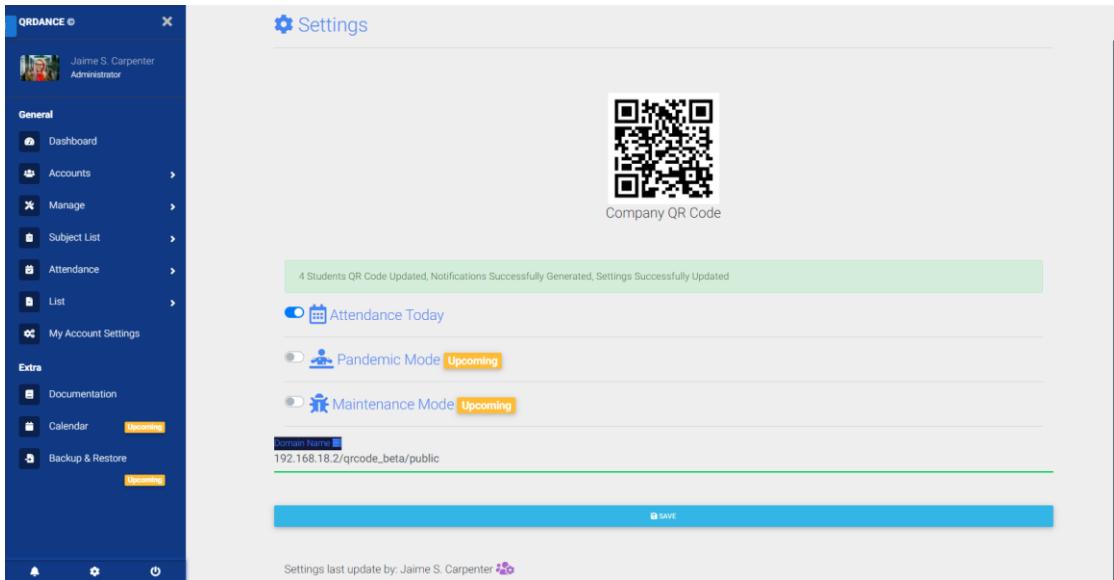


Figure 3.4.4.31 Admin: Settings

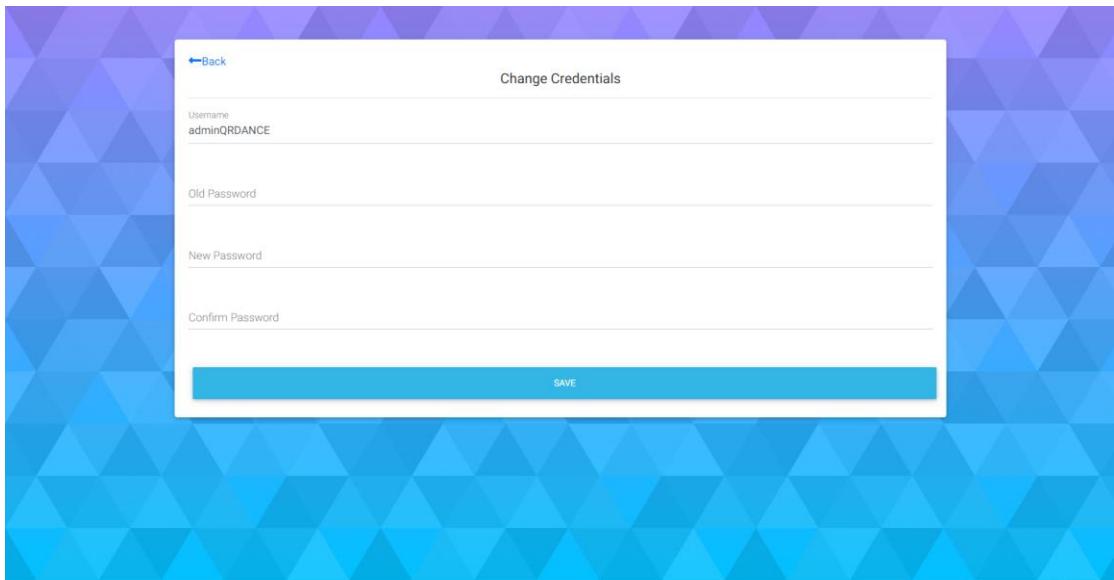


Figure 3.4.4.32 Change Credentials

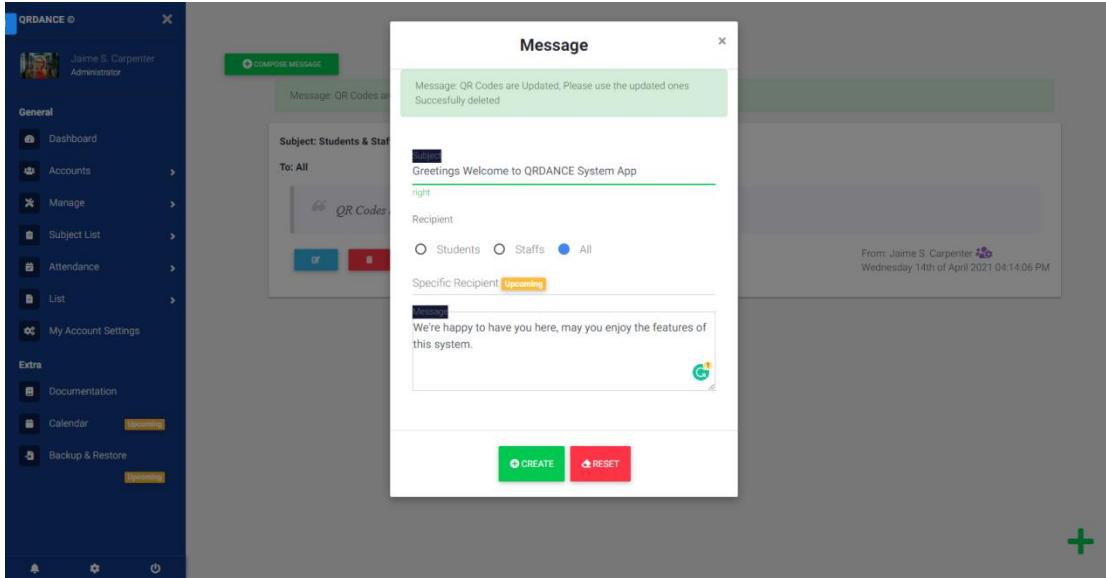


Figure 3.4.4.33 Admin: Compose Message

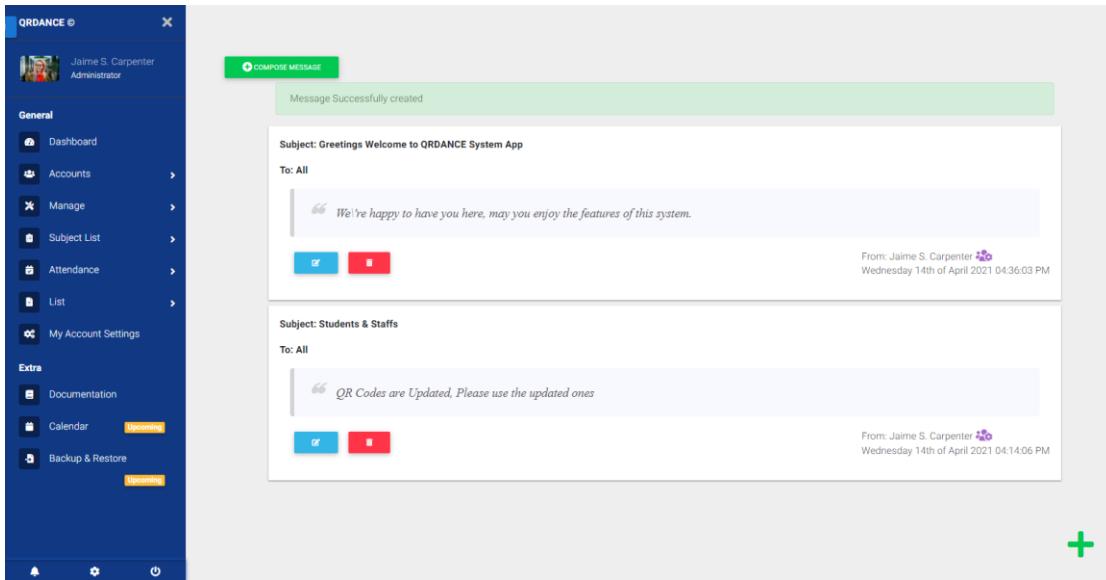


Figure 3.4.4.34 Admin: View Notifications

QRDANCE ©

My Classmates Student Settings



**Nina L. Berongoy**  
1-Computer Engineering-A

**ANNOUNCEMENT**

To: All  
Subject: Greetings Welcome to QRDANCE System App

We're happy to have you here, may you enjoy the features of this system.

From: Jaime S. Carpenter 🌸  
Wednesday 14th of April 2021 04:36:03 PM

**QR CODES**

Student



Company



**SUBJECTS TAKEN**

Differential Equations	Physical Education 3
P 100% A 0% L 0% E 0%	P 0% A 0% L 0% E 0%
P 1 A 0 L 0 E 0	P 0 A 0 L 0 E 0
PERFORMANCE: EXCELLENT	

**Subject Overall Performance**

Present 100% Absent 0% Late 0% Excuse 0%

**PERFORMANCE: EXCELLENT**

PRINT	CSV	EXCEL	PDF	COPY	COLUMN VISIBILITY
Search: <input type="text"/>					
Subject	Remarks	Mark By	Date		
Differential Equations	Present	Jaime S. Carpenter	Wednesday 14th of April 2021 03:37:33 PM		

Showing 0 to 0 of 0 entries

Previous Next

PRINT	CSV	EXCEL	PDF	COPY	COLUMN VISIBILITY
Search: <input type="text"/>					
Remarks	Guard On Duty	Date			
TIME OUT	Jaime S. Carpenter	Wednesday 14th of April 2021 04:19:47 PM			

Showing 0 to 0 of 0 entries

Previous Next

Figure 3.4.4.35 Student: Dashboard

The screenshot shows the student dashboard of the QRDANCE system. At the top, there's a navigation bar with icons for 'My Classmates', 'Student', and 'Settings'. Below the header, a large blue banner features a profile picture of a student, the name 'Juris P. De Guzman', and the text '1-Computer Engineering-A'. To the right, a sidebar titled 'My Classmates' lists several students with their names and profile icons. The main content area includes sections for 'ANNOUNCEMENT' (containing an email message), 'QR CODES' (with a QR code labeled 'Student'), and 'SUBJECTS TAKEN'.

Figure 3.4.4.36 Student: My Classmates

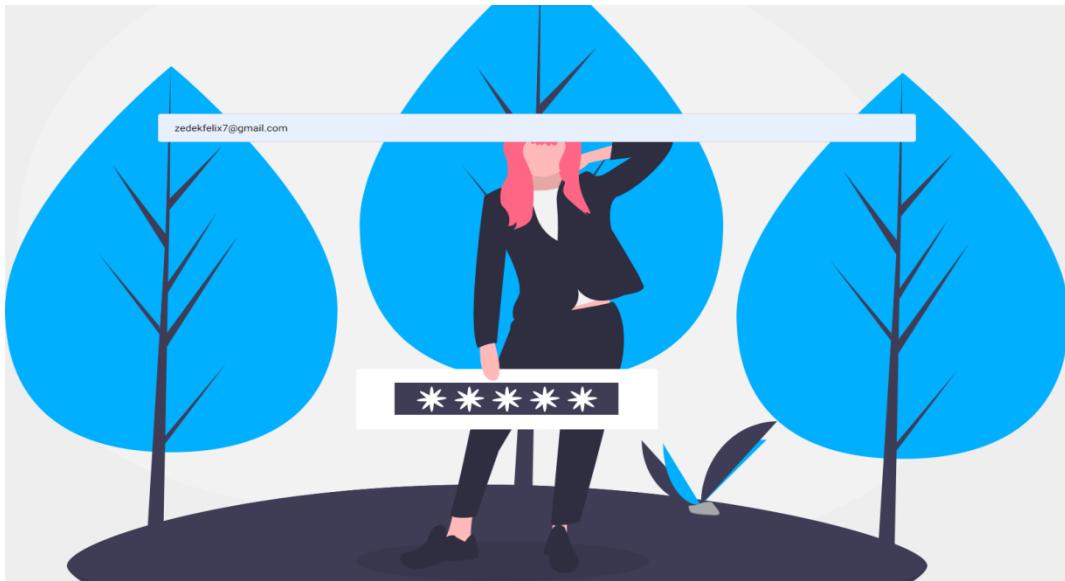


Figure 3.4.4.37 Forgot Password

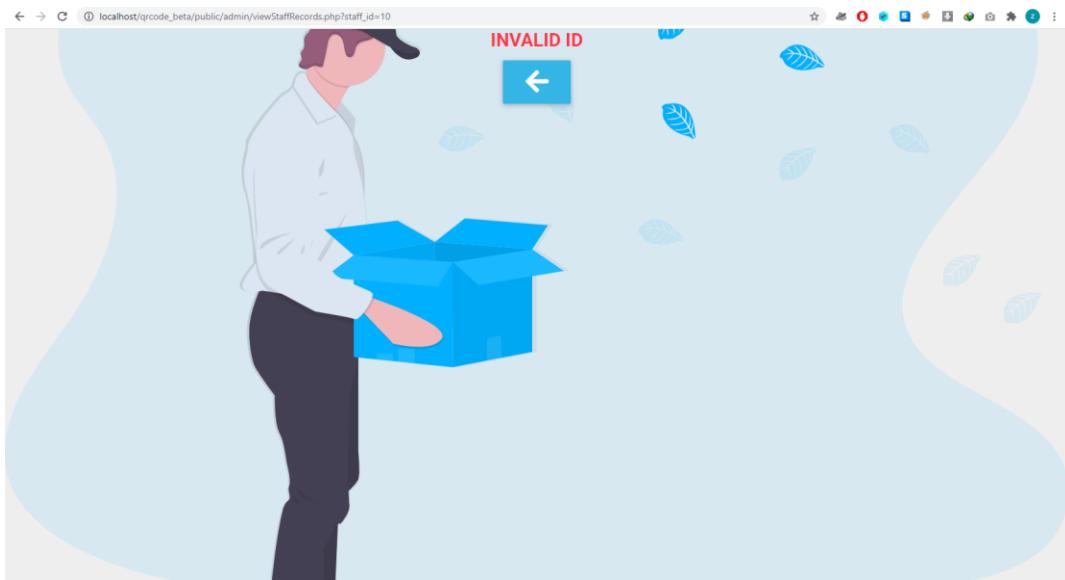


Figure 3.4.4.38 Invalid ID

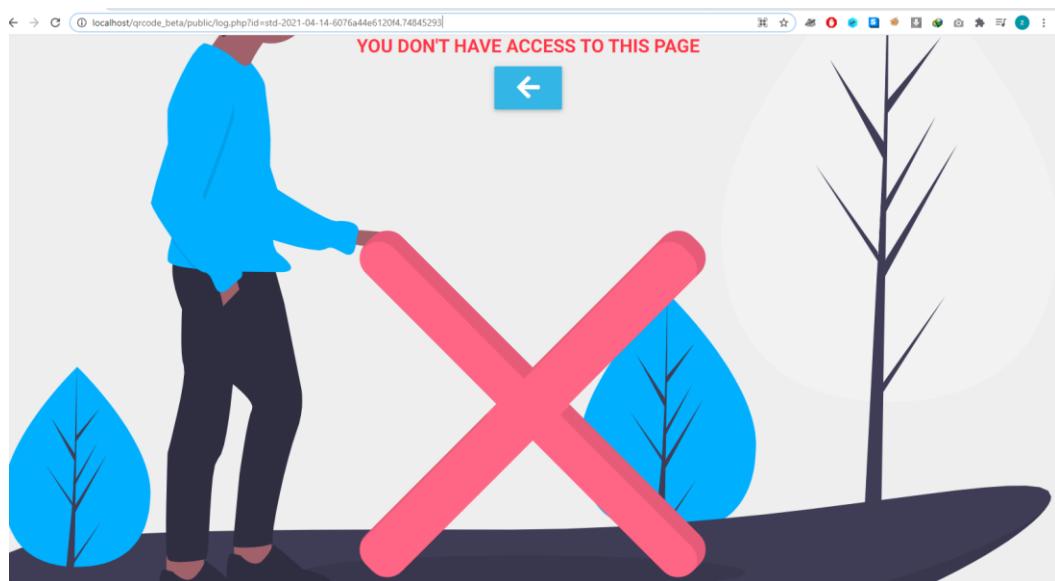


Figure 3.4.4.39 Page Restrictions

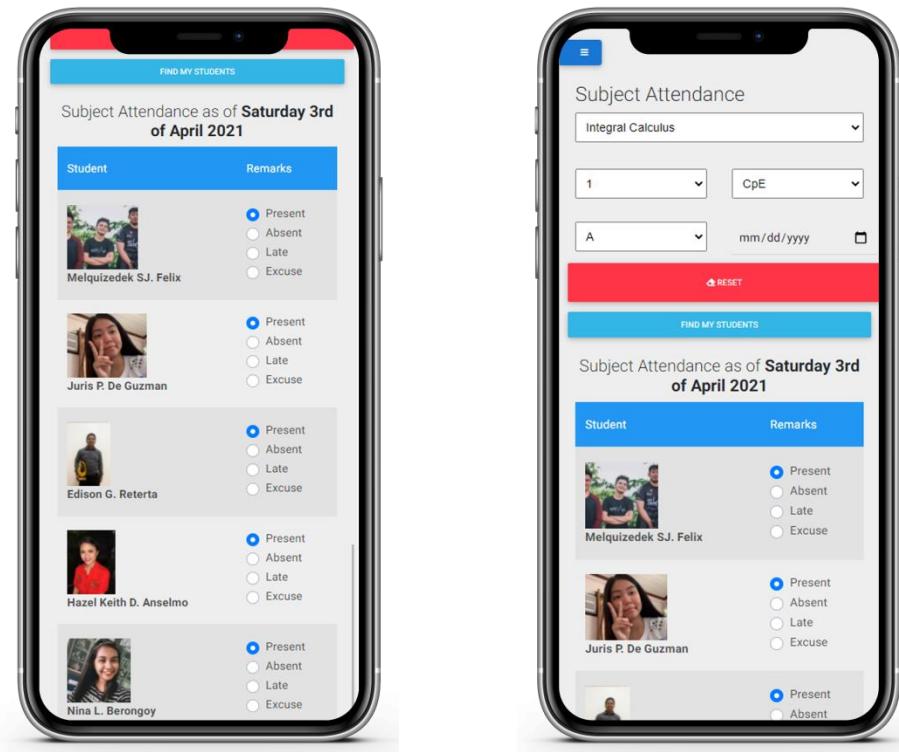
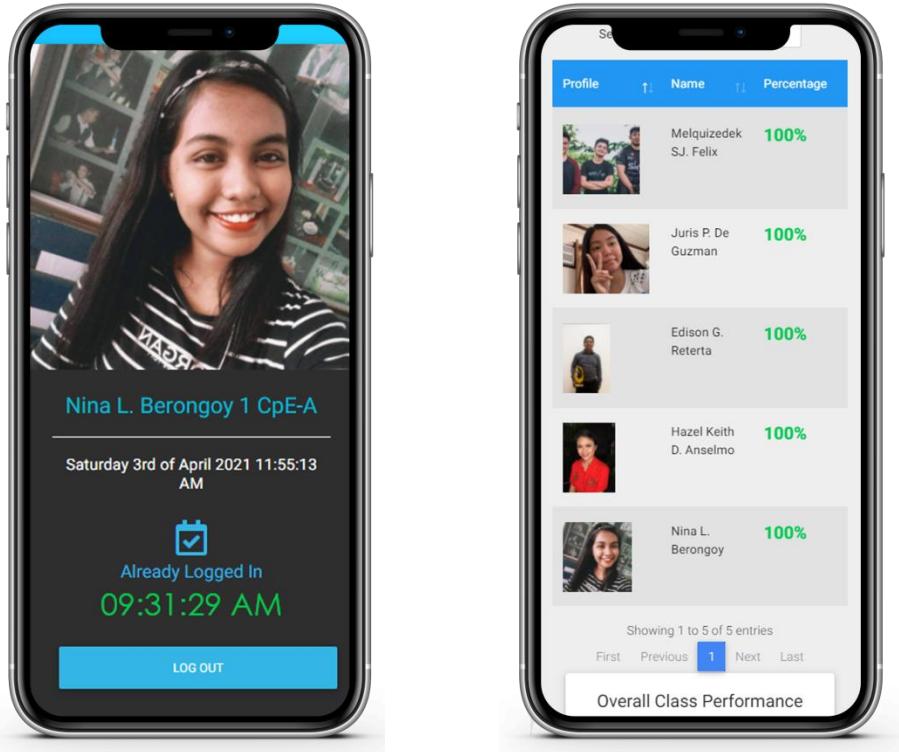


Figure 3.4.4.40 Mockups: Mobile View

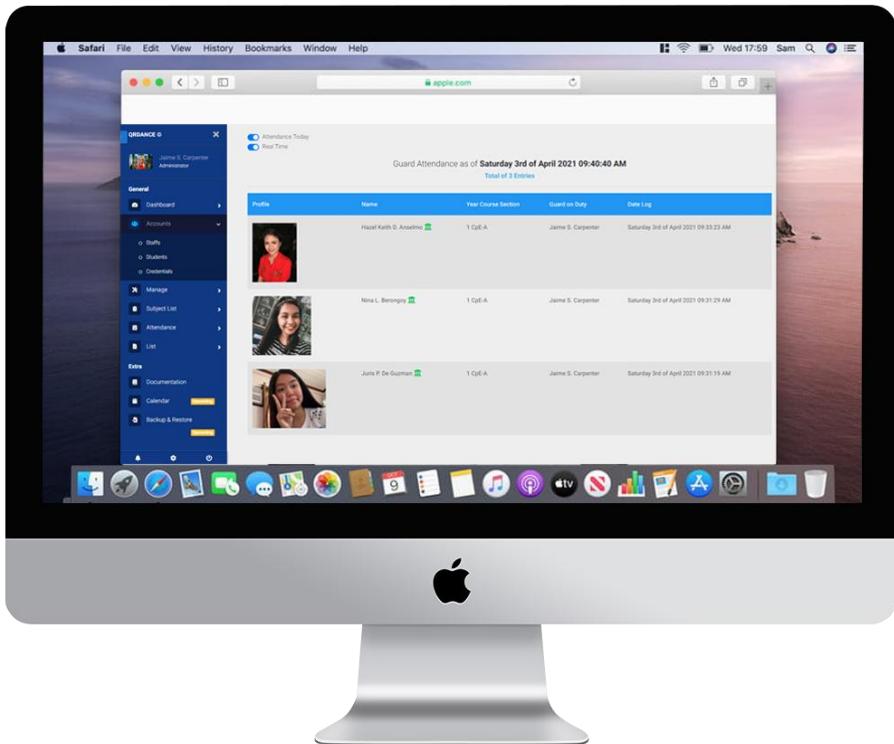
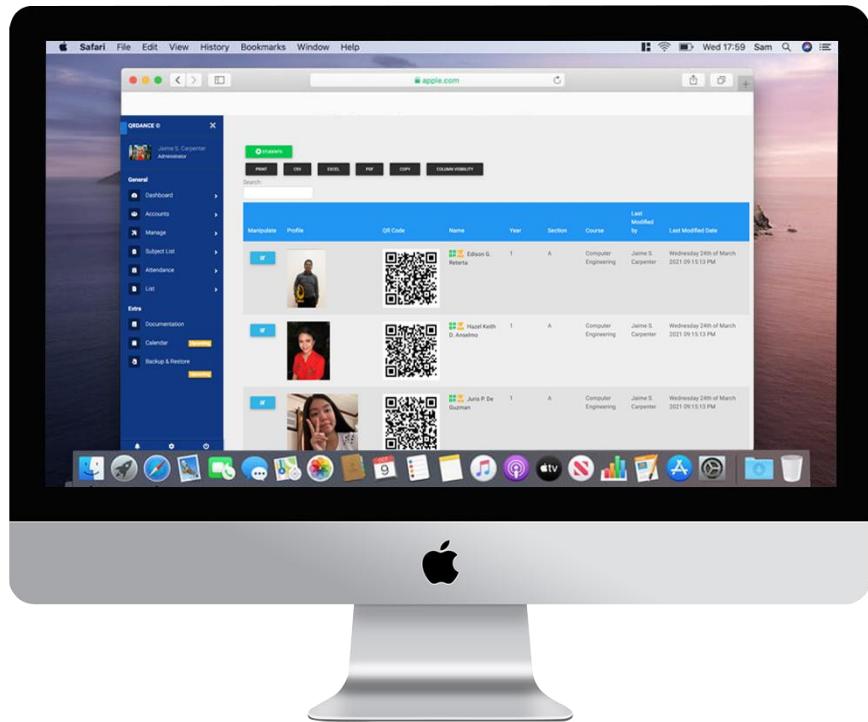


Figure 3.4.4.41 Mockups: Desktop View

#### **4. Source Code**

<https://github.com/user109436/QRDANCE.git>

#### **5. System Requirement**

##### **5.1 Software Requirement**

- Development
  - Browsers: Any updated browsers that enables JavaScript support (Chrome - recommended)
  - Server: XAMMP 5.5.30 and up (Latest recommended), LAMP, SQL Server
  - Internet Connection: 50kbps and Up
  - Code Editor: Visual Studio Code (Recommended) Atom, Sublime Text, Notepad ++, Brackets, Text mate, IDE, Php Storm and any code editors that reads Web scripts.
  - Debugging: ZendDebugger, XDebug and PHP Debug - VS Code Extension (by Felix Becker)

##### **5.2 Hardware Requirement**

- Development
  - OS: Windows 7.3.27, Linux 7.3.27, OS X 7.3.27 (1.6GHz and faster)
  - RAM: 4GB (64-bit) and 2GB (32-bit)
  - HDD: 20GB of available disk space
  - Display: 1280 x 768 screen resolution and up (Tablet-Desktop View)  
320px and up (Mobile View)
  - Graphics: No graphic requirements
  - Scanner: QR Code Scanner or Android/Apple Devices with any QR code scanner app (QR & Barcode Scanner Recommended)