DON MARIANO MARCOS MEMORIAL STATE UNIVERSITY

MID LA UNION CAMPUS

COLLEGE OF INFORMATION TECHNOLOGY

SAN FERNANDO CITY LA UNION

SBO ATTENDANCE MONITORING AND EVALUATION SYSTEM

ALFONSO, KIMBERLY ANNE   FRANCISCO, RICA

CATIVO, ZAIRA MAE   POLIDO, JAHP

DABATOS, CHRISTIAN   RENZAL, DANIEL

EUGENIO, EUCELHA CARYL   ROSARIO, MIVIEN

FLORES, ALDWIN XAVIER   SUYAT, MERINA

DECEMBER 2019

Table of Contents

I. Overview

Student Body Organization also called "SBO", is the organization of students dedicated to reviving school spirit and making critical improvements in and around the school, with responsibilities in areas encompassing school functions and student's life. With each school year, a new set of members brings new ideas to the table and each member's unique creativity and talents are harnessed for the benefit of the entire student body.

One of the core responsibilities of the SBO is the organization of school events that students are required to attend and in order for these events to be effective, student participation must be monitored. Measuring attendance is a significant concern for many organizations, which can use such information to gauge the effectiveness of their efforts and to plan for future efforts. Currently, the SBO uses a manual system for managing a student's attendance. The manual recording of class attendance using pen and paper is time-consuming. With the vast amount of students on the campus, the manual mode of doing transaction imposes heavy work hard for the SBO Officers. It is also inefficient in a way most of the time attendance sheet is accidental loss and prone to human error.

According to Levie Rosal, the Vice Governor of the SBO, forging of signatures in the current system is rampant due to the fact that students are

not to show any verification instruments such as their school ID. A long queue is another problem in the current system as students have to fall in line and wait for their turns to sign their attendance.

To solve this problem, the group has developed a computerized attendance monitoring system. While the system will not use any hardware technology integration (i.e. biometrics, barcode, or RFID) and will still need students to queue, the pen-based operation is omitted. The system will be practical due to the utilization of what every student already has: their IDs.

With this system, monitoring the attendance may provide security protection, eliminates all kinds of manual-related problems in the record management and speeds up time and effort wasted in taking attendance during events in school. It will also decrease the queuing time for the students because the system can run on various laptops, considering it is connected to a common server. It also reduces the number of paper resources needed in taking attendance because this system can be used in different events and can be used repeatedly by the students and SBO. All they have to do is to bring their ID with them and present to the SBO officers.

II. Diagrams

Use Case Diagram
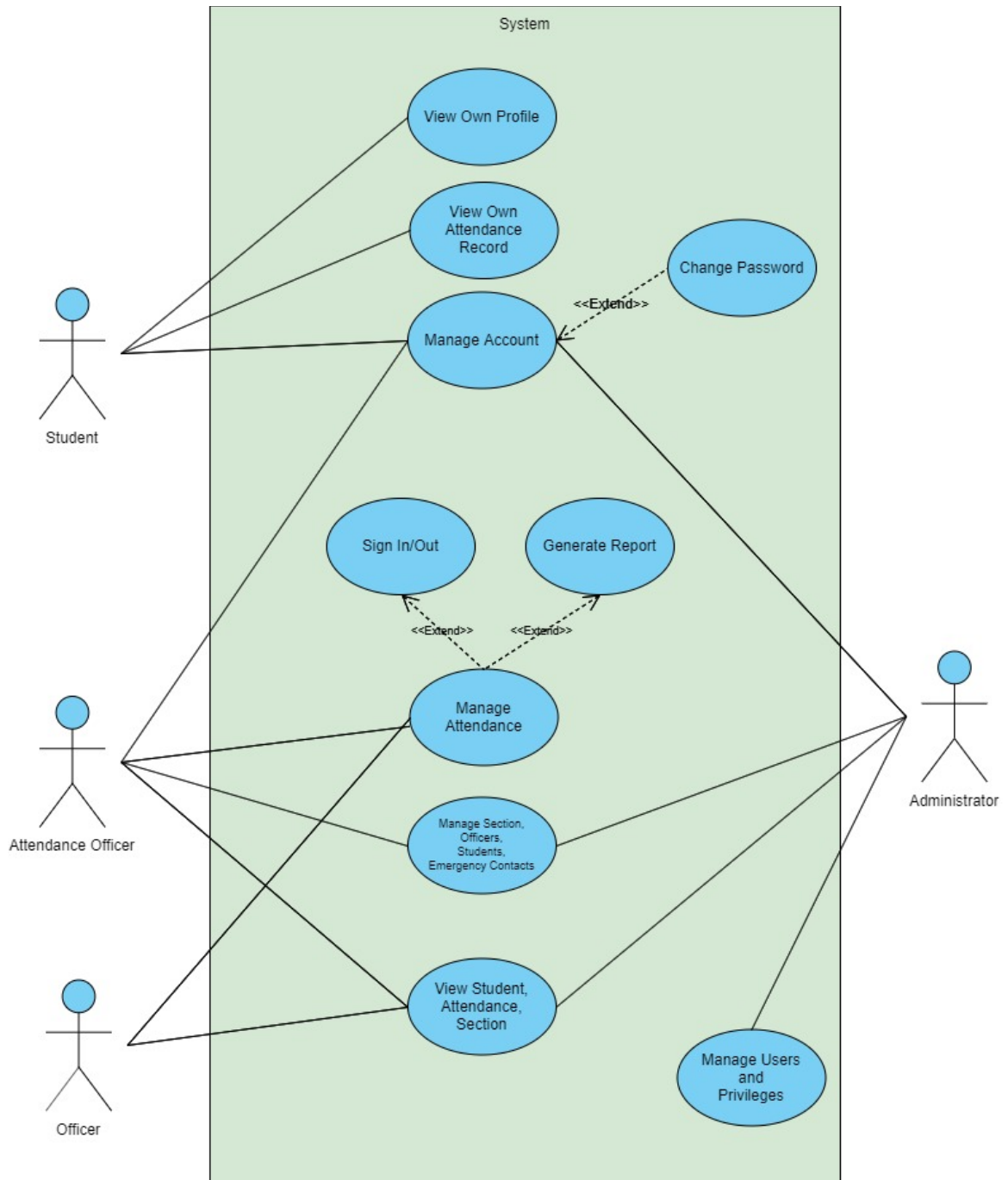
Users

1. Admin

   a. The Admin will have all the privileges in the system.

   b. User management

      i. Admin may change the privilege that is appropriate to the user.

2. Attendance Officer

   a. Attendance Officer users are able to manage events, sections, students, and attendance.

   b. For event management:

      i. View events list

      ii. Add event

      iii. Update event

   c. For Section management:

      i. View sections

      ii. Add sections

      iii. Update sections

   d. Student management

      i. View students

      ii. Register/Add students

      iii. Update student information

      iv. Update student sections

e.   Attendance management

   i.   View attendance

   ii.   Add new attendance

   iii.   Update attendance

   iv.   Signing student attendance

3.   Officer

a.   Officer users have lesser privileges in the system. Most of their privileges are limited to views only except for signing student attendance.

4.   Student

a.   The Student is only limited to viewing privileges and changing passwords.

b.   Able to view the list of events

c.   View their own profile.

d.   View their individual attendance.

e.   Manage own account

Class Diagram
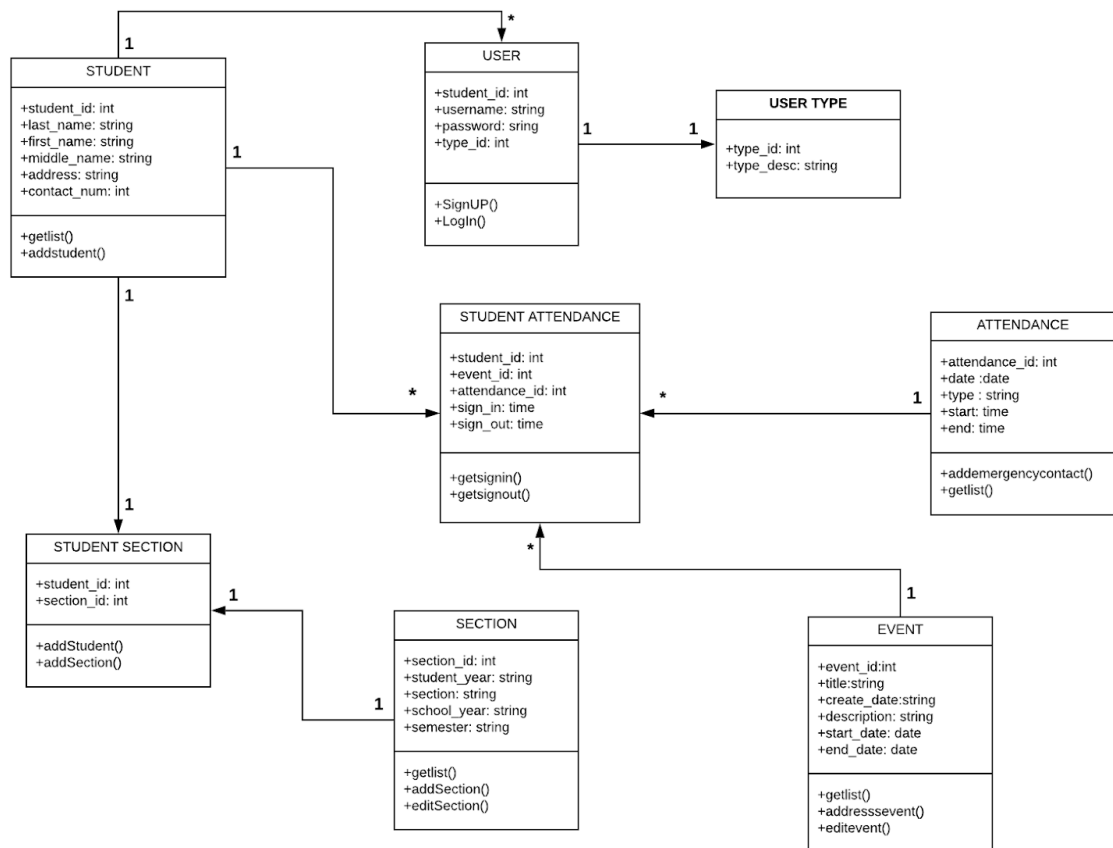
Figure 1: Class Diagram of SBO Attendance Monitoring and Evaluation System for College of Information Technology

The class diagram of the system shows the design of the design of the database where the system retrieved data according to the identity of the user. The students are assigned to a particular section, so when the officer, attendance officer and admin can mark the attendance (sign in and sign out button) easily. Students has a one to many attendance in an event and with the help of the one to one between student and section the student lists can be efficiently and fast displayed.
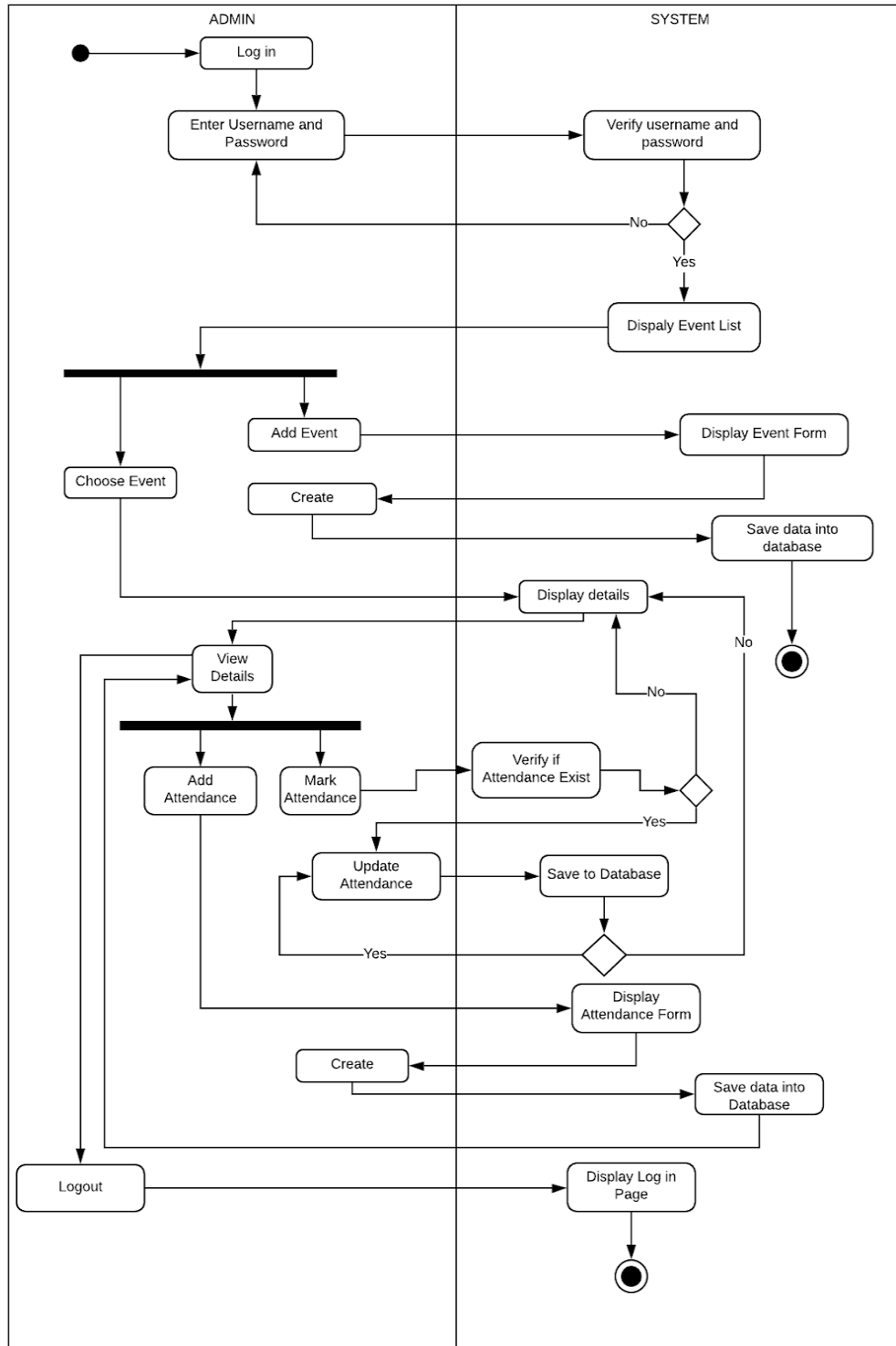
Activity Diagram
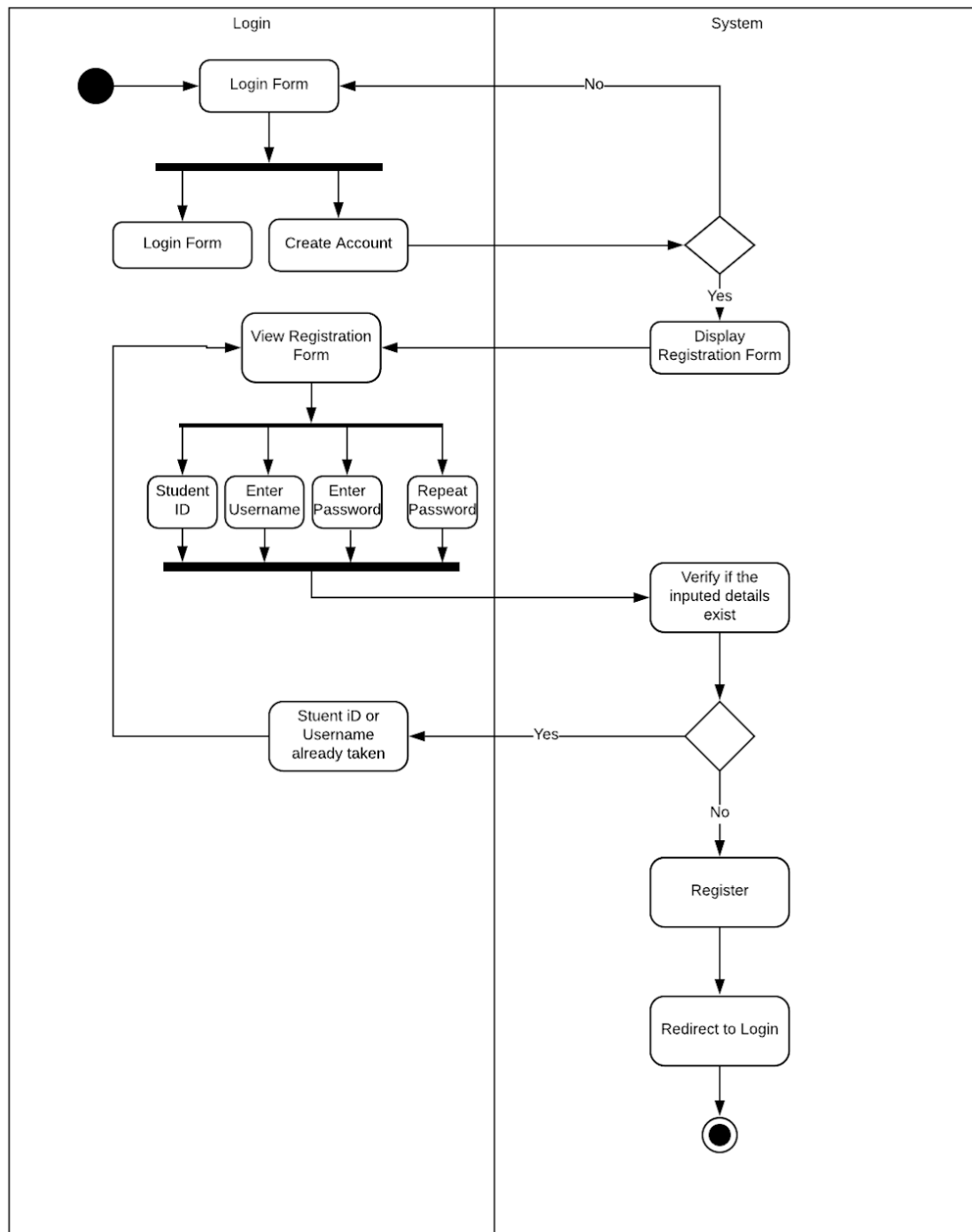
Figure 2: Activity Diagram of Login Form (SBO Attendance Monitoring and Evaluation System)

The activity diagram shows the flow between the User and System where they can directly Login or Create an Account. On creating an account, the system displays the Registration Form Page and they're required to insert the Student Id, Username, Password with a Confirmation Password required. The system will then verify If the input details already exist, if yes, a popup will display "Register" and will be redirected to the login form. Else, an alert popup will display "Student ID or Username already taken.
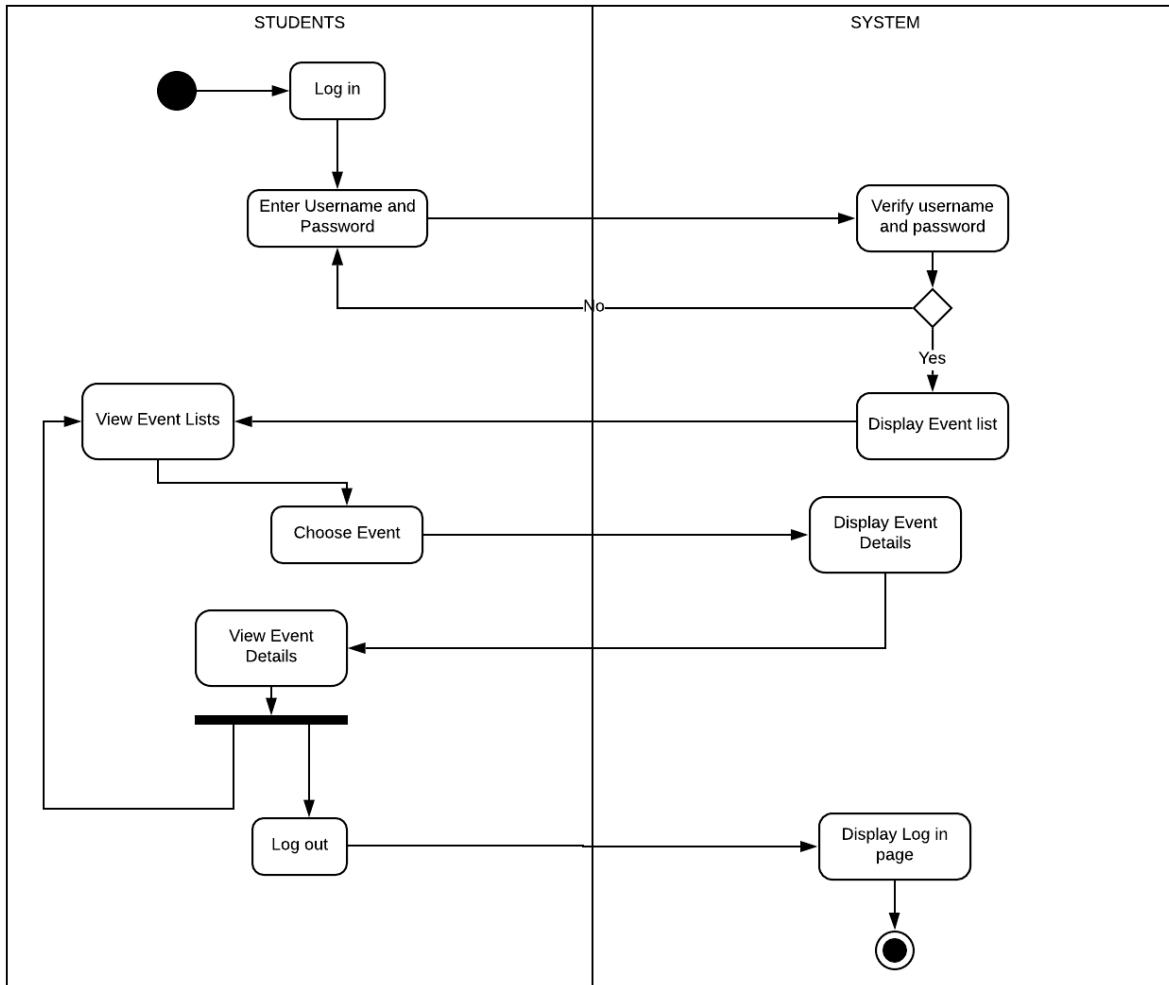
Figure 3: Activity Diagram of Student (SBO Attendance Monitoring and Evaluation System)

The activity diagram shows the flow between the Student User and System. Noted that the student is a registered user if the username and password match in the database with a type = "student" the system displays the Event List home page else the system will go back to the Login page. The student selects an Event, after selecting an Event the system displays the Event Details. Viewing the Event details, the student can either choose to go back to the Event Lists or Log out. And that describes the process of interaction between the student user and the system in the SBO Attendance Monitoring and Evaluation System.
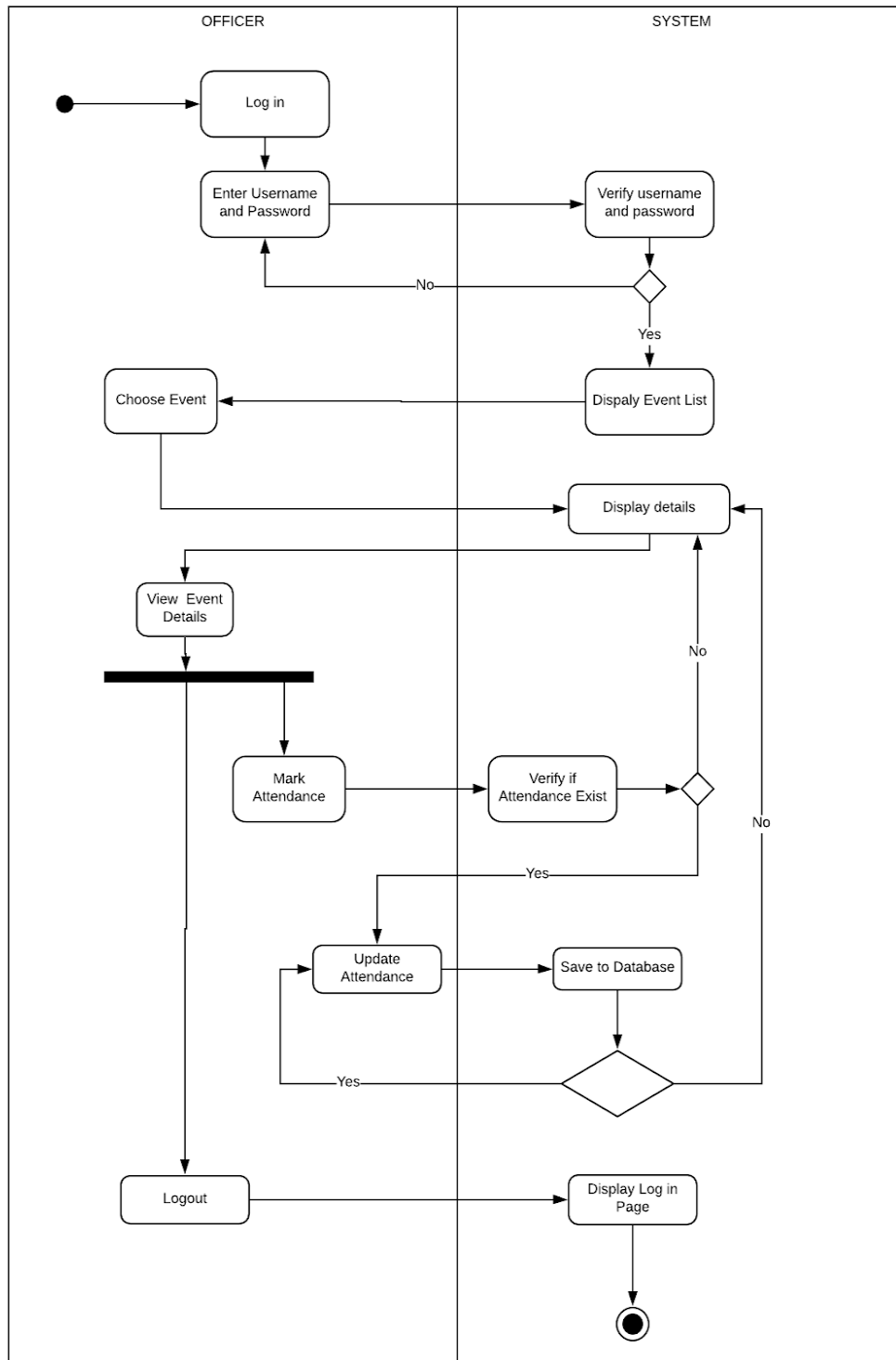
Figure 4: Activity Diagram of Officer (SBO Attendance Monitoring and Evaluation System)

The activity diagram shows the flow between the Officer User and System. Noted that the officer is a registered user. If the username and password match in the database with a type = "officer" the system displays the Event List home page else the system will go back to the Login page. The officer selects an Event, after selecting an Event the system displays the Event Details and Attendance Lists of the event. Viewing the Attendance Lists, the officer can either choose to Log out or start marking the attendance (the sign in and sign out button). If the verified attendance doesn't exist it will go back to display details, else it will now update the database and be saved in the database in the time when the button was clicked.
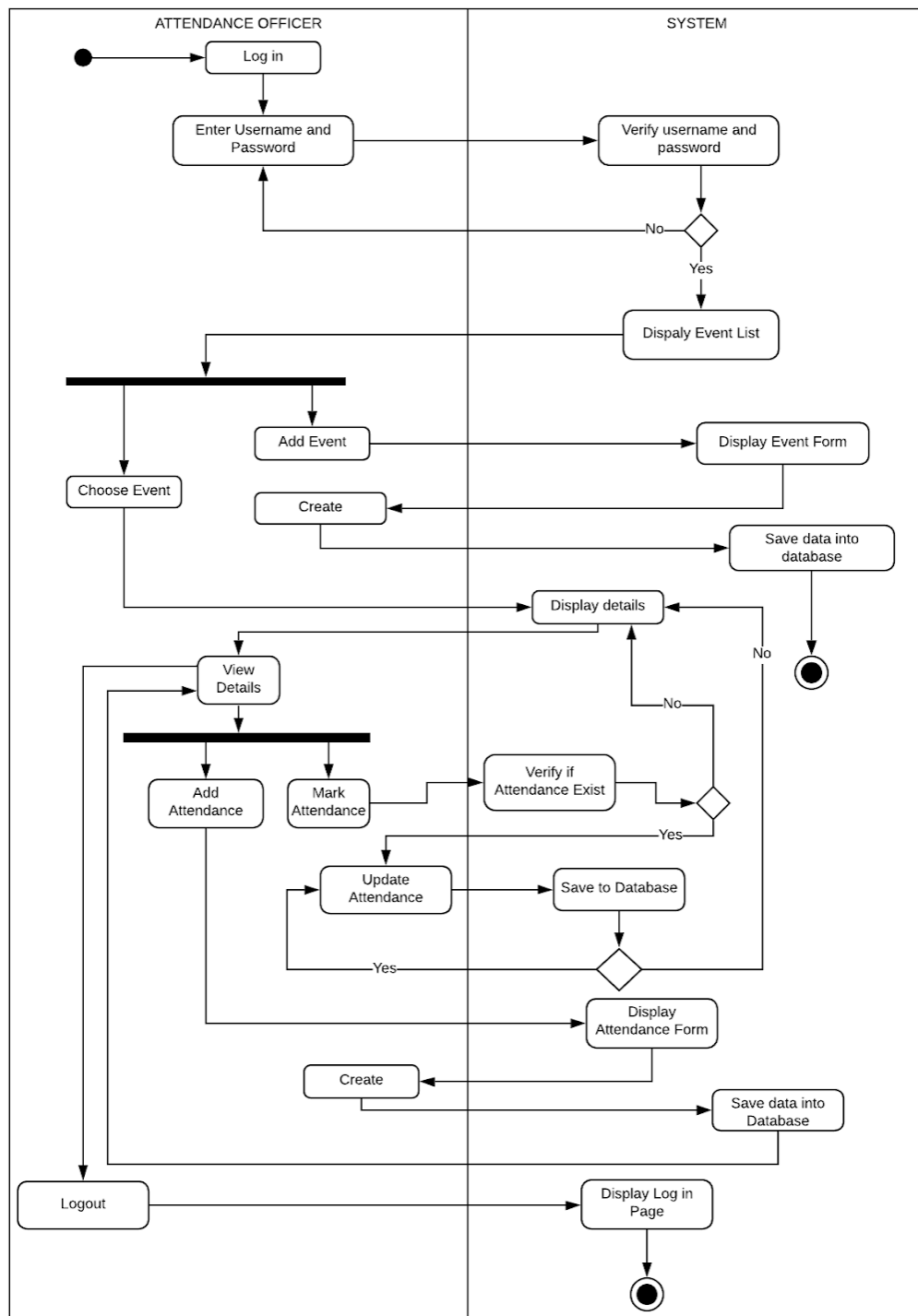
Figure 5: Activity Diagram of Attendance Officer (SBO Attendance Monitoring and Evaluation System)

The activity diagram shows the flow between the Attendance Officer User and System. Noted that the attendance officer is a registered user. If the username and password match in the database with a type = "attendance officer" the system displays the Event List home page else the system will go back to the Login page. The attendance officer selects an Event or add an Event. On selecting add event, it will display the event form where you will create a new event. Clicking the save button the data will be saved into the database. And after selecting an Event the system displays the Event Details and Attendance Lists of the event. Viewing the Event Details and Attendance Lists, the attendance officer can either choose to Log out or start marking the attendance (the sign in and sign out button) or add an attendance list. If the verified attendance doesn't exist it will go back to display details, else it will now update the database and be saved in the database in the time when the save button was clicked. And in selecting the add attendance the system will display the attendance form where you will create a new attendance list. Clicking the save button the data will be saved into the database.

Figure 6: Activity Diagram of Admin (SBO Attendance Monitoring and Evaluation System)

The activity diagram shows the flow between the Admin User and System. Noted that the admin is a registered user. If the username and password match in the database with a type = "admin" the system displays the Event List home page else the system will go back to the Login page. The admin selects an Event or add an Event. On selecting add event, it will display the event form where you will create a new event. Clicking the save button the data will be saved into the database. And after selecting an Event the system displays the Event Details and Attendance Lists of the event. Viewing the Event Details and Attendance Lists, the admin can either choose to Log out or start marking the attendance (the sign in and sign out button) or add an attendance list. If the verified attendance doesn't exist it will go back to display details, else it will now update the database and be saved in the database in the time when the save button was clicked. And in selecting the add attendance the system will display the attendance form where you will create a new attendance list. Clicking the save button the data will be saved into the database.

Plates

1. Login Form

2. Sign Up Form

3. Admin View: Events Page (Home Page)

4. Admin View: Add New Attendance Form

Welcome, **root**

Dashboard

- Events
- Surveys
- Students
- Sections
- Logout

📅 Event List / CIT Night

ADD NEW ATTENDANCE

Please provide the necessary information type to start monitoring the attendance.

Select Date

12/19/2019

AM ✔ PM ✔

AM Sign In	AM Sign Out
Start	Start
03:30 AM	05:30 AM
End	End
04:30 AM	06:30 AM

PM Sign In	PM Sign Out
Start	Start
12:00 PM	04:00 PM
End	End
12:30 PM	05:00 PM

Save

5. Admin View: Event Details with Attendance Lists

Welcome, **root**

Dashboard

- Events
- Surveys
- Students
- Sections
- Logout

📅 Event List / CIT Night

Event Details

Edit Event | View Survey | + Add Survey

Title	CIT Night
Description	SBO Organized Event

Attendance

📅 Attendance

2019 December 12

Show 10 ▾ entries   Search: _____

Student ID ▲	Name	Section	AM Sign In	AM Sign Out	PM Sign In	PM Sign Out
131-4578-1	Khan, Gengis	2A	Sign Out	Absent	Absent	Absent
142-1324-1	Ruiz, Ameerah	2A	Sign Out	Absent	Absent	Absent
151-1547-4	de la Cruz, Juan	2A	Sign Out	Absent	Absent	Absent
171-0115-2	Francisco, Rica	No Section	Sign Out	Absent	Absent	Absent
171-0135-2	dabatos, christian	No Section	Sign Out	Absent	Absent	Absent
171-0192-2	Rosario, Mivien	3A	Sign Out	Absent	Absent	Absent

Showing 1 to 6 of 6 entries   Previous | 1 | Next

6. Admin View: Signed In Student

7. Admin View: Edit Event Form

8. Admin View: Student List Page

9. Admin View: Register New Student Form

10. Admin View: Section List Page

11. Student View: Event List Page (Home Page)

12. Student View: Event Details with Attendance List

CIT - SBO

📅 Event List / CIT Night

Event Details

Title	CIT Night
Description	SBO Organized Event

Attendance

Date	AM Sign In	AM Sign Out	PM Sign In	PM Sign Out
2019-12-19	ABSENT	ABSENT	ABSENT	ABSENT

Welcome. **student**

Dashboard
📅 Events
📊 Surveys
↪ Logout

13. Student View: Survey List Page

CIT - SBO

📊 Surveys

Survey List

Show 10 ▾ entries   Search:

Title ▲	Event ⇵	Action ⇵
CIT Night Survey	CIT Night	👁 View

Showing 1 to 1 of 1 entries   Previous 1 Next

Welcome. **student**

Dashboard
📅 Events
📊 Surveys
↪ Logout

14. Attendance Officer View: Events Page (Home Page)

15. Attendance Officer View: Add New Attendance Form

16. Attendance Officer View: Event Details with Attendance Lists

17. Attendance Officer View: Signed In Students

18. Attendance Officer View: Edit Event Form

19. Attendance Officer View: Student List Page

20. Attendance Officer View: Register New Student Form

21. Attendance Officer View: Section List Page

22. For All User

CIT - SBO

Welcome, **root**

Dashboard
- 📅 Events
- 📊 Surveys
- 👥 Students
- ◎ Sections
- ↪ Logout

👤 Account Settings / root

root

User Type	root	
Student ID	171-0192-2	
Current Password	••••••••••••••••••••••••••••••••••••	
New Password		
Repeat Password		

Edit

Save Password

Interview for SBO Attendance

What is your name?

- ∞ Im Levie Rosal

What is your position at the sbo?

- ∞ I am the vice governor of sbo

How do you commonly take the attendance of the students in an event?

- ∞ We print some hard copy of the attendance of students then they will go to the us and sign the attendance

What is the common problem that you encounter when taking the attendance of the students?

- ∞ Long queue, forging of signature

- ∞ When the registration starts students will fall in line to the student lounge to sign that will cause a long queue

- ∞ Lots of students forge some signature that's because we didn't know what the real name of the one signing the attendance

How do you solve it?

∞ We match the previous sign to another signature, if it's not the same we put * to it

How do you process on students attendance during an event? would you give me an example?

∞ We post a registration time and then we will inform the student when is the time for signing the attendance

Why do we have to take student attendance in any events?

∞To know if they are attending school activities. If students don't have signature on attendance we will give them a penalty like Community Service