



DOCUMENT USER GUIDE AND INSTALL

**SYSTEM
MANAGEMENT
CERTIFICATE**



MODULE

1. Introduction.....	2
1.1 ABC Center Certificate.....	2
1.2 Member of group two.....	2
2. Install Database.....	3
2.1 Overview database.....	3
2.2 Setup User login with TCP/IP SQL Server.....	3
2.3 Create Database.....	10
3. Install Software Certificate:	13
4. How to Management System	17
4.1 Management Users.....	17
4.2 Management Student.....	19
4.3 Management Register of Student.....	27
4.4 Management Certificate	37
4.5 Management Subjects	44
4.6 Management Exam Mark	49
4.7 Management Certificate Store.....	53
4.8 Management User	58
4.9 Management Course.....	62
4.10 Student Result	66
4.11 Student Fail	68
4.12 Change Password	71
4.13 Print Certificate.....	73

1. Introduction

1.1 ABC Center Certificate.

ABC Center Certificate is a center works for the "ABC" institute to developing the certification system for the students who have completed the exam. For each student who goes to the "ABC" institute for register.

The center has a lot of certificates. For example, English Certificate includes A, B, C, and TOIEC...

ABC Center Certificate's main missions are providing regular contests for students. Students can register in the ministry room but before that student can find out about the information the certificate, they want to the registry like Certificate ID, all subjects they must pass to receive the certificate. After learning about information, the student receives student ID this ID will be confidential, so it won't be exposed to protect the information of the student. But if student ID has been lost or deletes it still can recuperate because all the information always saves on the database of the center.

1.2 Member of group two.

Members	Role and Responsibilities	Contact
Nghi Dang Quang	Leader/Analyst/ Designer/ Developer/Tester/ Implementation	dqnggia18086@cusc.ctu.edu.vn
Khanh Nguyen Le	Analyst/Developer/ Tester/ Implementation/	nlkhanha18083@cusc.ctu.edu.vn
Thang To Toan	Analyst/Designer/ Developer/ Tester	ttthanga18075@cusc.ctu.edu.vn
Thanh Nguyen Phuoc	Analyst/Developer/ Tester/ Implementation/	nphthanha18141@cusc.ctu.edu.vn

2. Install Database.

2.1 Overview database.

The Database is a collection of interrelated data where data can be easily accessed, managed and updated. For example, consider ABC institute maintains details of the student such as the name of the student, age, address, class, etc. These all records are related to student stored in a database.

The Database management System is a collection of data and a set of programs to access the data. It allows creation, definition, manipulation of the database. DBMS provides protection and security to the database. Some examples for popular DBMS are MySQL, Oracle, Sybase, Microsoft Access and IBM DB2. But this System just runs only on SQL Server.

2.2 Setup User login with TCP/IP SQL Server.

2.2.1 Reset SQL password

- Step 1: Login into SQL Server

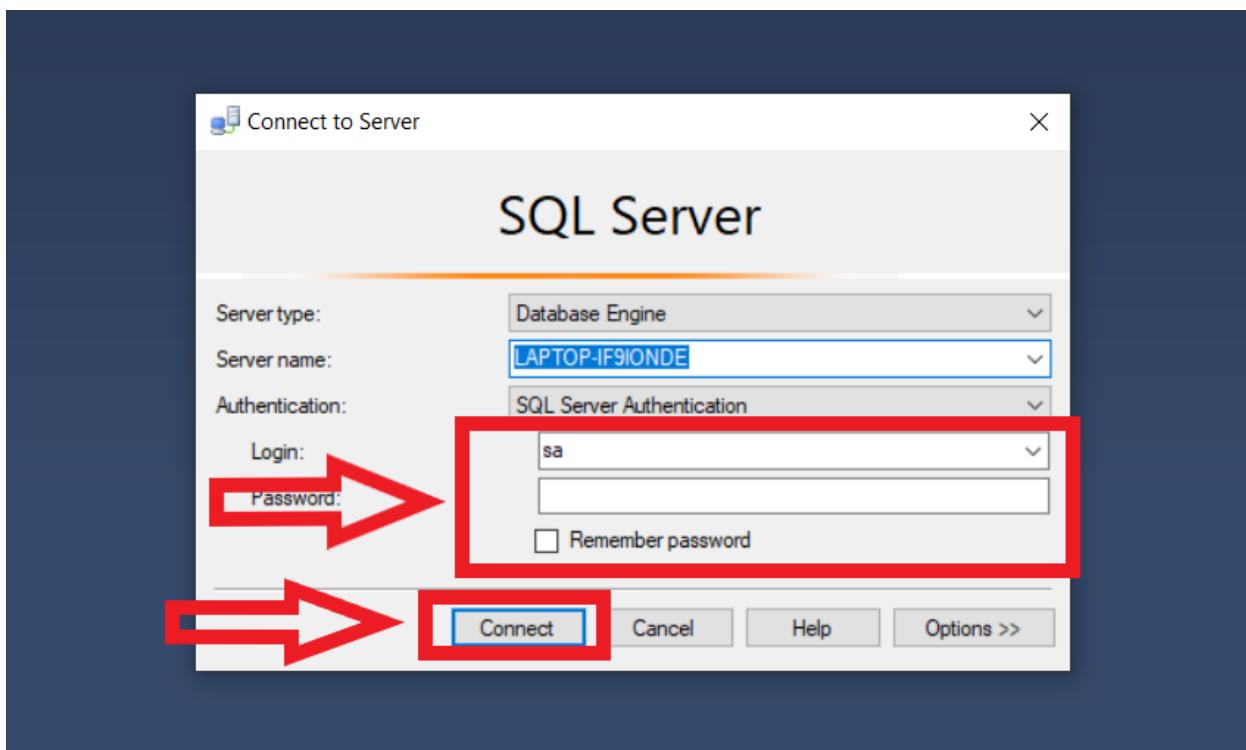


Figure 2.1: Login SQL Server

- Step 2: In Object Explorer, open a Security folder and open a Logins folder. Right-click on 'SA' account and go to Properties.

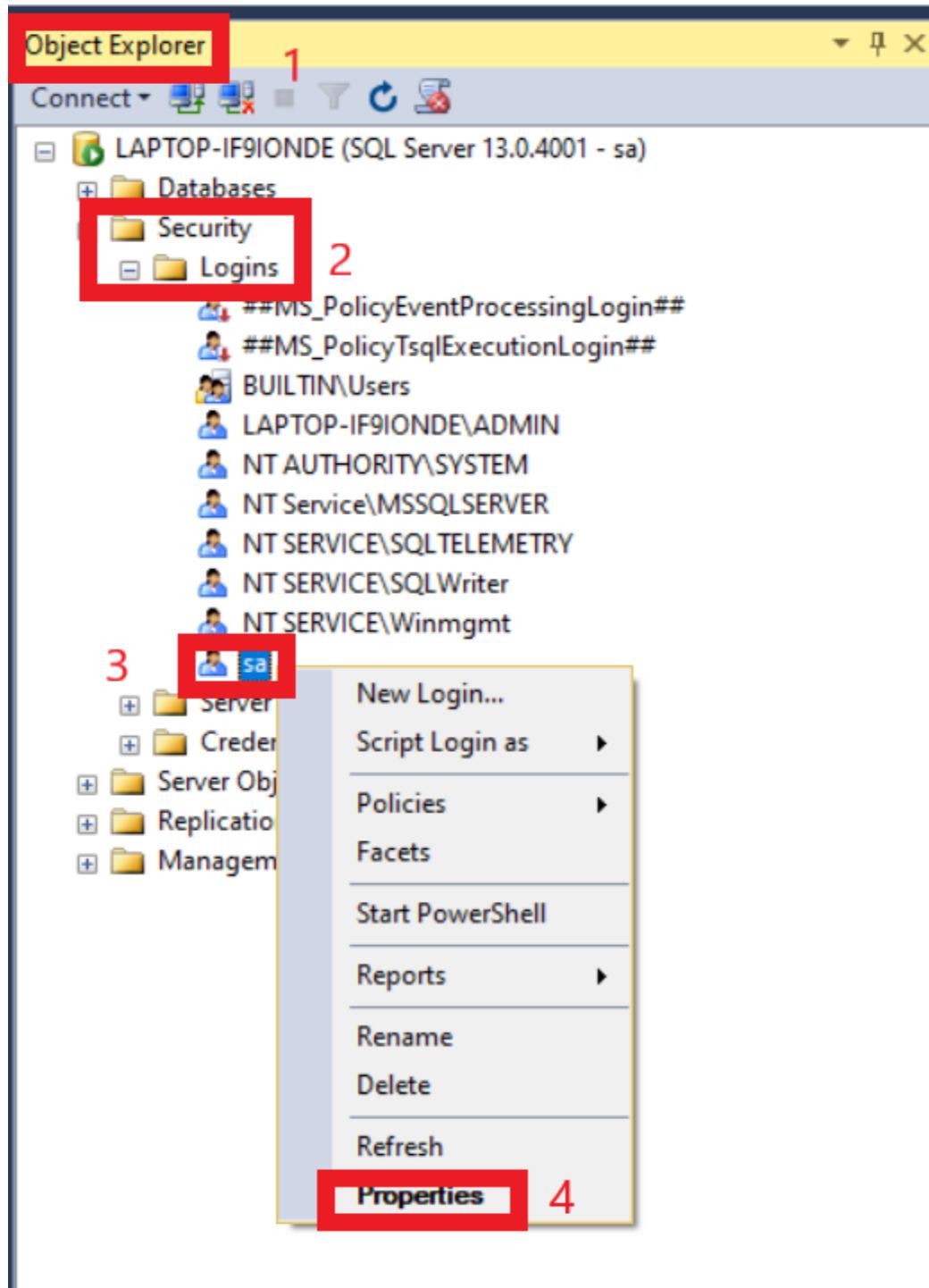


Figure 2.2: Properties account “SA”

- Step 3: Change a 'SA' password and confirm it. Click OK.

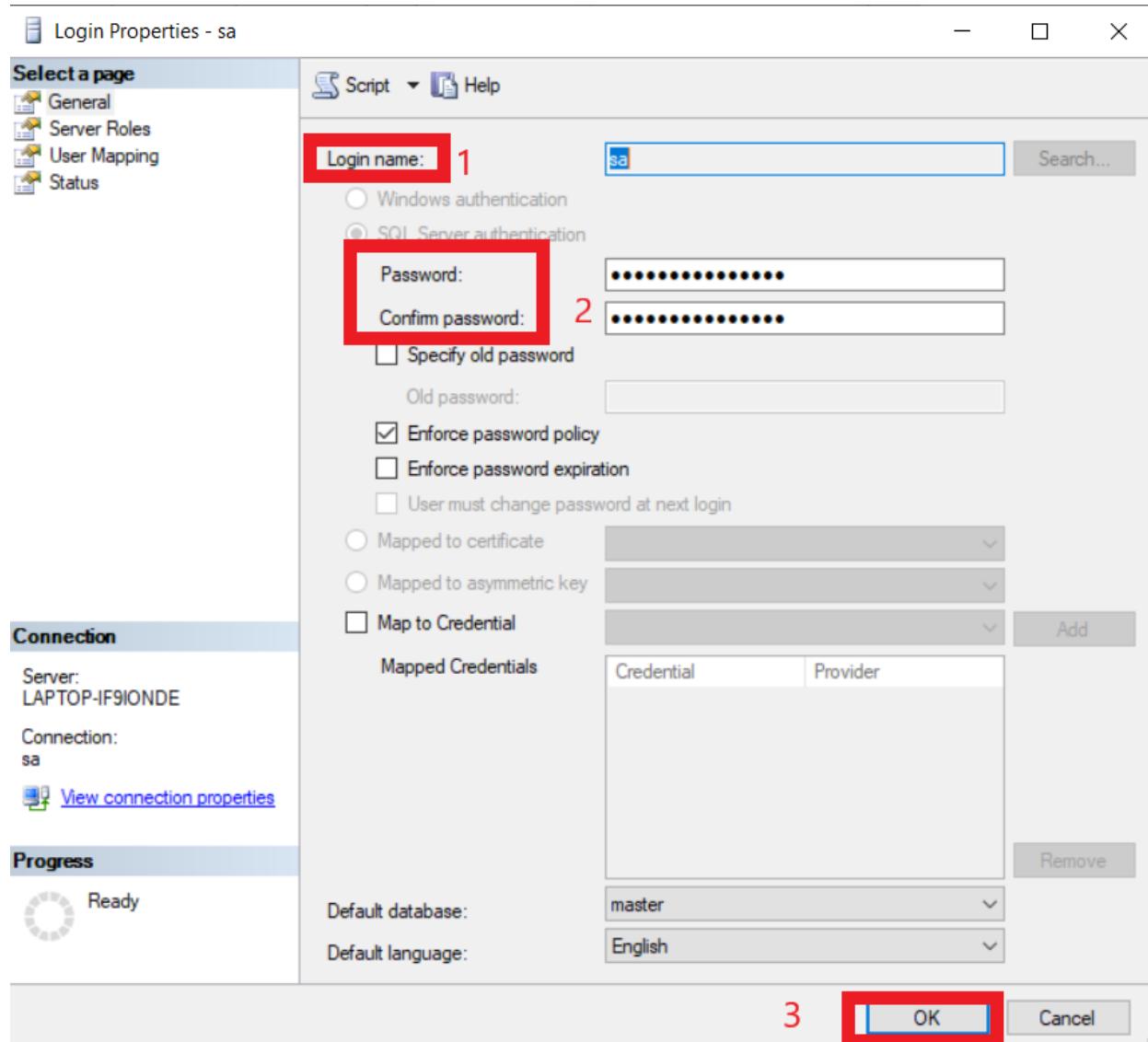


Figure 2.3: Change password SQL server

2.2.2 Configuration SQL server

- Step 1: On Start menu click mouse right the choose Computer Management.

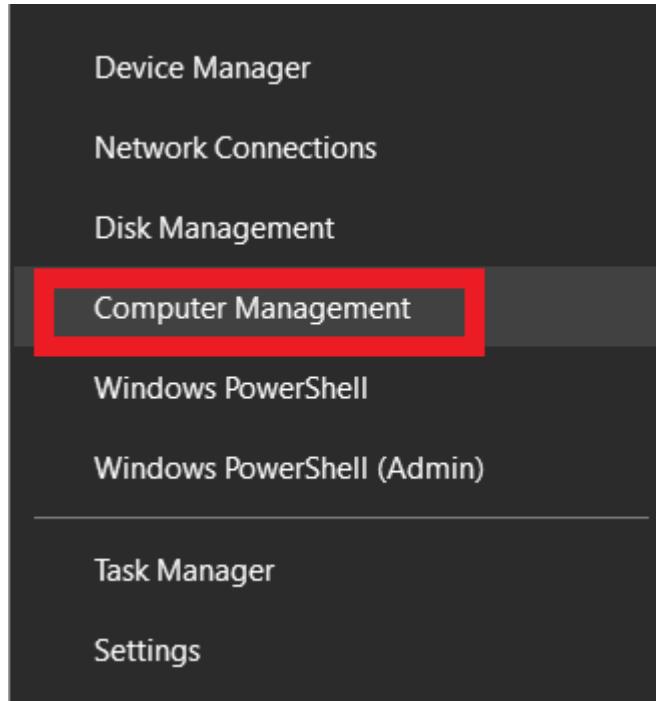


Figure 2.1: Choose Computer Management

- Step 2: In the interface of computer management select Server and Application. Then you should select a Server and Application continue to select SQL Server activate.



Figure 2.2: Back group of Computer Management

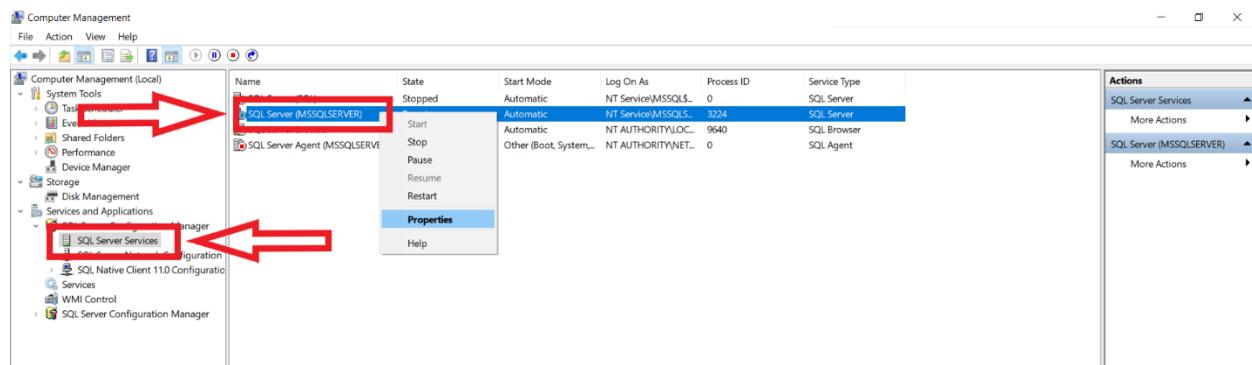


Figure 2.3: Configuration SQL Server Services

- Step 3: Stay at Service and Applications select Protocol for MSSQL SERVER

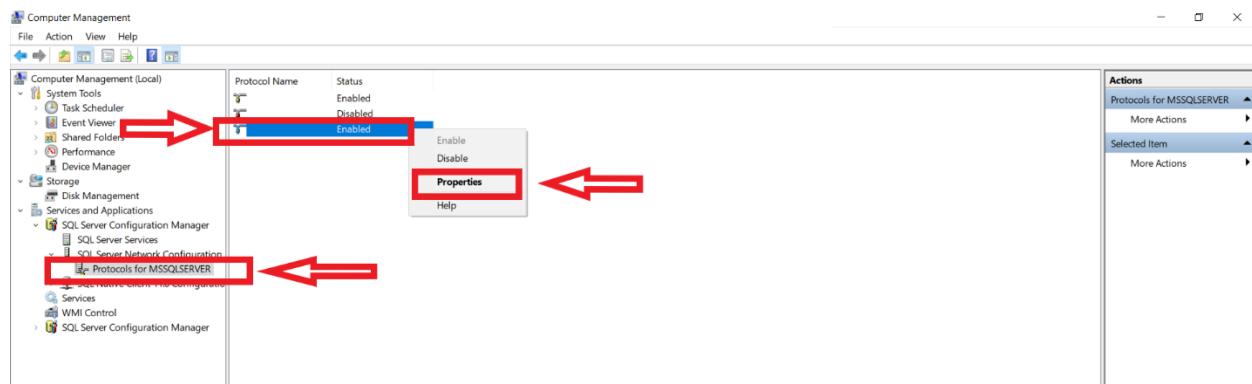


Figure 2.4: Configuration TCP/IP

- Step 4: Select Protocol and continue to choose “Yes” and then click the button “APPLY” and finally click the button “OK”.

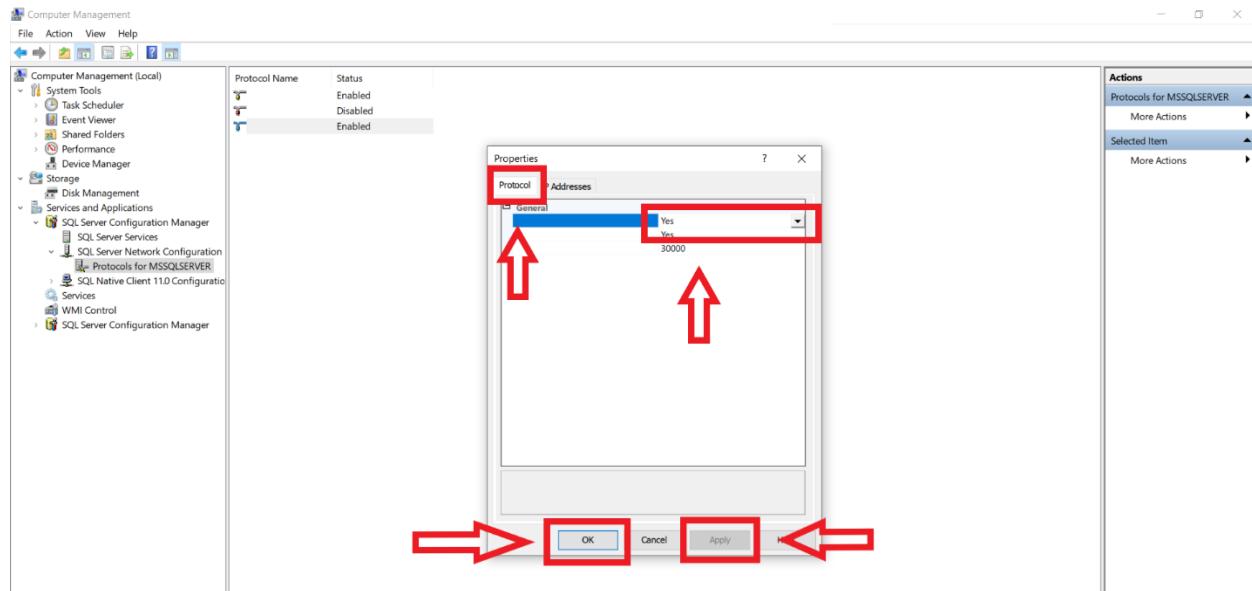


Figure 2.5: Configuration of Properties Protocol

- Step 5: Select IP Address and continue choose “Yes” (Same Figure 2.6).

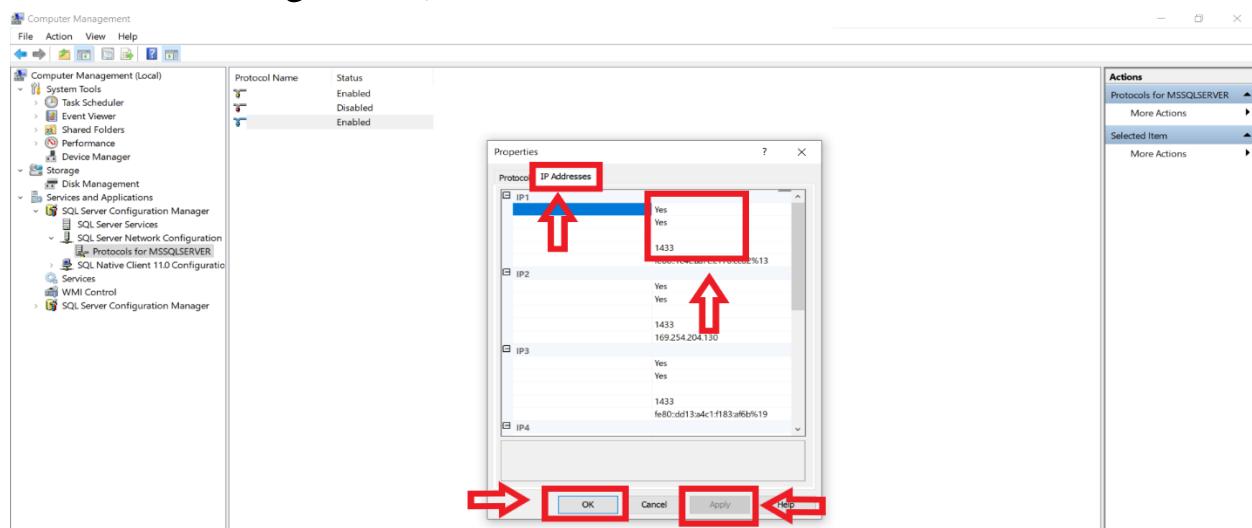


Figure 2.6: Configuration of Properties IP Address

2.2.3 Create User SQL Login

- Step1: On Start menu select Microsoft SQL Server Management.

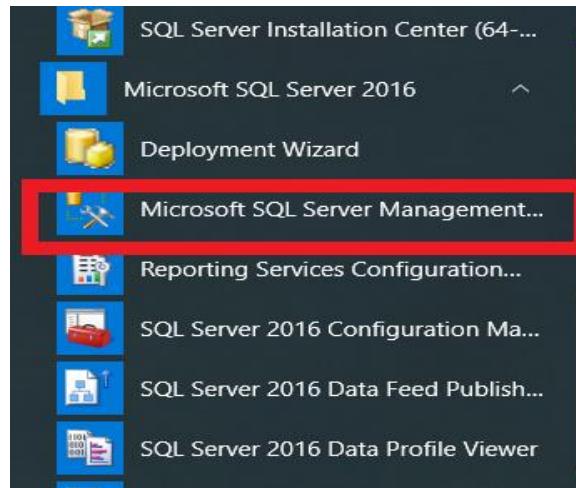


Figure 2.7: Select Microsoft SQL Server Management

- Step 2: Display form connect to server.

Enter login and password continue to click the button “CONNECT” (same figure 2.8).

After connecting to server successful display back group of SQL Server (same figure 2.9).

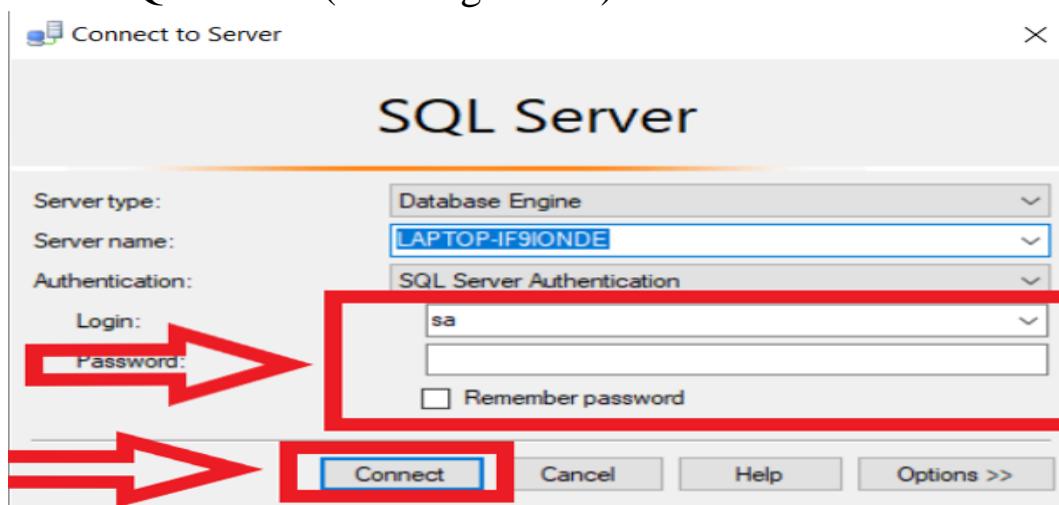
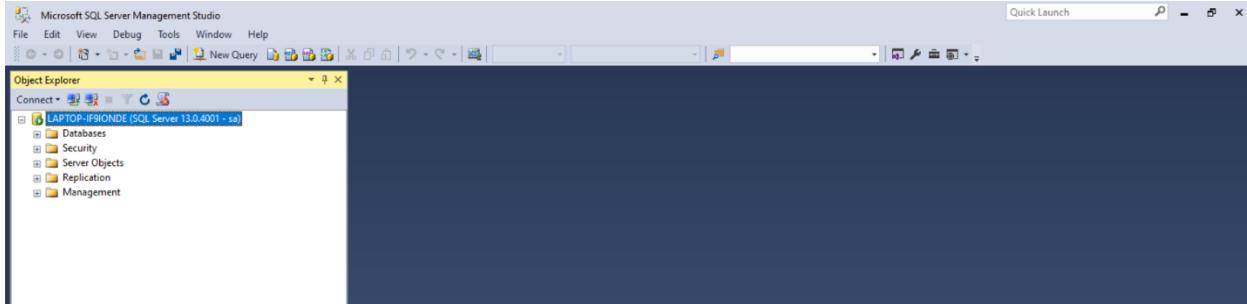


Figure 2.8: Connect to SQL Server

2.3 Create Database



```
CREATE DATABASE DBTEST_CER
GO
USE DBTEST_CER
GO
```

Figure 2.10: Example code create database

2.3.1 Create Table, Constant

```
CREATE TABLE USERS(
    USERS_ID VARCHAR(20) PRIMARY KEY,
    USERNAME NVARCHAR(40) NOT NULL,
    PASSWORDS NVARCHAR(40) NOT NULL,
    FULLNAME NVARCHAR(100) NOT NULL,
    GENDER NVARCHAR(10) NOT NULL,
    DOB DATE NOT NULL,
    PHONE VARCHAR(20) NOT NULL,
    EMAIL NVARCHAR(40) NOT NULL,
    ROLES NVARCHAR(40) NOT NULL,
    USERS_ADD NVARCHAR(100) NOT NULL,
    --CONSTRAINT CHECK_DOB CHECK(CONVERT(DATE,DOB,101) <= CONVERT(DATE,(GETDATE()-5475),101))
    --CONSTRAINT CHECK_DOB CHECK(DATEDIFF(YEAR,CONVERT(DATE,DOB,101), GETDATE()) = 15)
    --CONSTRAINT CHECK_DOB_USER CHECK(YEAR(CONVERT(VARCHAR(32),DOB,101)) <= YEAR(GETDATE())-24)
)
GO
```

Figure 2.11: Example code create table, constant

2.3.2 Insert Table

```
--(USERS_ID,USERNAME,PASSWORDS,FULLNAME,GENDER,DOB,PHONE,EMAIL,USERS_ADD)
INSERT [dbo].[USERS]([USERS_ID],[USERNAME], [PASSWORDS], [FULLNAME], [GENDER], [DOB], [PHONE], [EMAIL], [ROLES], [USERS_ADD])
VALUES('N'US1', N'DONGHI', N'12345', N'NGHIA DANG QUANG', N'FEMALE', N'1988-01-13', 1456789, N'DONGHI26@GMAIL.COM',N'Admin', N'CAN THO')
INSERT INTO USERS VALUES(N'US2', 'NLKHANH', '12345', 'KHAHN NGUYEN LE', 'FEMALE', '12/03/1990',123456789,'NLKHANH@GMAIL.COM',N'Keeper', N'CAN THO')
INSERT INTO USERS VALUES(N'US3', 'TTTHANG', '12345', 'THANG TO AN', 'MALE', '12/03/1990',123456789, 'TTTHANG@GMAIL.COM',N'Keeper', N'CAN THO')
INSERT INTO USERS VALUES(N'US4', 'NP THANH', '12345', 'THANH NGUYEN PHUC', 'FEMALE', '12/03/1990',123456789, 'NP THANH@GMAIL.COM',N'Admin', N'CAN THO')
```

Figure 2.12: Example code insert table

2.3.3 Create PROC

```

CREATE PROC sp_USERS_identityID
AS
BEGIN
DECLARE @UID NVARCHAR(20)
DECLARE @max INT
SELECT @max=COUNT(USER_ID)+1 FROM USERS WHERE USER_ID LIKE 'US'
SET @UID= 'US' + RIGHT('' + CAST( @max AS NVARCHAR(10)),10)
WHILE(EXISTS(SELECT USER_ID FROM USERS WHERE USER_ID=@UID))
BEGIN
    SET @max=@max+1
    SET @UID='US'+ RIGHT('' + CAST( @max AS NVARCHAR(10)),10)
END
SELECT @UID
END
GO

```

Figure 2.13: Example code create PROC

2.3.4 Update Table, Column

```

UPDATE STUDENT_CER
SET STUDENT_CER.RESULT=NULL

```

Figure 2.14: Example code update table, column

2.3.5 Delete Table, Column

```

DELETE FROM USERS
WHERE USER_ID = 'US1'

```

Figure 2.15: Example code delete table, column

→ Open files



DB_CERTIFICATE_Final.sql 11/27/2019 10:56 ... Microsoft SQL Ser... 21 KB

And then CTRL + A and press key F5 or choose **Execute**

→ Restore a database on SQL Server using *.mdf, *.ldf and *.ndf files.

Using Enterprise Manager:

- Expand the registered SQL server
- Right-click Databases, select All Tasks -> Attach Database...
- Click the "..." button to browse for the *.mdf file
- Highlight the necessary *.mdf file and click OK
- Click OK again
- The database will now show up in Enterprise Manager

OR

- detach the database (right click the database and click **Detach**)
- copy the *.mdf and *.ldf files to your backup location
- attach the database (right click **Databases** and click **Attach**)

This is the path where you will find MDF file:

C:\Program Files\Microsoft SQL
Server\MSSQL13.SQLEXPRESS\MSSQL\DATA

➔ **Backup database**

- Open SQL Server Management Studio Express and connect to the SQL server.
- Expand **Databases**.
- Right-click on the database you want to back up, then select **Tasks > Back up**. (This is not available for version 2018/2019)
- On the Back up Database window, make sure the **Database** field contains the name of the database you want to back up.
- Select the **Backup Type**. By default, it is **Full** - leave it set to that.
- Click **Remove** to remove the default/last backup file name.
- Click **Add** to open the Select Backup Destination window.
- Click [...] next to the File Name field.
- On the Locate Database Files window, select the folder where you want to backup file to go. By default, it is ...\\Microsoft SQL Server\\MSSQL.1\\MSSQL\\Backup.

- In the **File Name** field, type the name for this backup, with a ***.bak** extension. For example, **xyz_20080221.bak** for a backup of the XYZ database created on 21 February 2008.
- Click **OK** to close the Locate Database Files window.
- Click **OK** to close the Select Backup Destination window.
- Click **OK** to start the backup. The progress icon displays in the lower left corner, and a ‘completed successfully’ message displays when it’s done.

3. Install Software Certificate:

- **Step 1: Download file setup**



Figure 3.1: Click on file “eProjectJava.exe”

- **Step 2: Install file setup.**

appCertificate



Figure 3.2: Step 2.1 After Step 1 of installing the setup and click the button “Next” 2 times

appCertificate

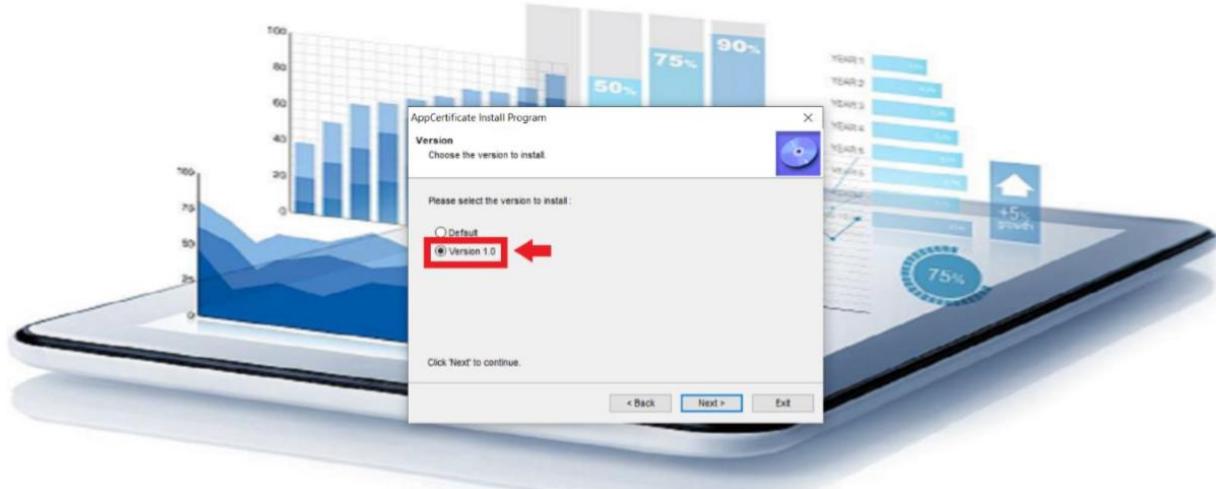


Figure 3.3: Step 2.2 of installing the setup choose “Version 1.0” and click the button “Next”

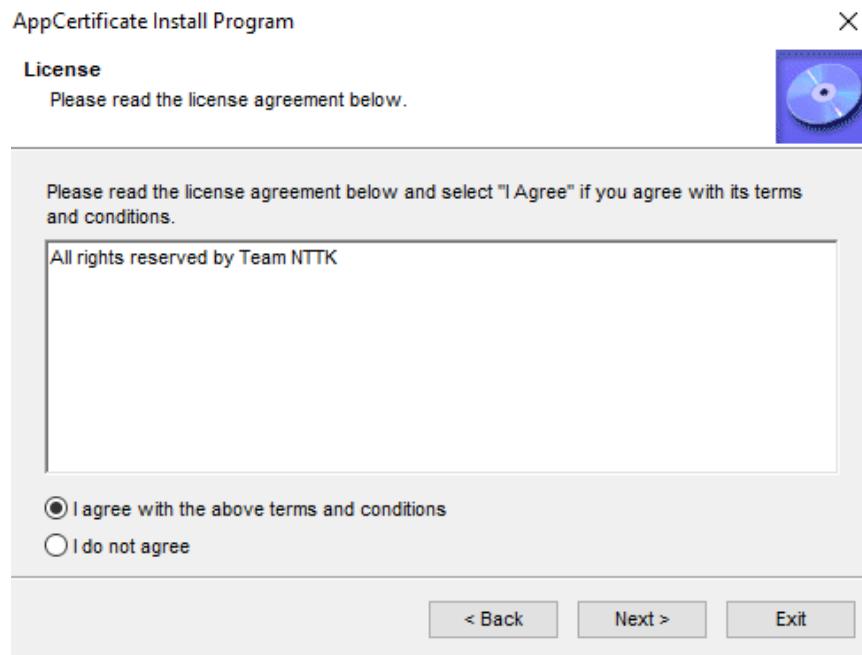


Figure 3.4: Step 2.3 of installing the setup choose “I agree” and click the button “Next”

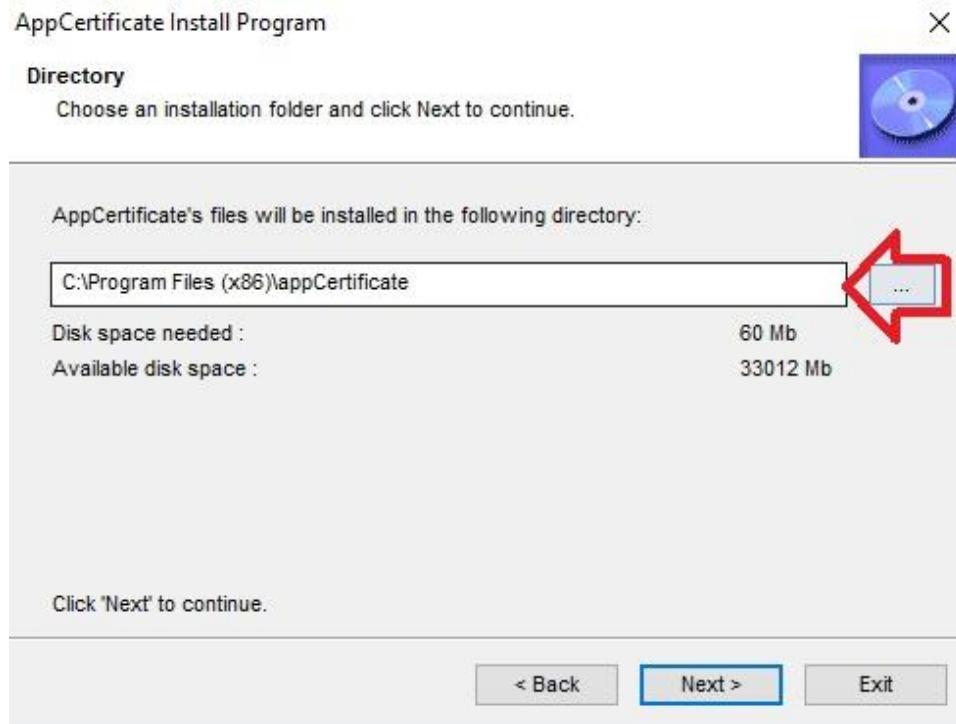


Figure 3.5: Step 2.4 of installing the setup choose file save and click the button “Next”

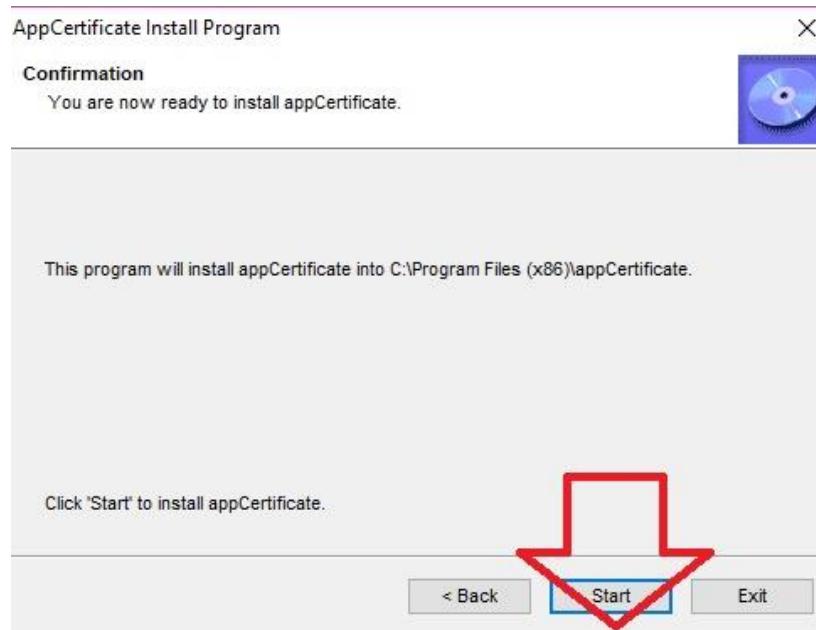


Figure 3.6: Step 2.5 of installing the setup and Click the button “Start”

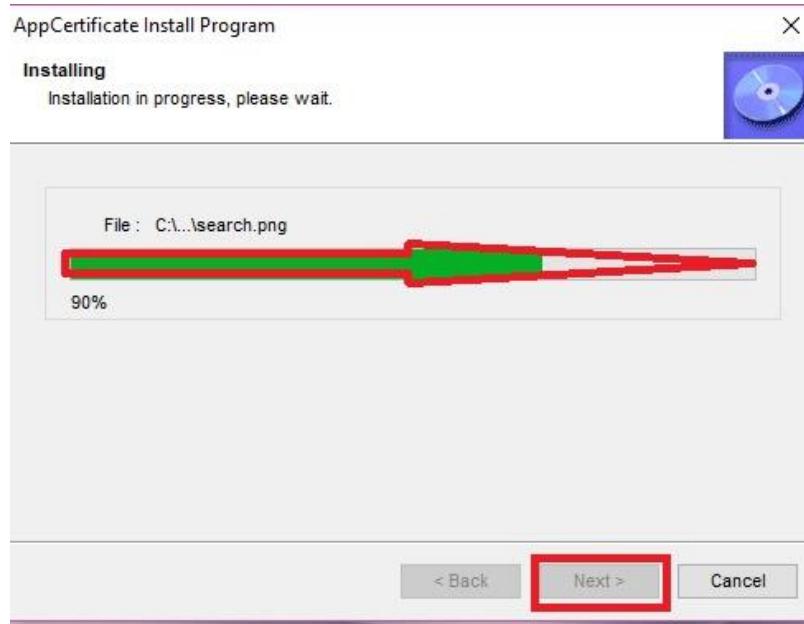


Figure 3.7: Step 2.6 of installing the setup and load application, click the button “Next”, and then click the button “Exit”

- **Step 3: Open the saved folder during installation**



Figure 3.8: On desktop have an icon “CertificateBC” click-right and then choose Open file location

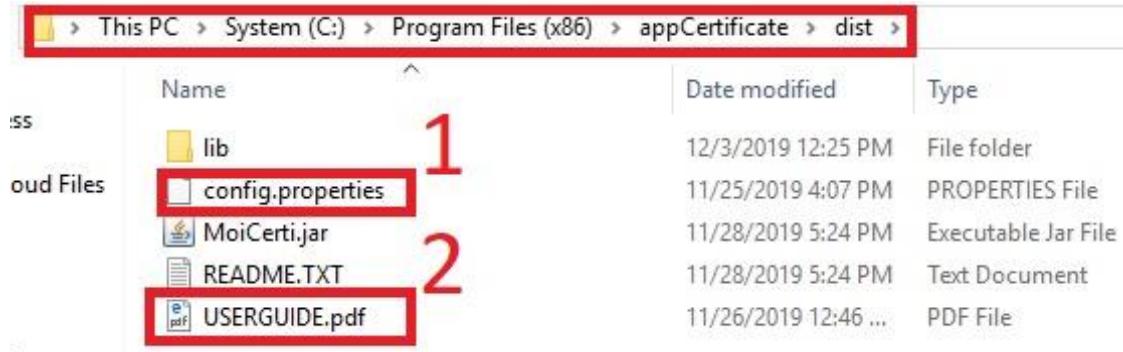


Figure 3.9: checking in folder “dist” have two files include (config.properties and USERGUIDE.pdf)

*****Notes:** if a folder “dist” have not some files here. You must back to folder “appCertificate” and then copy two files here to folder “dist”.

4. How to Management System

4.1 Management Users

- Step 1: Login connection with Database.

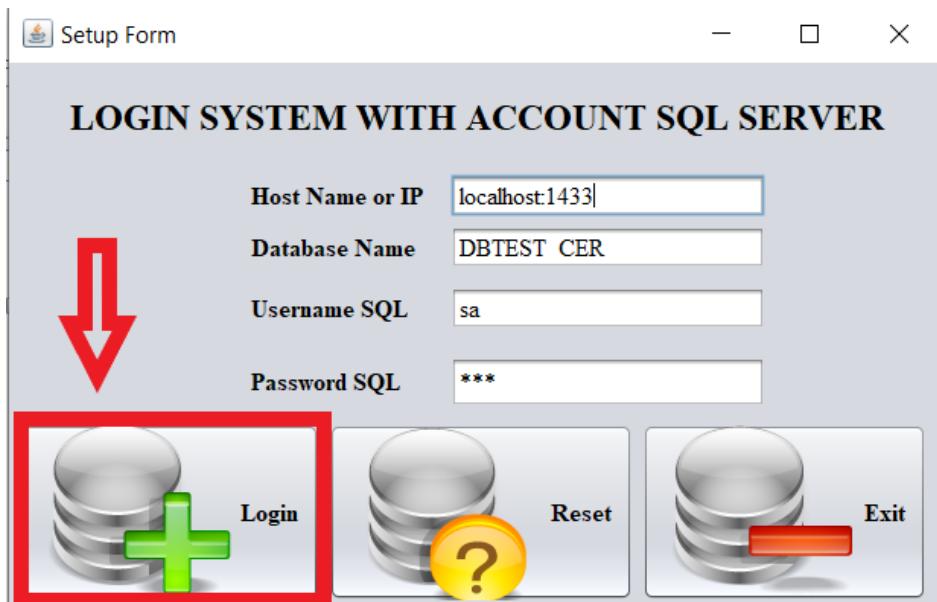


Figure 4.1: Form connect to Database



Figure 4.2: Form connect to database success

- Step 2: Login username and password



Figure 4.3: Form login to system

- Step 3: Form system management certificate.



Figure 4.4: Form main of system management certificate

4.2 Management Student

- Step 1: In form system management certificate. Click the button “Management Student”



Figure 4.5: Click the button “Management Student”

- Step 2: Display Form Management Student

The screenshot shows a Windows application window titled 'Management'. At the top, there are fields for 'Student ID' (STU11...), 'Gender' (Male/Female), 'Date of Birth' (Nov 25, 2019), and several text input fields for 'Student Name', 'Identity Card', 'Email', 'Address', and 'Phone'. Below these are buttons for '+ Add', 'Edit', 'Delete', 'Save', 'Reset', 'Report', and 'Close'. A large table below the buttons displays a list of student records with columns for ID Student, Full name, Identity Card, Gender, DOB, Phone, Email, and Address. The data in the table is as follows:

ID Student	Full name	Identity Card	Gender	DOB	Phone	Email	Address
STU1	Le Van Quyet	302980780	Male	1990-12-12	905682594	quyet@gmail.com	Can Tho
STU10	Nguyen Thi Loi	626384729	Male	1994-12-07	905682603	loi@gmail.com	Tra Vinh
STU2	Nguyen Thi Tam	890228465	Female	1991-01-01	905682595	tam@gmail.com	Vinh Long
STU3	Doan Van Chien	864536278	Male	1992-03-20	905682596	chien@gmail.com	Dong Thap
STU4	Tran Van Dau	837261538	Male	1993-04-23	905682597	dau@gmail.com	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gmail.com	Long An
STU6	Pham Van Chan	364826243	Male	1995-12-04	905682599	chan@gmail.com	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gmail.com	Ca Mau
STU8	Nguyen Khai Dinh	284634636	Male	2000-04-05	905682601	dinh@gmail.com	Bac Lieu
STU9	Ly Van Thang	636329367	Female	1996-08-09	905682602	thang@gmail.com	Soc Trang

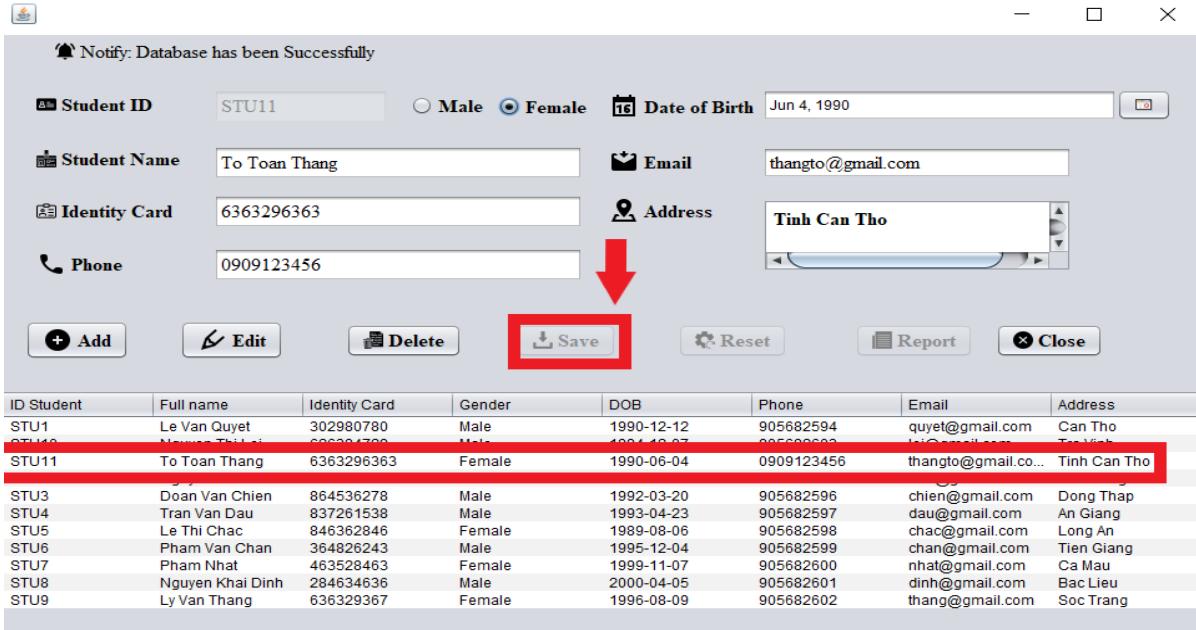
Figure 4.6: Back group form “Management”

- Step 3: User want add information student

The screenshot shows the same 'Management' form as Figure 4.6, but with a red box and arrow pointing to the '+ Add' button at the bottom left. This indicates the user's intention to add new student information. The rest of the interface and data grid remain the same.

Figure 4.7: Click the button “Add” in Management Student

After clicking the button “Add”. Enter information student and clicking the button “Save” and then the information of the student will display in the Table View.

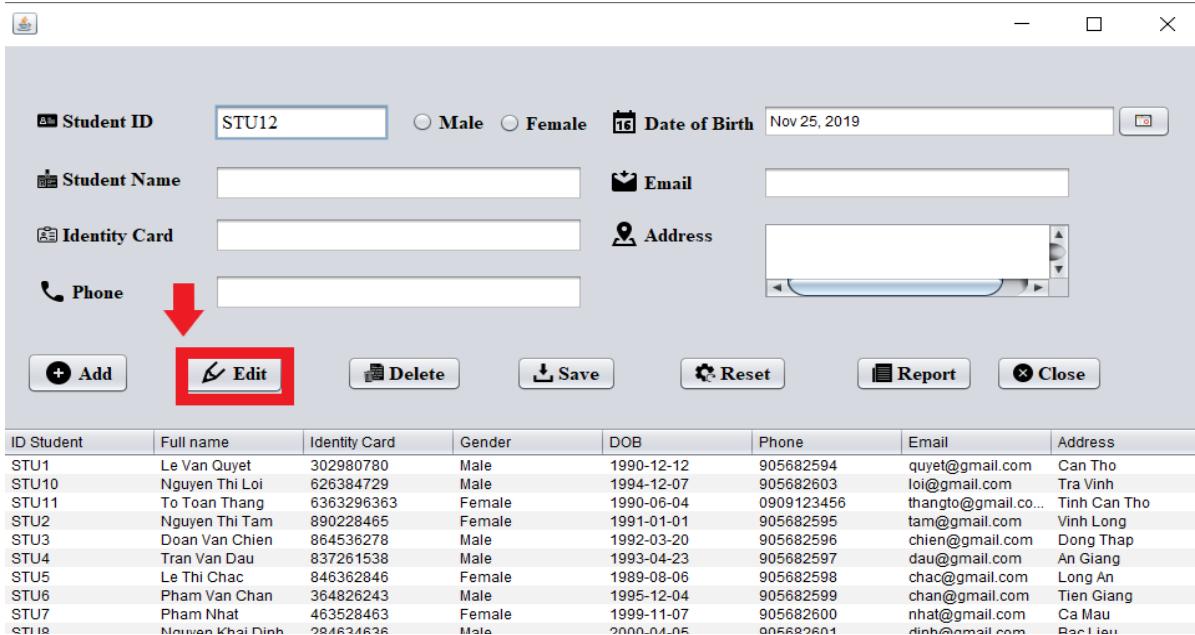


The screenshot shows a Java Swing application window titled "Notify: Database has been Successfully". The form contains fields for Student ID (STU11), Gender (Female), Date of Birth (Jun 4, 1990), Student Name (To Toan Thang), Email (thangto@gmail.com), Identity Card (6363296363), Address (Tinh Can Tho), and Phone (0909123456). A red arrow points to the "Save" button, which is highlighted with a red box. Below the form is a table view displaying student data, with the last row (STU11) highlighted in red, indicating it is the newly added record.

ID Student	Full name	Identity Card	Gender	DOB	Phone	Email	Address
STU1	Le Van Quyet	302980780	Male	1990-12-12	905682594	quyet@gmail.com	Can Tho
STU10	Nguyen Thi Loi	626384729	Male	1994-12-07	905682603	loi@gmail.com	Tra Vinh
STU11	To Toan Thang	6363296363	Female	1990-06-04	0909123456	thangto@gmail.co...	Tinh Can Tho
STU3	Doan Van Chien	864536278	Male	1992-03-20	905682596	chien@gmail.com	Dong Thap
STU4	Tran Van Dau	837261538	Male	1993-04-23	905682597	dau@gmail.com	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gmail.com	Long An
STU6	Pham Van Chan	364826243	Male	1995-12-04	905682599	chan@gmail.com	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gmail.com	Ca Mau
STU8	Nguyen Khai Dinh	284634636	Male	2000-04-05	905682601	dinh@gmail.com	Bac Lieu
STU9	Ly Van Thang	636329367	Female	1996-08-09	905682602	thang@gmail.com	Soc Trang

Figure 4.8: After clicking the button “Add”

- Step 4: A User wants to edit information students



The screenshot shows a Java Swing application window with a similar layout to Figure 4.8. It displays fields for Student ID (STU12), Gender (Male/Female), Date of Birth (Nov 25, 2019), Student Name, Email, Identity Card, Address, and Phone. A red arrow points to the "Edit" button, which is highlighted with a red box. Below the form is a table view displaying student data, with the second row (STU12) highlighted in red, indicating it is the selected record for editing.

ID Student	Full name	Identity Card	Gender	DOB	Phone	Email	Address
STU1	Le Van Quyet	302980780	Male	1990-12-12	905682594	quyet@gmail.com	Can Tho
STU10	Nguyen Thi Loi	626384729	Male	1994-12-07	905682603	loi@gmail.com	Tra Vinh
STU11	To Toan Thang	6363296363	Female	1990-06-04	0909123456	thangto@gmail.co...	Tinh Can Tho
STU2	Nguyen Thi Tam	890228465	Female	1991-01-01	905682595	tam@gmail.com	Vinh Long
STU3	Doan Van Chien	864536278	Male	1992-03-20	905682596	chien@gmail.com	Dong Thap
STU4	Tran Van Dau	837261538	Male	1993-04-23	905682597	dau@gmail.com	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gmail.com	Long An
STU6	Pham Van Chan	364826243	Male	1995-12-04	905682599	chan@gmail.com	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gmail.com	Ca Mau
STU8	Nguyen Khai Dinh	284634636	Male	2000-04-05	905682601	dinh@gmail.com	Bac Lieu

Figure 4.9: Click the button “Edit” in Management Student

ID Student	Full name	Identity Card	Gender	DOB	Phone	Email	Address
STU1	Le Van Quyet	302980780	Male	1990-12-12	905682594	quyet@gmail.com	Can Tho
STU10	Nguyen Thi Loi	626384729	Male	1994-12-07	905682603	loi@gmail.com	Tra Vinh
STU11	To Toan Thang	6363296363	Female	1990-06-04	0909123456	thangto@gmail.co...	Tinh Can Tho
STU2	Nguyen Thi Tam	890228465	Female	1991-01-01	905682595	tam@gmail.com	Vinh Long
STU3	Doan Van Chien	864536278	Male	1992-03-20	905682596	chien@gmail.com	Dong Thap
STU4	Tran Van Dau	837261538	Male	1993-04-23	905682597	dau@gmail.com	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gmail.com	Long An
STU6	Pham Van Chan	364826243	Male	1995-12-04	905682599	chan@gmail.com	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gmail.com	Ca Mau
STU8	Nguyen Khai Dinh	284634636	Male	2000-04-05	905682601	dinh@gmail.com	Bac Lieu
STU9	Ly Van Thang	636329367	Female	1996-08-09	905682602	thang@gmail.com	Soc Trang

Figure 4.10: After clicking the button “Edit” in Management Student

After clicking the button “Edit”. Enter information students want to edit and click the button “Save”. And display notifies.

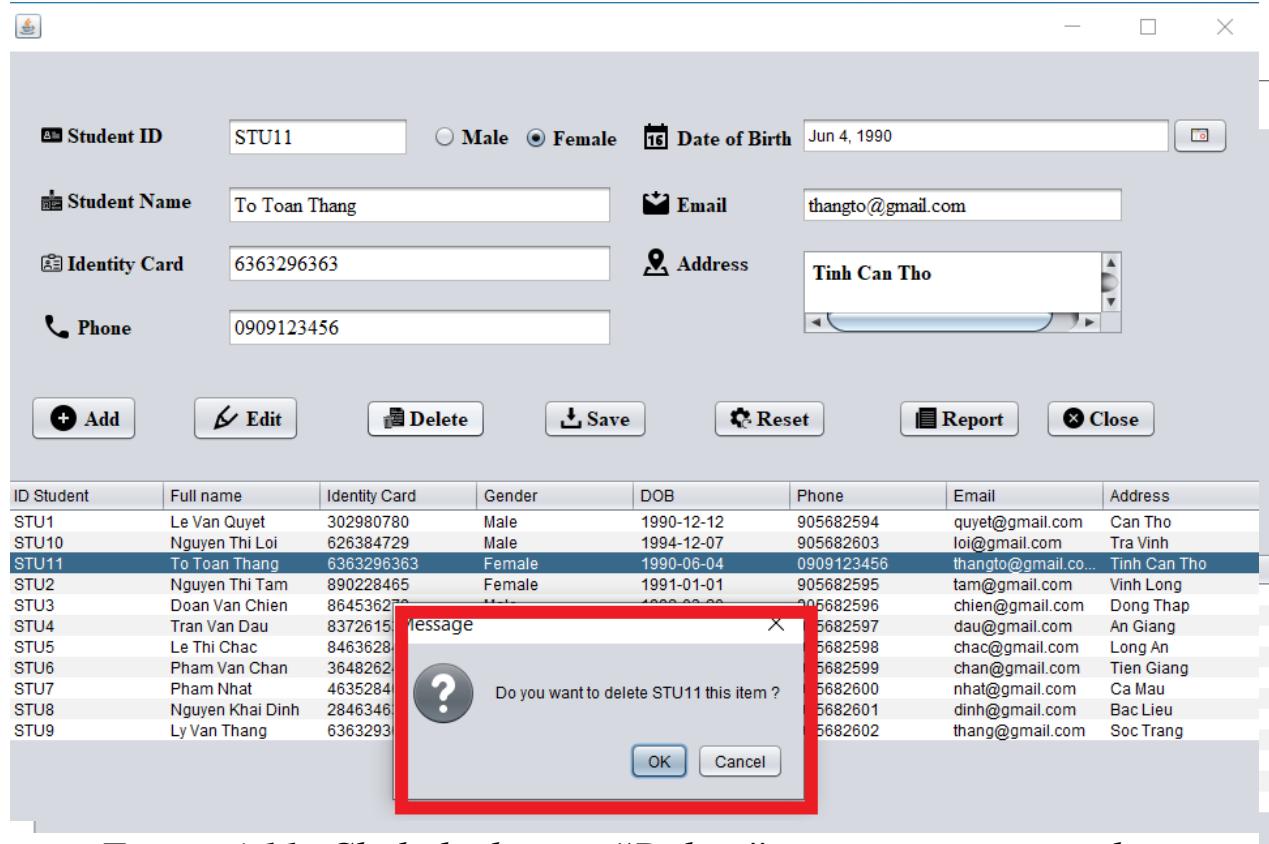


Figure 4.11: Click the button “Delete” in management student

- Step 5: A User wants to delete information students. After clicking the button “Delete”. Display a message. Click the button “OK” in a message.

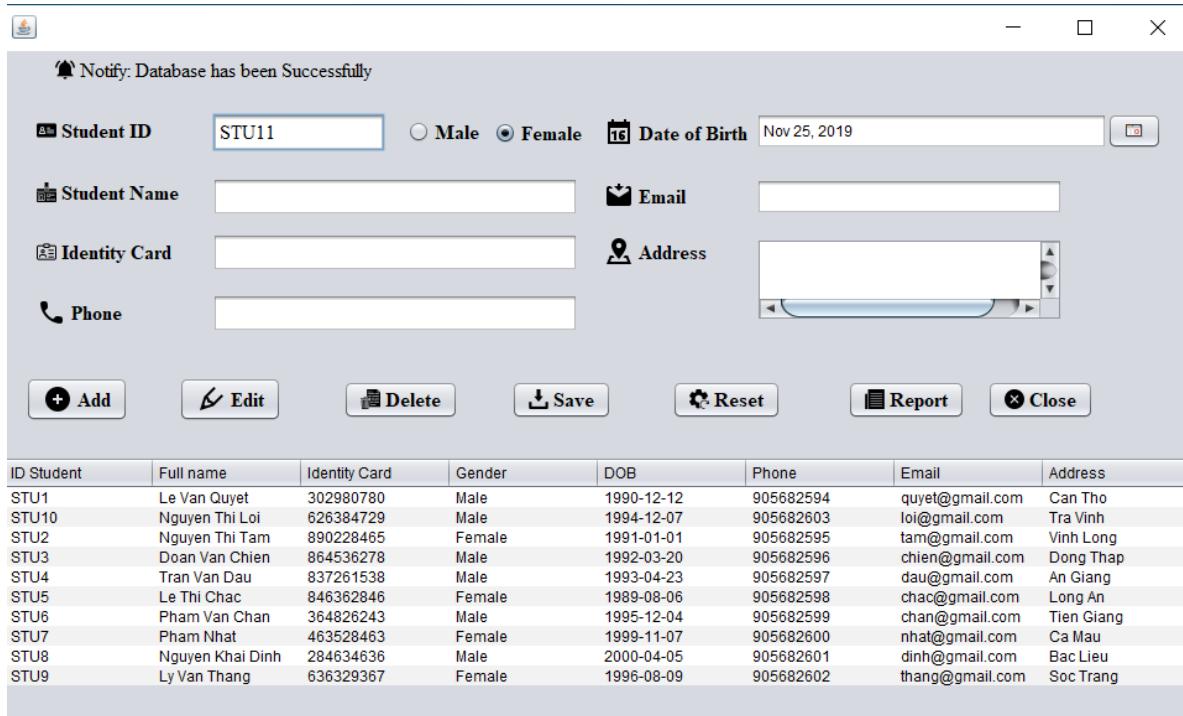


Figure 4.12: After clicking the button “Delete” in management student

- Step 6: A User wants to report information students.

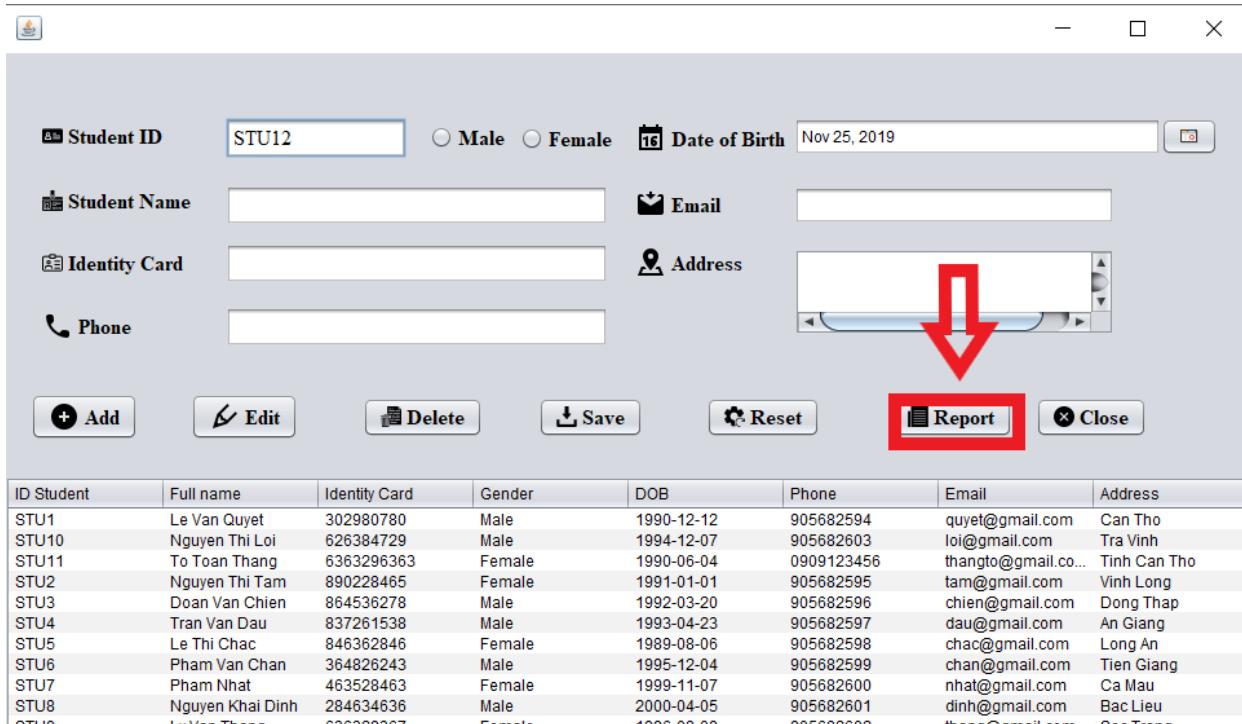


Figure 4.13: Clicking the button “Report” in management students

After clicking the button “Report” and then display form report. Choosing a folder saves and enter a name which you want to save. And finally, click the button “Save”

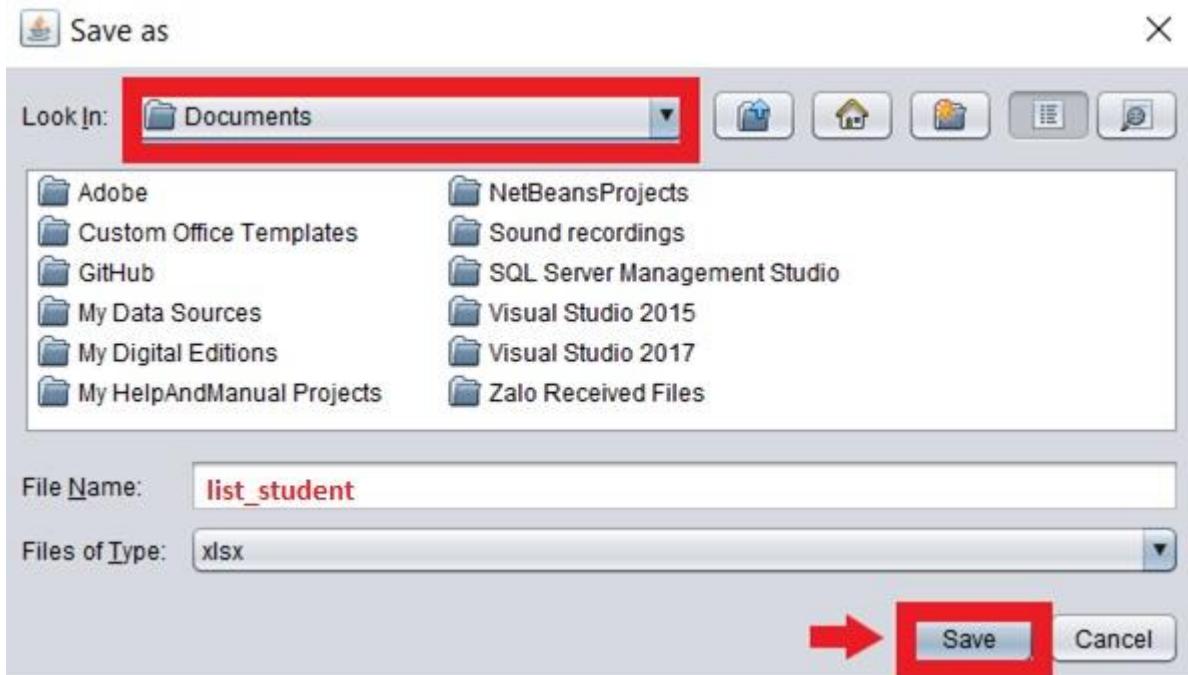


Figure 4.14: Report file list_student.xlsx

- Step 7: User want close form.

Click the button “Close” and back to form management main.

The screenshot shows a window titled "Management Student". At the top, there are fields for "Student ID" (STU11), "Gender" (Male/Female), "Date of Birth" (Nov 25, 2019), and several text input fields for "Student Name", "Identity Card", "Address", and "Phone". Below these are buttons for "+ Add", "Edit", "Delete", "Save", "Reset", "Report", and a red-bordered "Close" button. A large red arrow points down to the "Close" button. At the bottom is a table listing student information:

ID Student	Full name	Identity Card	Gender	DOB	Phone	Email	Address
STU1	Le Van Quyet	302980780	Male	1990-12-12	905682594	quyet@gmail.com	Can Tho
STU10	Nguyen Thi Loi	626384729	Male	1994-12-07	905682603	loi@gmail.com	Tra Vinh
STU2	Nguyen Thi Tam	890228465	Female	1991-01-01	905682595	tam@gmail.com	Vinh Long
STU3	Doan Van Chien	864536278	Male	1992-03-20	905682596	chien@gmail.com	Dong Thap
STU4	Tran Van Dau	837261538	Male	1993-04-23	905682597	dau@gmail.com	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gmail.com	Long An
STU6	Pham Van Chan	364826243	Male	1995-12-04	905682599	chan@gmail.com	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gmail.com	Ca Mau
STU8	Nguyen Khai Dinh	284634636	Male	2000-04-05	905682601	dinh@gmail.com	Bac Lieu
STU9	Ly Van Thang	636329367	Female	1996-08-09	905682602	thang@gmail.com	Soc Trang

Figure 4.15: Click the button “Close” in management student

The screenshot shows a window titled "SYSTEM MANAGEMENT CERTIFICATE". On the left is a vertical menu with buttons for "Registry Student", "Management Certificate", "Management Certificate Store", "Management Subject", "Management Student", "Management Mark", "Student Result", "Student Fail", "Print Certificate", and "Management User". The main area features a central icon of three stylized human figures (yellow, blue, and red) connected by lines. Below this is a search bar with a magnifying glass icon and the word "Search". At the bottom is a table with columns "NAME", "CERTIFICATE", "EXAM DATE", and "No".

Figure 4.16: Back to form System Management Certificate

4.3 Management Register of Student

- Step 1: In form system management certificate. Click the button “Management Register Student”.

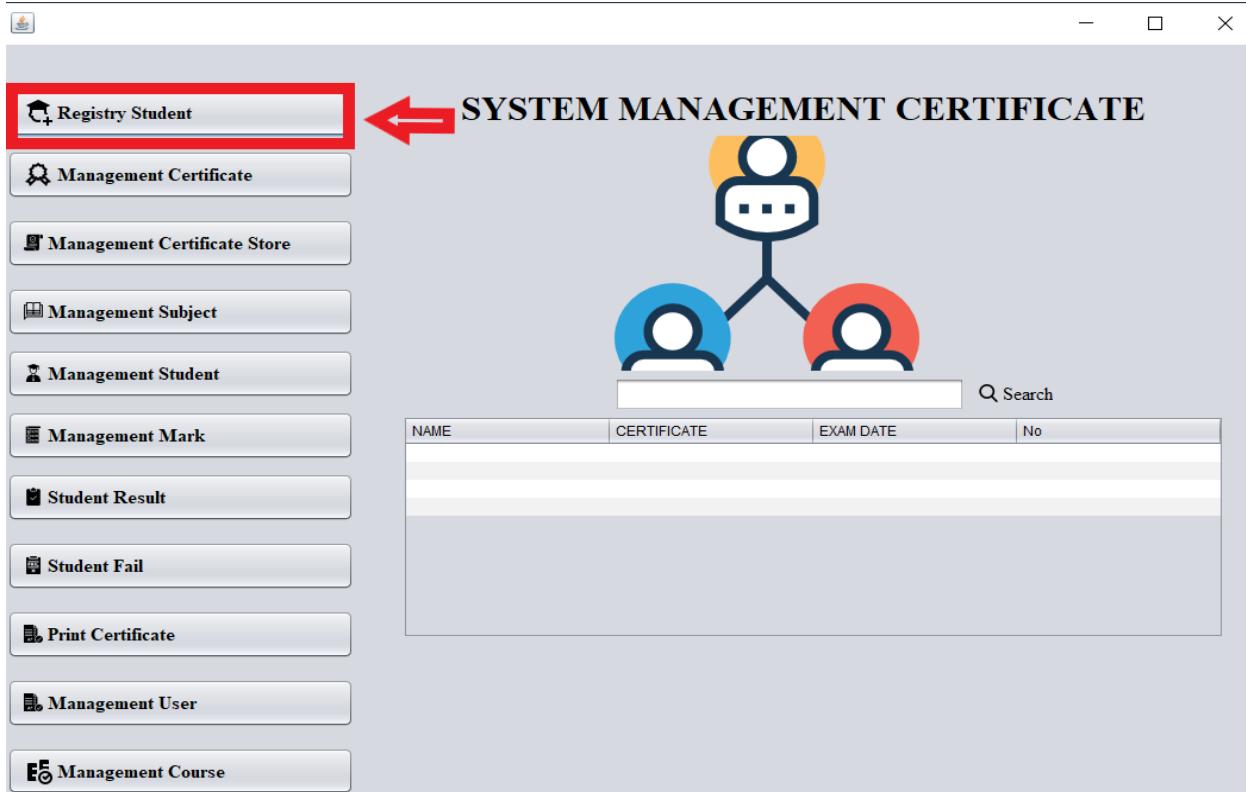


Figure 4.17: Click the button “Registry student”

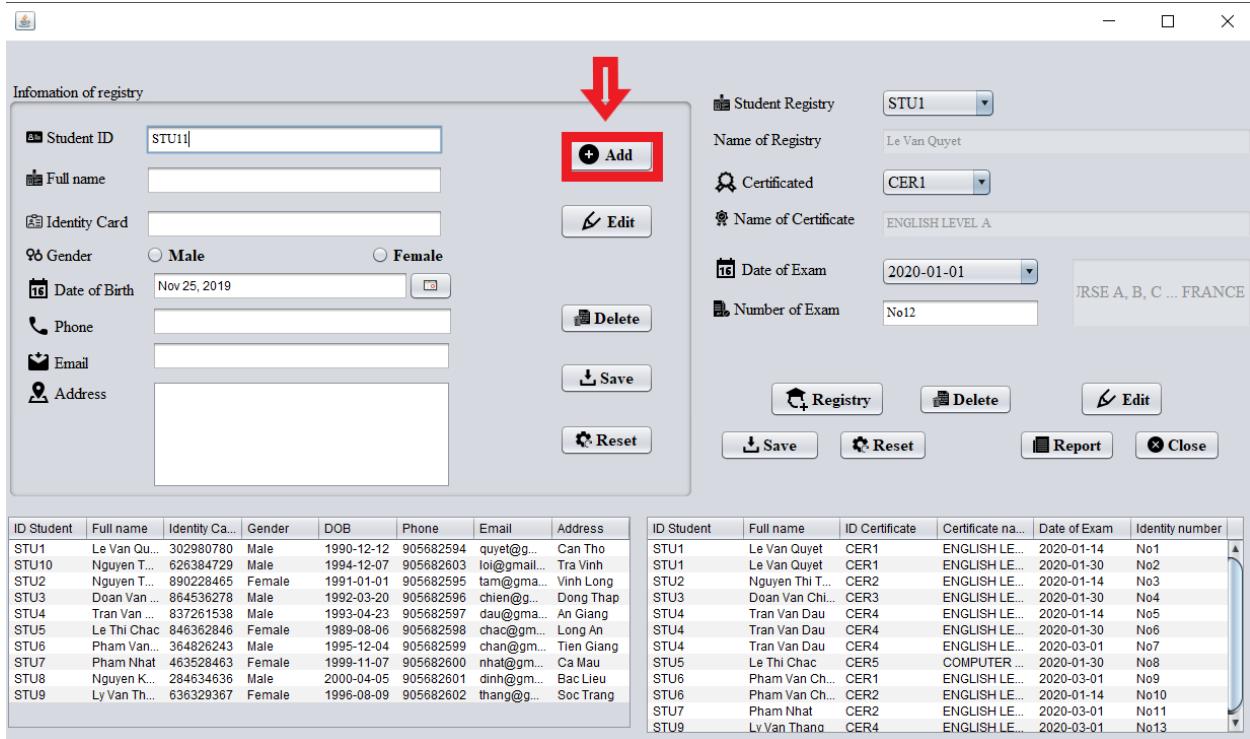
- Step 2: Display form Register Student.

ID Student	Full name	Identity Ca...	Gender	DOB	Phone	Email	Address
STU1	Le Van Qu...	302980780	Male	1990-12-12	905682594	quyen@g...	Can Tho
STU10	Nguyen T...	626384729	Male	1994-12-07	905682603	loi@gmail...	Tra Vinh
STU2	Nguyen T...	890228465	Female	1991-01-01	905682595	tam@gmail...	Vinh Long
STU3	Doan Van ...	864536278	Male	1992-03-20	905682596	chien@g...	Dong Thap
STU4	Tran Van ...	837261538	Male	1993-04-23	905682597	dau@gmail...	Ai Gianh
STU5	Le Thi Qu...	945678945	Female	1995-05-05	905682598	tran@gmail...	Long An

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-14	No1
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-30	No2
STU2	Nguyen Thi...	CER2	ENGLISH LE...	2020-01-14	No3
STU3	Doan Van Chi...	CER3	ENGLISH LE...	2020-01-30	No4
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-14	No5
STU5	Le Thi Qu...	CER4	ENGLISH LE...	2020-01-30	No6

Figure 4.18: Form Register Student

- Step 3: A User wants to add information students



The screenshot shows the 'Student Registry' application interface. On the left, there is a form titled 'Infomation of registry' with fields for Student ID (STU11), Full name, Identity Card, Gender (Male selected), Date of Birth (Nov 25, 2019), Phone, Email, and Address. On the right, there are dropdown menus for Student Registry (STU1), Name of Registry (Le Van Quyet), Certificated (CER1), Name of Certificate (ENGLISH LEVEL A), Date of Exam (2020-01-01), and Number of Exam (No12). Below the form are buttons for Add, Edit, Delete, Save, Reset, Registry, Delete, Report, and Close. At the bottom, there are two tables: one for student information and one for certificate details.

ID Student	Full name	Identity Ca...	Gender	DOB	Phone	Email	Address
STU1	Le Van Qu...	302980780	Male	1990-12-12	905682594	quyet@g...	Can Tho
STU10	Nguyen T...	626384729	Male	1994-12-07	905682603	lo@gmail...	Tra Vinh
STU2	Nguyen T...	890228465	Female	1991-01-01	905682595	tam@gma...	Vinh Long
STU3	Doan Van ...	864536278	Male	1992-03-20	905682596	chien@g...	Dong Thap
STU4	Tran Van ...	837261538	Male	1993-04-23	905682597	dau@gma...	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gm...	Long An
STU6	Pham Van ...	364826243	Male	1995-12-04	905682599	chan@gm...	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gm...	Ca Mau
STU8	Nguyen K...	284634636	Male	2000-04-05	905682601	dinh@gm...	Bac Lieu
STU9	Ly Van Th...	636329367	Female	1996-08-09	905682602	thang@g...	Soc Trang

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-14	No1
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-30	No2
STU2	Nguyen Thi T...	CER2	ENGLISH LE...	2020-01-14	No3
STU3	Doan Van Chi...	CER3	ENGLISH LE...	2020-01-30	No4
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-14	No5
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-30	No6
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-03-01	No7
STU5	Le Thi Chac	CER5	COMPUTER ...	2020-01-30	No8
STU6	Pham Van Ch...	CER1	ENGLISH LE...	2020-03-01	No9
STU6	Pham Van Ch...	CER2	ENGLISH LE...	2020-01-14	No10
STU7	Pham Nhat	CER2	ENGLISH LE...	2020-03-01	No11
STU9	Ly Van Thanh	CER4	ENGLISH LE...	2020-03-01	No13

Figure 4.19: Click the button “Add” in registry student

After clicking the button “add”. Enter the information of the students and click the button “save”. (THE SAME STEP 3 – 4.2)

- Step 4: A User wants to edit information students

The screenshot shows a Windows application window titled "Information of registry". On the left, there is a form with fields for Student ID (STU11), Full name, Identity Card, Gender (Male selected), Date of Birth (Nov 25, 2019), Phone, Email, and Address. To the right of the form is a grid of student data. At the top right of the form area, there is an "Edit" button with a red arrow pointing to it. Below the form is a table of student records.

ID Student	Full name	Identity Ca...	Gender	DOB	Phone	Email	Address
STU1	Le Van Qu...	302980780	Male	1990-12-12	905682594	quyet@g...	Can Tho
STU10	Nguyen T...	626384729	Male	1994-12-07	905682603	loi@gmail.c...	Tra Vinh
STU2	Nguyen T...	890228465	Female	1991-01-01	905682595	tam@gmail...	Vinh Long
STU3	Doan Van ...	884536278	Male	1992-03-20	905682596	chien@g...	Dong Thap
STU4	Tran Van ...	837261538	Male	1993-04-23	905682597	dau@gmail...	An Giang
STU5	Le Thi Chac	302980781	Female	1998-08-09	905682598	chac@gm...	Long An
STU6	Pham Van...	364926243	Male	1995-12-04	905682599	chan@gmail...	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gmail...	Ca Mau
STU8	Nguyen K...	284634636	Male	2000-04-05	905682601	dinh@gmail...	Bac Lieu
STU9	Ly Van Th...	636329367	Female	1996-08-09	905682602	thang@g...	Soc Trang

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-14	No1
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-30	No2
STU2	Nguyen Thi T...	CER2	ENGLISH LE...	2020-01-14	No3
STU3	Doan Van Ch...	CER3	ENGLISH LE...	2020-01-30	No4
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-14	No5
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-30	No6
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-03-01	No7
STU5	Le Thi Chac	CER5	COMPUTER...	2020-01-30	No8
STU6	Pham Van Ch...	CER1	ENGLISH LE...	2020-03-01	No9
STU6	Pham Van Ch...	CER2	ENGLISH LE...	2020-01-14	No10
STU7	Pham Nhat	CER2	ENGLISH LE...	2020-03-01	No11
STU9	Ly Van Thanh	CER4	ENGLISH LE...	2020-03-01	No13

Figure 4.20: Click the button “Edit” in registry student

After clicking the button “Edit” and choose information student and enter information student be edit and click the button “Save”.
(THE SAME STEP 4 - 4.2)

- Step 5: A User wants to delete information students

The screenshot shows a Windows application window titled "Information of registry". On the left, there is a form with fields for Student ID (STU4), Full name, Identity Card, Gender (Male selected), Date of Birth (Dec 3, 2019), Phone, Email, and Address. To the right of the form is a grid of student data. At the top right of the form area, there is a "Delete" button with a red arrow pointing to it. Below the form is a table of student records.

ID St...	Full name	Identity Ca...	Date of Bi...	Gender	Phone	Email	Address
STU1	Le Van Quyet Le...	302980780	1990-12-12	Female	905682594	quyet@gm...	Can Tho Le...
STU...	Nguyen Thi Loi	302980789	1994-12-07	Male	905682603	loi@gmail.c...	Tra Vinh
STU2	Nguyen Thi Tam	302980781	1991-01-01	Female	905682595	tam@gmail...	Vinh Long
STU3	Doan Van Chien	302980782	1992-03-20	Male	905682596	chien@iom...	Don Thap
STU4	Tran Van Dau	302980783	1993-04-23	Female	905682597	dau@gmail...	Tp. Long Xu...
STU5	Le Thi Chac	302980784	1999-08-06	Female	905682598	chac@gm...	Long An
STU6	Pham Van Chan	302980785	1995-12-04	Male	905682599	chan@gmail...	Tien Giang
STU7	Pham Nhat	302980786	1999-11-07	Female	905682600	nhat@gmail...	Ca Mau

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU4	Tran Van Dau	CER4	English Level...	2020-01-14	No5
STU4	Tran Van Dau	CER4	English Level...	2020-01-30	No6
STU4	Tran Van Dau	CER4	English Level...	2020-03-01	No7
STU5	Le Thi Chac	CER5	Computer mail...	2020-01-20	No8

Figure 4.21: Click the button “Delete” in registry student

After clicking the button “Delete” and choose information students have registered and then display a message and click “OK”. If the certificate, student, and course have a certificate ID (4), student ID (5), exam date (3) each to an identity number (1). Else you must delete that certificates, students (5.1, 5.2), and courses each to an identity number (1).

- Step 6: User want report information student

The screenshot shows a Java Swing application window. On the left, there's a form for adding a new student record. It includes fields for Student ID (STU11), Full name, Identity Card, Gender (Male selected), Date of Birth (Nov 25, 2019), Phone, Email, and Address. There are buttons for Add, Edit, Delete, Save, Reset, and Report. On the right, there's a panel for a 'Student Registry' with dropdowns for Name of Registry (Le Van Quyet), Certificated (CER1), Name of Certificate (ENGLISH LEVEL A), Date of Exam (2020-01-01), and Number of Exam (No12). Below these are buttons for Registry, Delete, Edit, Save, Reset, and Report. A red arrow points to the 'Report' button. At the bottom, there are two tables: one for 'ID Student' and 'Full name' and another for 'ID Student', 'Full name', 'ID Certificate', 'Certificate na...', 'Date of Exam', and 'Identity number'. Both tables contain data for multiple students.

ID Student	Full name	Identity Ca...	Gender	DOB	Phone	Email	Address
STU1	Le Van Qu...	302980780	Male	1990-12-12	905682594	quyet@g...	Can Tho
STU10	Nguyen T...	626384729	Male	1994-12-01	905682603	toi@gmail...	Tra Vinh
STU2	Nguyen T...	890228465	Female	1991-01-01	905682595	tam@gma...	Vinh Long
STU3	Doan Van ...	864536278	Male	1992-03-20	905682596	chien@g...	Dong Thap
STU4	Tran Van ...	837261532	Male	1993-04-23	905682597	dau@gma...	An Giang
STU5	Le Thi Chac	846362848	Female	1989-08-06	905682598	chac@gm...	Long An
STU6	Pham Van...	364826243	Male	1995-12-04	905682599	chan@gm...	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	dinh@gm...	Ca Mau
STU8	Nguyen K...	284634636	Male	2000-04-05	905682601	dinh@gm...	Bac Lieu
STU9	Ly Van Th...	636329367	Female	1996-08-09	905682602	thang@g...	Soc Trang

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-14	No1
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-30	No2
STU2	Nguyen Thi T...	CER2	ENGLISH LE...	2020-01-14	No3
STU3	Doan Van Chi...	CER3	ENGLISH LE...	2020-01-30	No4
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-14	No5
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-30	No6
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-03-01	No7
STU5	Le Thi Chac	CER5	COMPUTER	2020-01-30	No8
STU6	Pham Van Ch...	CER1	ENGLISH LE...	2020-03-01	No9
STU6	Pham Van Ch...	CER2	ENGLISH LE...	2020-01-14	No10
STU7	Pham Nhat	CER2	ENGLISH LE...	2020-03-01	No11
STU9	Ly Van Thanh	CER4	ENGLISH LE...	2020-03-01	No13

Figure 4.22: Click the button “Report” in registry student

After clicking the button “Report”. Display form report. Choose folder save, enter name. And click the button “Save”.

A	B	C	D	E	F
Student ID	Full name	Certificate	Certificate name	Date of Exam	ID number
STU7	Pham Nhat	CER1	English Level B	2020-03-01	No11
STU8	Nguyen Khai Dinh	CER3	English Level C	2020-01-20	No12
STU2	Nguyen Thi Tam	CER1	English Level B	2020-01-14	No3
STU3	Doan Van Chien	CER3	English Level C	2020-01-30	No4
STU4	Tran Van Dau Le Van Quyet	CER4	English Level TOIEC	2020-01-14	No5
STU4	Tran Van Dau Le Van Quyet	CER4	English Level TOIEC	2020-01-30	No6
STU4	Tran Van Dau Le Van Quyet	CER4	English Level TOIEC	2020-03-01	No7
STU5	Le Thi Chac	CER5	Computer maintenance	2020-01-20	No8

Figure 4.22: Result of registry the students

- Step 7: A User wants to register for a student.

ID Student	Full name	Identity Ca...	Gender	DOB	Phone	Email	Address
STU1	Le Van Qu...	302980780	Male	1990-12-12	905682594	quyet@g...	Can Tho
STU10	Nguyen T...	626384729	Male	1994-12-07	905682603	lo@gmail...	Tra Vinh
STU2	Nguyen T...	890228465	Female	1991-01-01	905682595	tam@gma...	Vinh Long
STU3	Doan Van ...	864536278	Male	1992-03-20	905682596	chien@g...	Dong Thap
STU4	Tran Van ...	837261538	Male	1993-04-23	905682597	dau@gma...	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gm...	Long An
STU6	Pham Van...	364826243	Male	1995-12-04	905682599	chan@gm...	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gm...	Ca Mau
STU8	Nguyen K...	284634636	Male	2000-04-05	905682601	dinh@gm...	Bac Lieu
STU9	Ly Van Th...	636329367	Female	1996-08-09	905682602	thang@g...	Soc Trang

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-14	No1
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-30	No2
STU2	Nguyen Thi T...	CER2	ENGLISH LE...	2020-01-14	No3
STU3	Doan Van Ch...	CER3	ENGLISH LE...	2020-01-30	No4
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-14	No5
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-30	No6
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-03-01	No7
STU5	Le Thi Chac	CER5	COMPUTER ...	2020-01-30	No8
STU6	Pham Van Ch...	CER1	ENGLISH LE...	2020-03-01	No9
STU6	Pham Van Ch...	CER2	ENGLISH LE...	2020-01-14	No10
STU7	Pham Nhat	CER2	ENGLISH LE...	2020-03-01	No11
STU9	Ly Van Thanh	CER4	ENGLISH LE...	2020-03-01	No13

Figure 4.23: Click the button “Registry” in registry student

After clicking the button “Registry”. And choose to combo box “Student Registry”, “Certificated” and “Date of Exam”. And click the button “Save”.

The screenshot displays a Java-based application window with two main panels. The left panel is a form for adding a new student, with fields for Student ID (STU3), Full name, Identity Card, Gender (Male selected), Date of Birth (Nov 25, 2019), Phone, Email, and Address. The right panel is a 'Student Registry' interface, showing dropdown menus for Student Registry (STU1), Certificate (CER1), and Date of Exam (2020-01-01). Below these are tables for 'Student' and 'Registry' data.

Student	Full name	Identity Ca...	Gender	DOB	Phone	Email	Address
STU1	Le Van Qu...	302980780	Male	1990-12-12	905682594	quyet@g...	Can Tho
STU10	Nguyen T...	626384729	Male	1994-12-07	905682603	loi@gmail...	Tra Vinh
STU2	Nguyen T...	890228465	Female	1991-01-01	905682595	tam@gma...	Vinh Long
STU3	Doan Van ...	864536278	Male	1992-03-20	905682596	chien@g...	Dong Thap
STU4	Tran Van ...	837261538	Male	1993-04-23	905682597	dau@gma...	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gm...	Long An
STU6	Pham Van...	364826243	Male	1995-12-04	905682599	chan@gm...	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gm...	Ca Mau
STU8	Nguyen K...	284634636	Male	2000-04-05	905682601	dinh@gm...	Bac Lieu
STU9	Ly Van Th...	636329367	Female	1996-08-09	905682602	thang@g...	Soc Trang

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-14	No1
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-30	No2
STU2	Nguyen Thi T...	CER2	ENGLISH LE...	2020-01-14	No3
STU3	Doan Van Chi...	CER3	ENGLISH LE...	2020-01-30	No4
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-14	No5
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-30	No6
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-03-01	No7
STU5	Le Thi Chac	CER5	COMPUTER ...	2020-01-30	No8
STU6	Pham Van Ch...	CER1	ENGLISH LE...	2020-03-01	No9
STU6	Pham Van Ch...	CER2	ENGLISH LE...	2020-01-14	No10
STU7	Pham Nhat	CER2	ENGLISH LE...	2020-03-01	No11
STU9	Ly Van Thang	CER4	ENGLISH LE...	2020-03-01	No13

Figure 4.24: After clicking the button “registry” in registry student

- Step 8: A User wants to edit information register for a students.

The screenshot shows a Java Swing application window titled "Infomation of registry". On the left, there is a form for entering student information:

- Student ID:** STU11
- Full name:** To Thang
- Identity Card:** 6363636363
- Gender:** Male (radio button selected)
- Date of Birth:** Nov 5, 1990
- Phone:** 905050505
- Email:** tothang@gmail.com
- Address:** Thanh Pho Can Tho

Buttons available in the form area include: + Add, Edit, Delete, Save, Reset.

On the right, there is a panel for managing student registries:

- Student Registry:** STU1
- Name of Registry:** Le Van Quyet
- Certified:** CER1
- Name of Certificate:** ENGLISH LEVEL A
- Date of Exam:** 2020-01-01
- Number of Exam:** No12

Buttons available in the registry panel include: Registry, Delete, Save, Reset, Report, Close.

A red arrow points to the "Edit" button in the registry panel, which is highlighted with a red box.

Below the form and registry panel, there are two tables listing student information:

ID Student	Full name	Identity Ca...	Gender	DOB	Phone	Email	Address
STU1	Le Van Qu...	302980780	Male	1990-12-12	905682594	quyet@g...	Can Tho
STU10	Nguyen T...	626384729	Male	1994-12-07	905682603	loi@gmail...	Tra Vinh
STU11	To Thang	6363636363	Male	1990-11-05	905050505	tothang@...	Thanh Ph...
STU2	Nguyen T...	890228465	Female	1991-01-01	905682595	tam@gma...	Vinh Long
STU3	Doan Van ...	864536278	Male	1992-03-20	905682596	chien@g...	Dong Thap
STU4	Tran Van ...	837261538	Male	1993-04-23	905682597	dau@gma...	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gm...	Long An
STU6	Pham Van...	364826243	Male	1995-12-04	905682599	chan@gm...	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gm...	Ca Mau
STU8	Nguyen K...	284634636	Male	2000-04-05	905682601	dinh@gm...	Bac Lieu
STU9	Ly Van Th...	636329367	Female	1996-08-09	905682602	thang@g...	Soc Trang

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-14	No1
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-30	No2
STU2	Nguyen Thi T...	CER2	ENGLISH LE...	2020-01-14	No3
STU3	Doan Van Chi...	CER3	ENGLISH LE...	2020-01-30	No4
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-14	No5
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-30	No6
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-03-01	No7
STU5	Le Thi Chac	CER5	COMPUTER ...	2020-01-30	No8
STU6	Pham Van Ch...	CER1	ENGLISH LE...	2020-03-01	No9
STU6	Pham Van Ch...	CER2	ENGLISH LE...	2020-01-14	No10
STU7	Pham Nhat	CER2	ENGLISH LE...	2020-03-01	No11
STU9	Ly Van Thanh	CER4	ENGLISH LE...	2020-03-01	No13

Figure 4.25: Click the button “Edit” in registry student

- Step 9: A User wants to delete information register for student.

After clicking the button “Delete” and a choose information students want to delete on Table View and then display message, click the button “OK”. If the certificate, student, and course have a certificate ID (4), student ID (5), exam date (3) each to an identity number. (Review to Step 5).

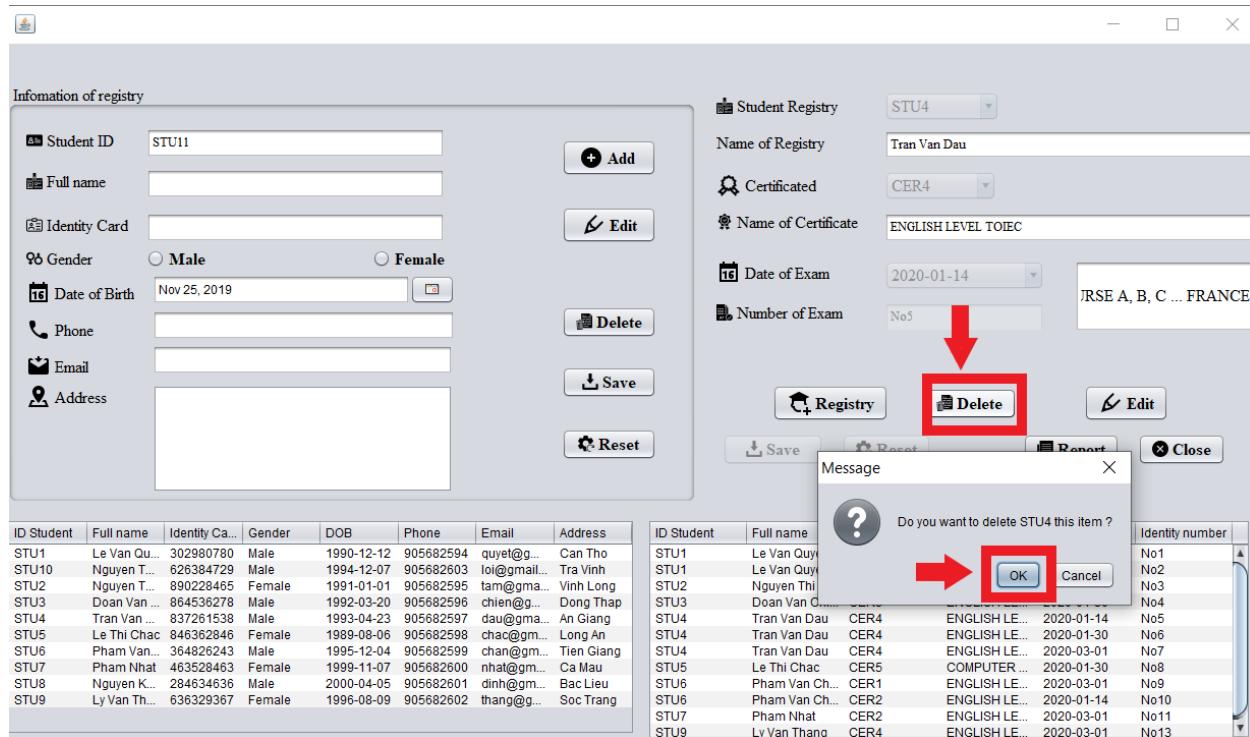


Figure 4.26: Click the button “Delete” in registry student

- Step 10: User want report information register for student. (THE SAME STEP 6 – 4.2).

The screenshot shows a Java Swing application window. On the left, there is a form titled "Infomation of registry" with fields for Student ID (STU11), Full name (To Thang), Identity Card (63636363), Gender (Male selected), Date of Birth (Nov 5, 1990), Phone (905050305), Email (tothang@gmail.com), and Address (Thanh Pho Can Tho). There are buttons for Add, Edit, Delete, Save, Reset, and a message "Notify: Database has been Successfully". On the right, there is a "Student Registry" section with dropdowns for Name of Registry (STU1), Certificated (CER1), and Name of Certificate (ENGLISH LEVEL A). It also shows Date of Exam (2020-01-01) and Number of Exam (No12). Below these are buttons for Registry, Delete, Edit, Save, Reset, and Report. A red arrow points to the "Report" button. At the bottom, there are two tables: one for student details and one for exam results.

ID Student	Full name	Identity Ca...	Gender	DOB	Phone	Email	Address
STU1	Le Van Qu...	302880780	Male	1990-12-12	905682594	quyet@g...	Can Tho
STU10	Nguyen T...	626384729	Male	1994-12-07	905682603	lo@gmail...	Tra Vinh
STU11	To Thang	63636363	Male	1990-11-05	905050505	tothang@...	Thanh Ph...
STU2	Nguyen T...	890228465	Female	1991-01-01	905682595	tam@gma...	Vinh Long
STU3	Doan Van ...	864536278	Male	1992-03-20	905682596	chien@g...	Dong Thap
STU4	Tran Van ...	837261538	Male	1993-04-23	905682597	dau@gma...	An Giang
STU5	Le Thi Chac	846362846	Female	1989-08-06	905682598	chac@gm...	Long An
STU6	Pham Van ...	364826243	Male	1995-12-04	905682599	chan@gm...	Tien Giang
STU7	Pham Nhat	463528463	Female	1999-11-07	905682600	nhat@gm...	Ca Mau
STU8	Nguyen K...	284634636	Male	2000-04-05	905682601	dinh@gm...	Bac Lieu
STU9	Ly Van Th...	636329367	Female	1996-08-09	905682602	thang@g...	Soc Trang

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-14	No1
STU1	Le Van Quyet	CER1	ENGLISH LE...	2020-01-30	No2
STU2	Nguyen Thi T...	CER2	ENGLISH LE...	2020-01-14	No3
STU3	Doan Van Ch...	CER3	ENGLISH LE...	2020-01-30	No4
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-14	No5
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-30	No6
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-03-01	No7
STU5	Le Thi Chac	CER5	COMPUTER ...	2020-01-30	No8
STU6	Pham Van Ch...	CER1	ENGLISH LE...	2020-03-01	No9
STU6	Pham Van Ch...	CER2	ENGLISH LE...	2020-01-14	No10
STU7	Pham Nhat	CER2	ENGLISH LE...	2020-03-01	No11
STU9	Ly Van Thanh	CER4	ENGLISH LE...	2020-03-01	No13

Figure 4.27: Click the button “Report” in registry student

- Step 11: A User wants to close form. (THE SAME STEP 7 – 4.2).

The screenshot shows a Java Swing application window titled "Infomation of registry". The main panel contains fields for Student ID (STU11), Full name (To Thang), Identity Card (6363636363), Gender (Male selected), Date of Birth (Nov 5, 1990), Phone (905050505), Email (tothang@gmail.com), and Address (Thanh Pho Can Tho). There are buttons for Add, Edit, Delete, Save, Reset, Registry, Delete, Edit, Save, Reset, Report, and Close. A message at the top says "Notify: Database has been Successfully". To the right, there is a list of registered students with columns: ID Student, Full name, ID Certificate, Certificate na..., Date of Exam, and Identity number. The "Close" button is highlighted with a red box and an arrow pointing to it.

ID Student	Full name	ID Certificate	Certificate na...	Date of Exam	Identity number
STU1	Le Van Qu...	CER1	ENGLISH LE...	2020-01-14	No1
STU10	Nguyen T...	CER1	ENGLISH LE...	2020-01-30	No2
STU11	To Thang	CER2	ENGLISH LE...	2020-01-14	No3
STU2	Nguyen T...	CER3	ENGLISH LE...	2020-01-30	No4
STU3	Doan Van ...	CER4	ENGLISH LE...	2020-01-14	No5
STU4	Tran Van Dau	CER4	ENGLISH LE...	2020-01-30	No6
STU5	Le Thi Chac	CER4	ENGLISH LE...	2020-03-01	No7
STU6	Pham Van Ch...	CER5	COMPUTER...	2020-01-30	No8
STU7	Pham Nhat	CER1	ENGLISH LE...	2020-03-01	No9
STU8	Nguyen K...	CER2	ENGLISH LE...	2020-01-14	No10
STU9	Ly Van Th...	CER4	ENGLISH LE...	2020-03-01	No11
					No13

Figure 4.28: Click the button “Close” in registry student

4.4 Management Certificate

- Step 1: In form system management certificate. Click the button “Management Certificate”.

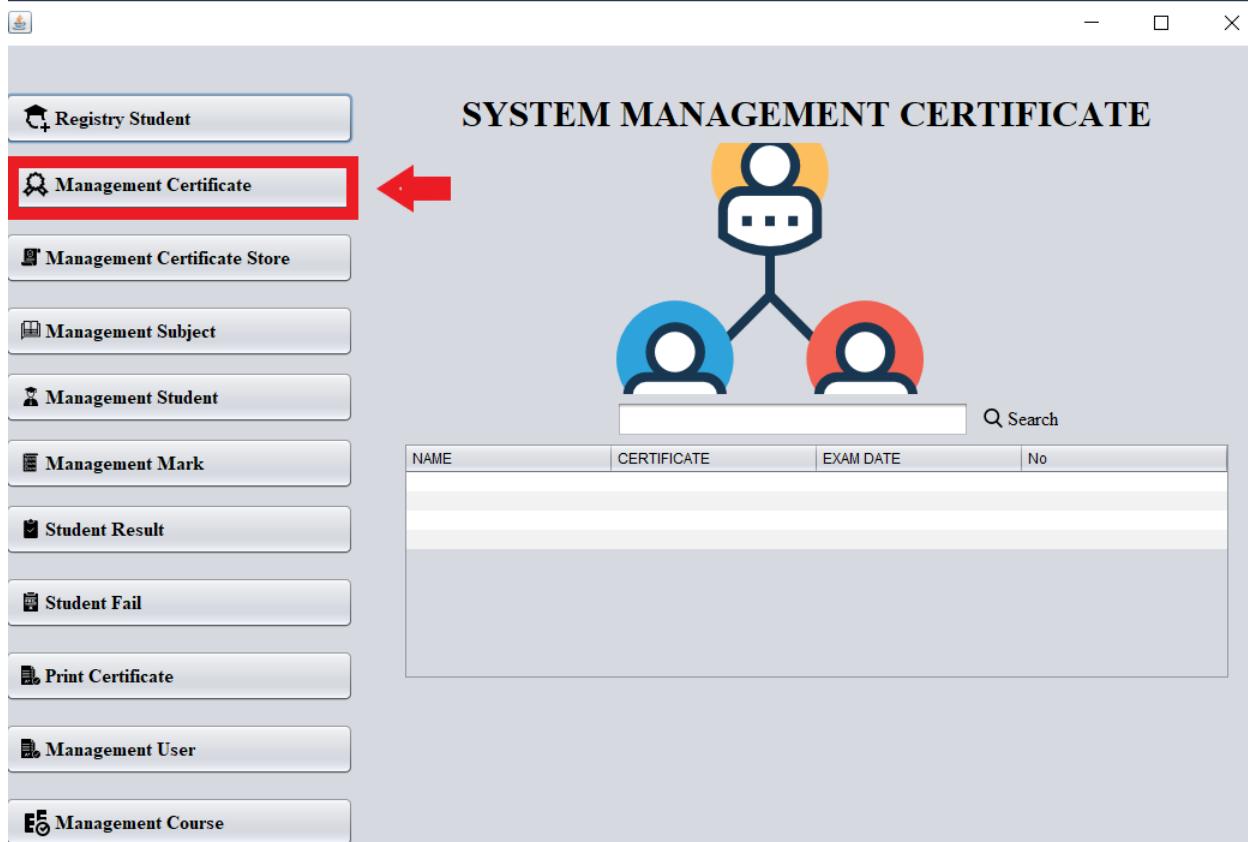


Figure 4.29: Click the button “Management Certificate”

- Step 2: Display Form Management Certificate.

The screenshot shows a Windows application window titled "Form Management certificate". The window has a title bar with standard window controls (minimize, maximize, close). Inside, there are three input fields: "Certificate ID" (containing "CER7"), "Certificate Name" (empty), and "Number of Certificate" (empty). Below these are buttons for "Add", "Edit", "Delete", "Save", "Reset", "Report", and "Close". At the bottom is a grid table with columns "CERTIFICATE ID", "CERTIFICATE NAME", and "CERTIFICATE NUMBER". The data rows are:

CERTIFICATE ID	CERTIFICATE NAME	CERTIFICATE NUMBER
CER1	ENGLISH LEVEL A	ENGLISH1
CER2	ENGLISH LEVEL B	ENGLISH2
CER3	ENGLISH LEVEL C	ENGLISH3
CER4	ENGLISH LEVEL TOIEC	ENGLISH4
CER5	COMPUTER MAINTAINMENT	COMPUTER5
CER6	PROGRAMMING PHP LEVEL ADVANDT...	PROGRAM6

Figure 4.30: Form Management certificate

- Step 3: User want to add certificate. (SAME a STEP 3-4.2).

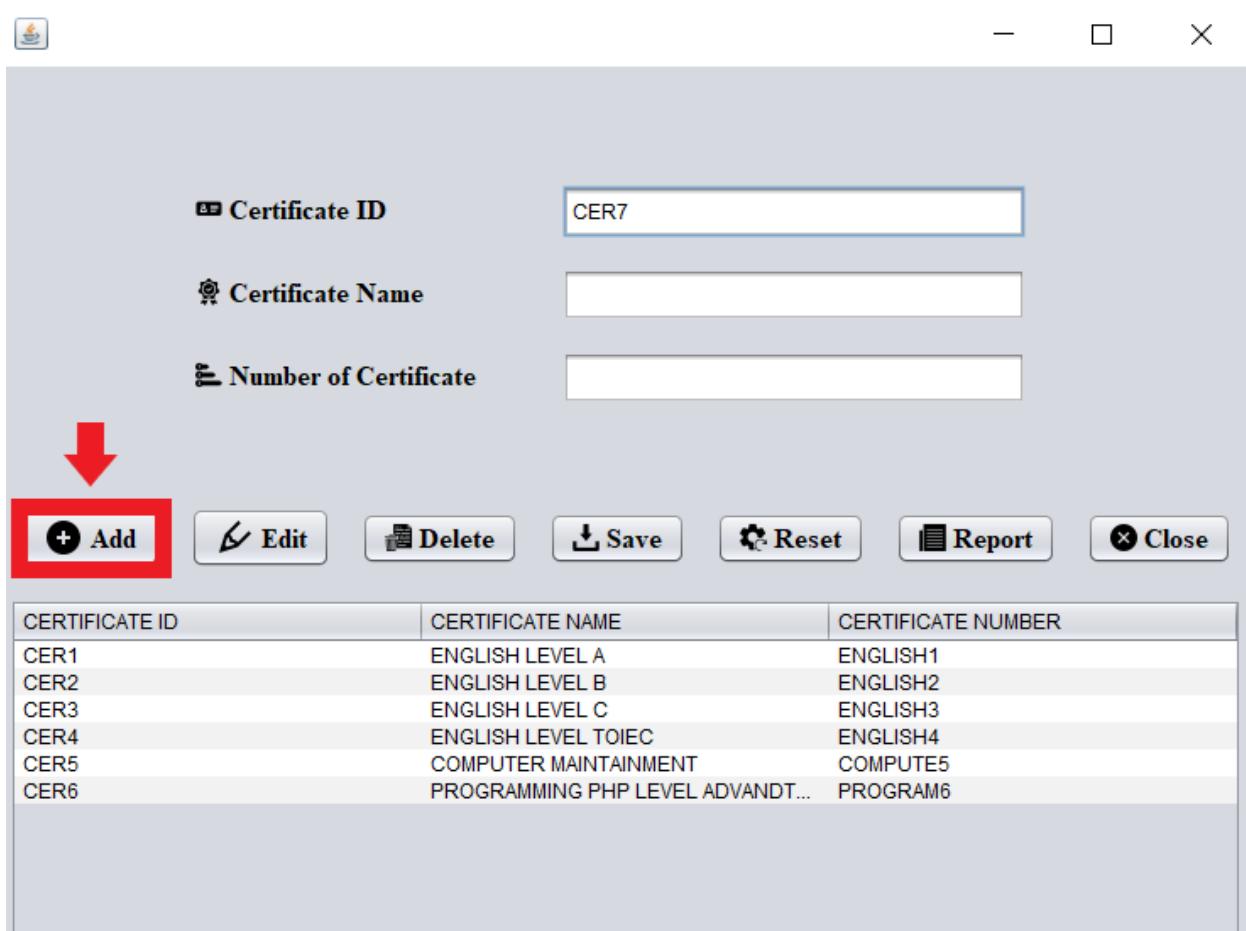


Figure 4.31: Click the button “Add” in management certificate

- Step 4: User want edit certificate. (THE SAME STEP 4 -4.2).

The screenshot shows a Java Swing application window titled "Management Certificate". At the top, there are three input fields: "Certificate ID" (containing "CER7"), "Certificate Name" (empty), and "Number of Certificate" (empty). Below these fields is a red arrow pointing down towards the button bar. The button bar contains six buttons: "+ Add", "Edit" (which is highlighted with a red box), "Delete", "Save", "Reset", and "Report". Below the button bar is a table with three columns: "CERTIFICATE ID", "CERTIFICATE NAME", and "CERTIFICATE NUMBER". The table contains the following data:

CERTIFICATE ID	CERTIFICATE NAME	CERTIFICATE NUMBER
CER1	ENGLISH LEVEL A	ENGLISH1
CER2	ENGLISH LEVEL B	ENGLISH2
CER3	ENGLISH LEVEL C	ENGLISH3
CER4	ENGLISH LEVEL TOIEC	ENGLISH4
CER5	COMPUTER MAINTAINMENT	COMPUTER5
CER6	PROGRAMMING PHP LEVEL ADVANDT...	PROGRAM6

Figure 4.32: Click the button “Edit” in management certificate

- Step 5: User want to delete certificate. (SAME a STEP 5 -4.2).

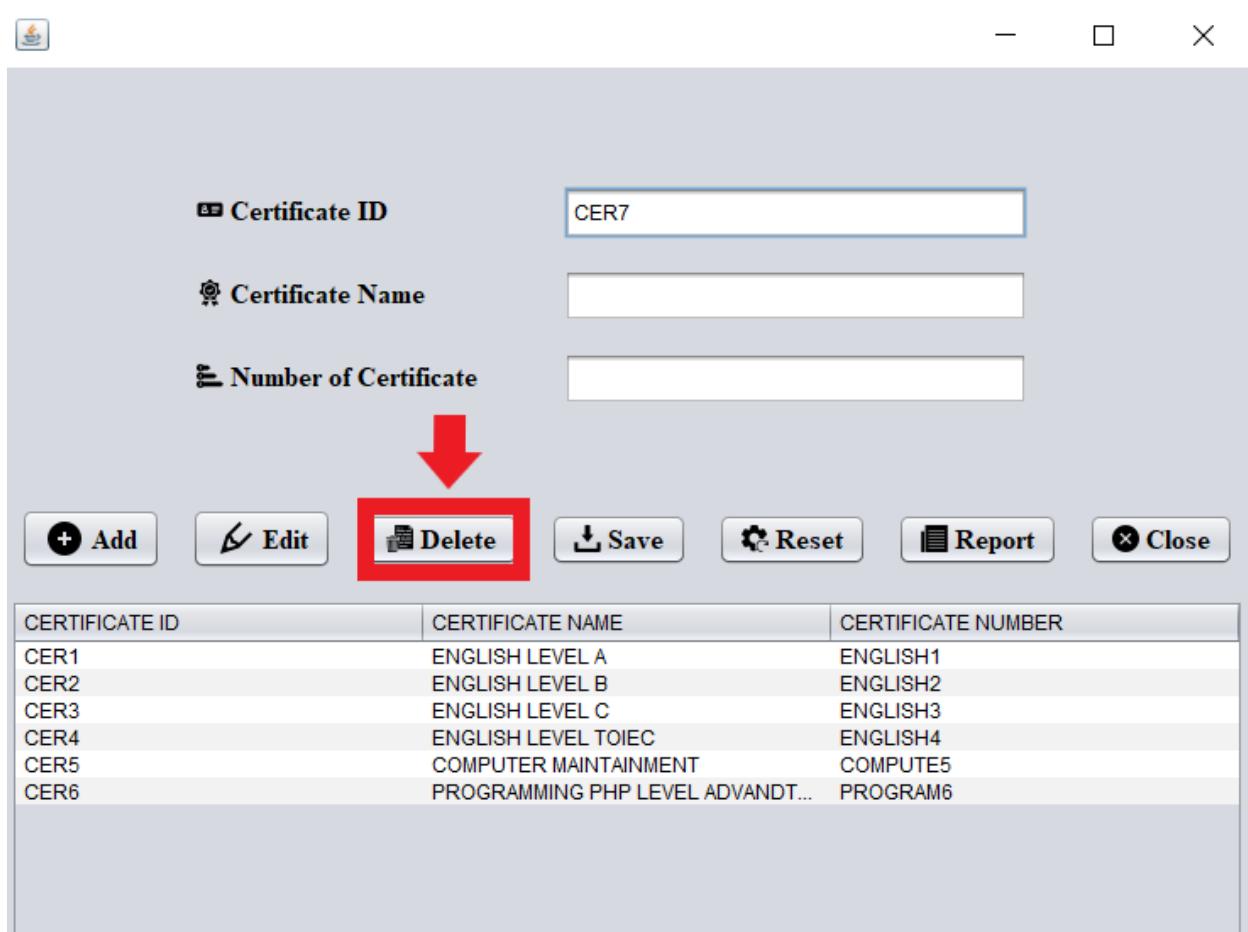


Figure 4.33: Click the button “Delete” in management certificate

- Step 6: User want report certificate. (SAME a STEP 6 -4.2).

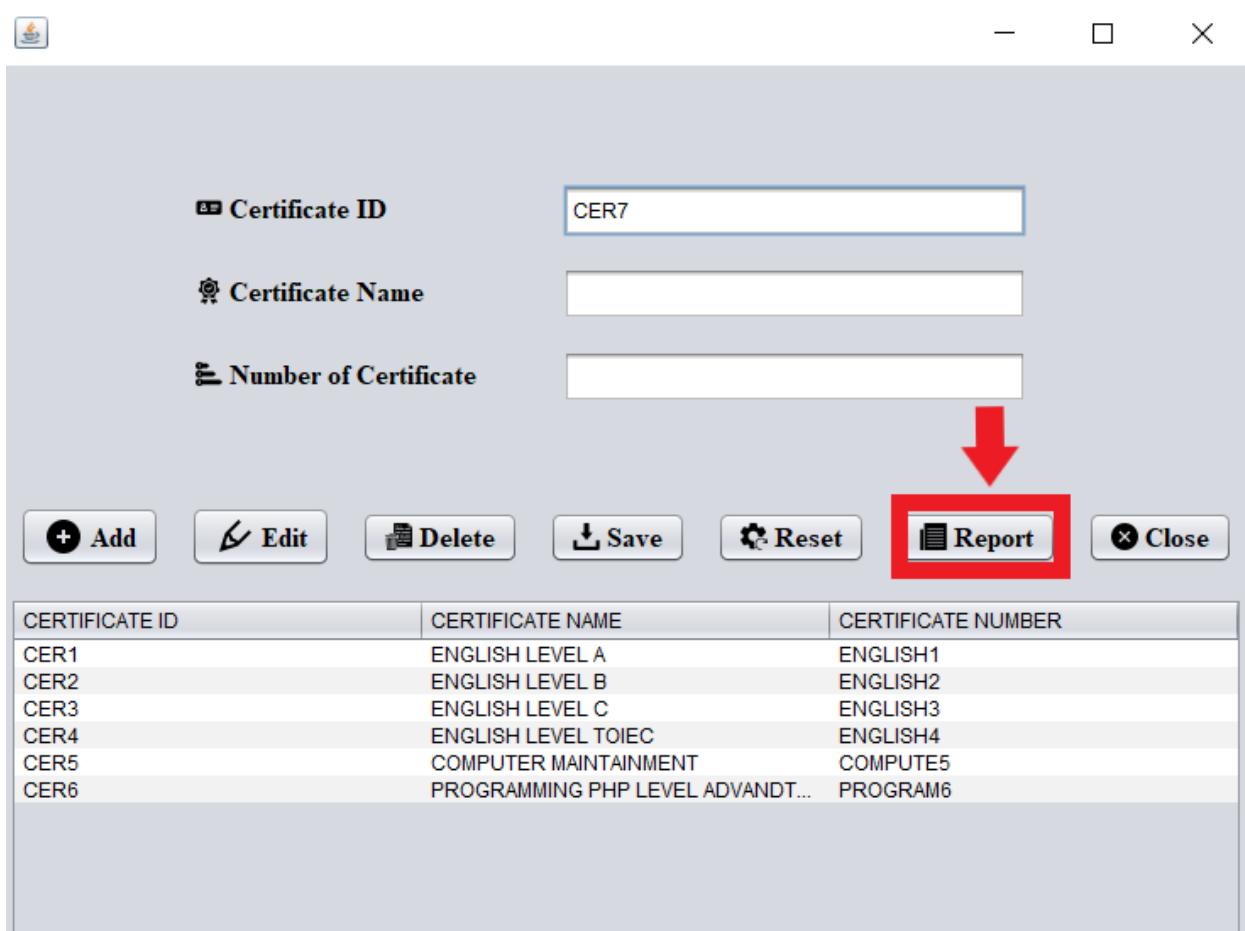


Figure 4.34: Click the button “Report” in management certificate

- Step 7: User want close form. (THE SAME STEP 7-4.2).

The screenshot shows a Java Swing application window titled "eProject Java – Group 2". The window has a title bar with standard minimize, maximize, and close buttons. Inside, there are three text input fields labeled "Certificate ID" (containing "CER7"), "Certificate Name" (empty), and "Number of Certificate" (empty). Below these fields is a row of buttons: "Add", "Edit", "Delete", "Save", "Reset", "Report", and "Close". The "Close" button is highlighted with a red rectangle and a red arrow points to it from the bottom right. At the bottom is a table with columns "CERTIFICATE ID", "CERTIFICATE NAME", and "CERTIFICATE NUMBER". The table contains six rows of data:

CERTIFICATE ID	CERTIFICATE NAME	CERTIFICATE NUMBER
CER1	ENGLISH LEVEL A	ENGLISH1
CER2	ENGLISH LEVEL B	ENGLISH2
CER3	ENGLISH LEVEL C	ENGLISH3
CER4	ENGLISH LEVEL TOIEC	ENGLISH4
CER5	COMPUTER MAINTAINMENT	COMPUTE5
CER6	PROGRAMMING PHP LEVEL ADVANDT...	PROGRAM6

Figure 4.35: Click the button “Close” in management certificate

4.5 Management Subjects

- Step 1: In form system management certificate. Click the button “Management Subject”.

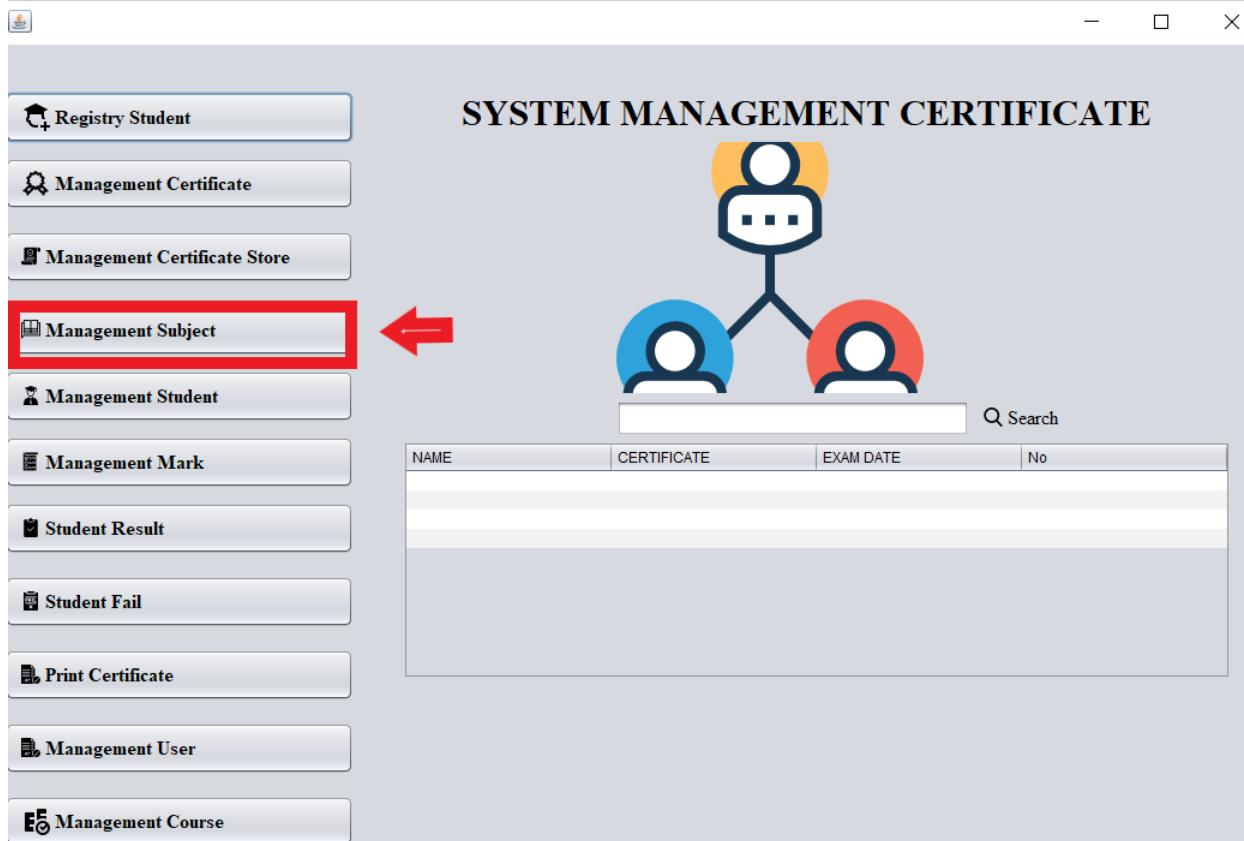


Figure 4.36: Click the button “Management Subject”

- Step 2: Display Form Management Subject.

The screenshot shows a Windows application window titled "Form Management Subject". At the top, there are four input fields: "Subject ID" (SBJ11), "Subject Name" (empty), "Certificate" (CER1), and "Certificate Name" (ENGLISH LEVEL A). Below these are six buttons: "+ Add", "Edit", "Delete", "Save", "Reset", and "Report". A "Close" button is also present. A large table below the buttons displays a list of subjects with columns: SUBJECT ID, SUBJECT NAME, CERTIFICATE ID, and CERTIFICATE NAME. The data in the table is as follows:

SUBJECT ID	SUBJECT NAME	CERTIFICATE ID	CERTIFICATE NAME
SBJ1	Listening A	CER1	ENGLISH LEVEL A
SBJ10	Speaking IELTS	CER6	PROGRAMMING PHP LEVEL AD...
SBJ2	Speaking A	CER1	ENGLISH LEVEL A
SBJ3	Reading A	CER1	ENGLISH LEVEL A
SBJ4	Writing A	CER1	ENGLISH LEVEL A
SBJ5	Listening B	CER2	ENGLISH LEVEL B
SBJ6	Speaking C	CER3	ENGLISH LEVEL C
SBJ7	Reading D	CER4	ENGLISH LEVEL TOIEC
SBJ8	Writing D	CER4	ENGLISH LEVEL TOIEC
SBJ9	Listening TOIEC	CER5	COMPUTER MAINTAINMENT

Figure 4.37: Form Management subject

- Step 3: A User wants to add subject. (SAME a STEP 3 – 4.2).

This screenshot is identical to Figure 4.37, showing the "Form Management Subject" window. However, a red arrow points to the "+ Add" button, indicating where the user should click to add a new subject. The rest of the interface, including the table of existing subjects, remains the same.

Figure 4.38: Click the button “Add” in management subject

- Step 4: A User wants to edit subject. (SAME a STEP 4 – 4.2).

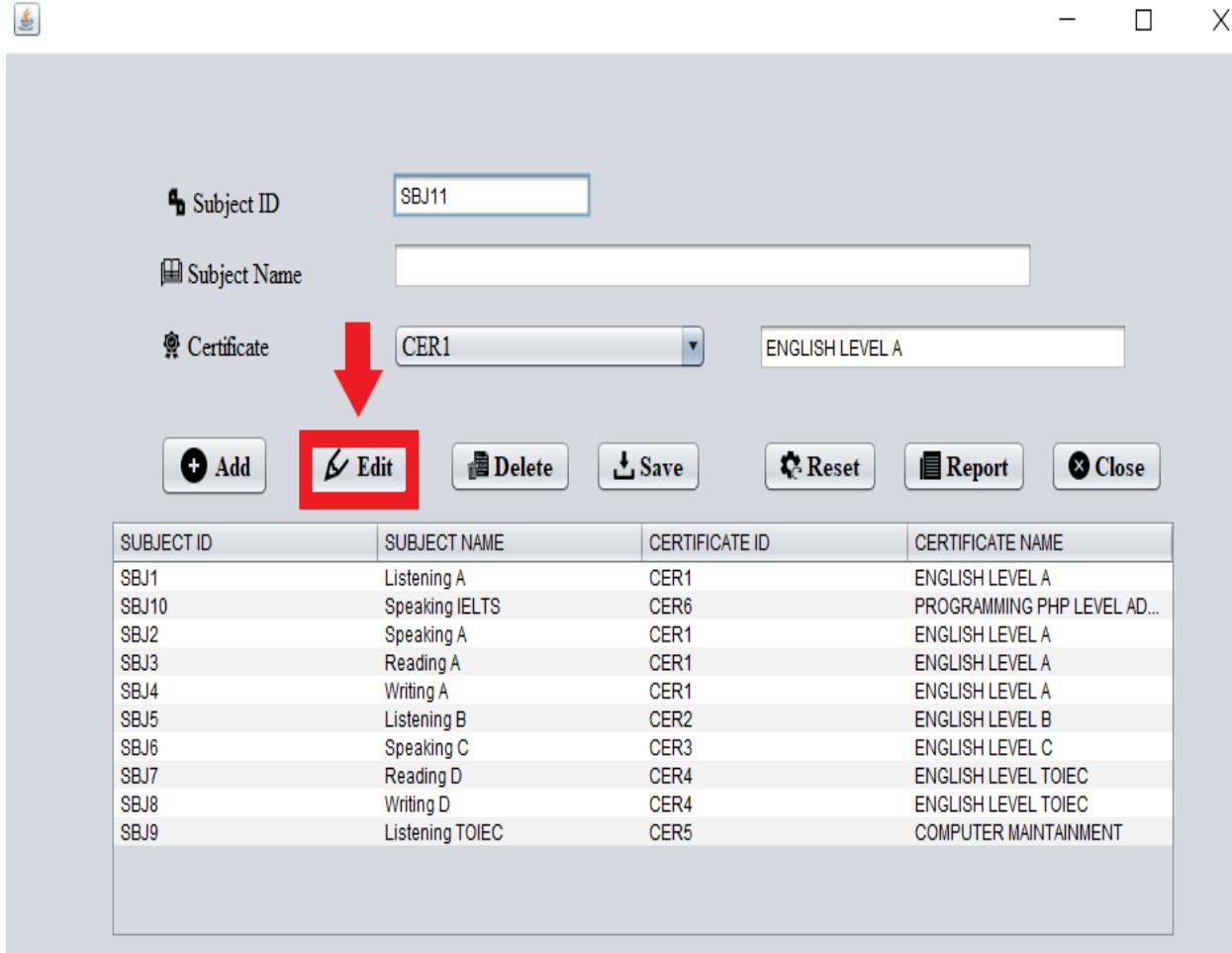


Figure 4.39: Click the button “Edit” in management subject

- Step 5: A User wants to delete subject. (SAME a STEP 5 – 4.2)

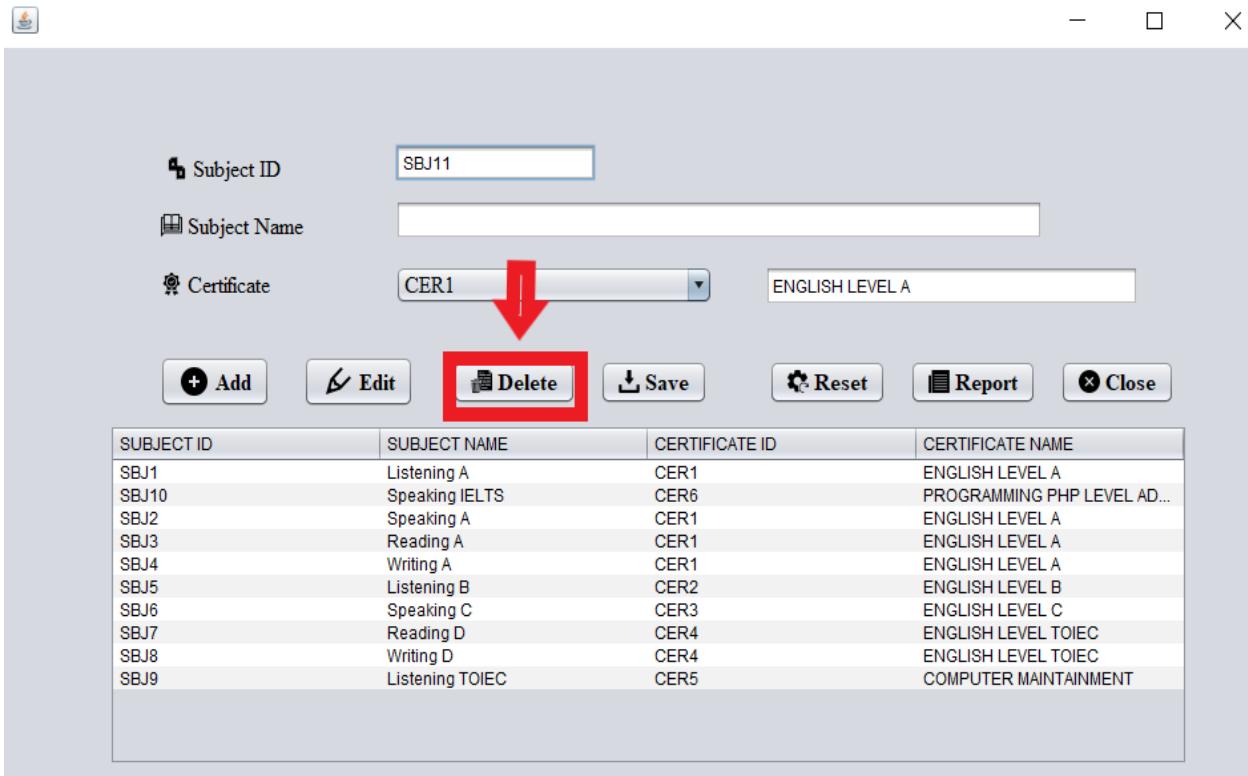


Figure 4.40: Click the button “Delete” in management subject

- Step 6: A User wants to report subject. (THE SAME STEP 6 – 4.2).

The screenshot shows a Java Swing application window titled "eProject Java – Group 2". The window has a title bar with standard minimize, maximize, and close buttons. The main area contains a form with fields for "Subject ID" (text input: SBJ11), "Subject Name" (text input: empty), "Certificate" (dropdown: CER1), and "ENGLISH LEVEL A" (text input: empty). Below the form is a table with four columns: SUBJECT ID, SUBJECT NAME, CERTIFICATE ID, and CERTIFICATE NAME. The table contains 10 rows of data. At the bottom of the window are several buttons: Add, Edit, Delete, Save, Reset, Report, and Close. The "Close" button is highlighted with a red rectangle and a red arrow points to it from the right.

SUBJECT ID	SUBJECT NAME	CERTIFICATE ID	CERTIFICATE NAME
SBJ1	Listening A	CER1	ENGLISH LEVEL A
SBJ10	Speaking IELTS	CER6	PROGRAMMING PHP LEVEL AD...
SBJ2	Speaking A	CER1	ENGLISH LEVEL A
SBJ3	Reading A	CER1	ENGLISH LEVEL A
SBJ4	Writing A	CER1	ENGLISH LEVEL A
SBJ5	Listening B	CER2	ENGLISH LEVEL B
SBJ6	Speaking C	CER3	ENGLISH LEVEL C
SBJ7	Reading D	CER4	ENGLISH LEVEL TOIEC
SBJ8	Writing D	CER4	ENGLISH LEVEL TOIEC
SBJ9	Listening TOIEC	CER5	COMPUTER MAINTAINMENT

Figure 442: Click the button “Close” in management subject.

- Step 7: User want close form. (THE SAME STEP 7 – 4.2).

4.6 Management Exam Mark

- Step 1: In form system management certificate. Click the button “Management Mark”.

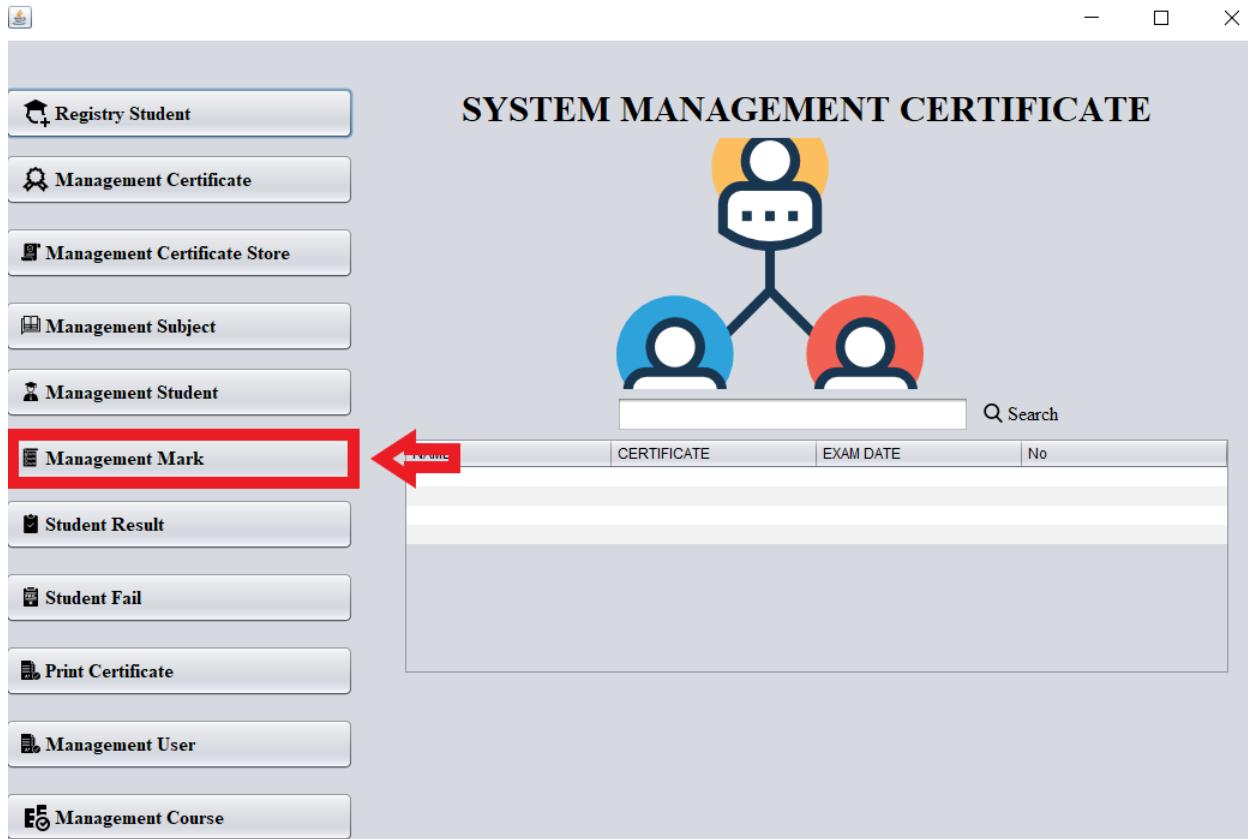


Figure 4.43: Click the button “Management Mark”

- Step 2: Display Form “Management Mark”.

The screenshot shows a software interface titled "Management Mark". At the top, there are input fields for "ID NUMBER" (No1), "Student name" (STU1), "Subject ID" (SBJ1), and "Subject name" (Listening A). Below these are buttons for "Add", "Edit", "Delete", "Save", "Reset", "Report", and "Close". A table below the buttons displays student marks:

ID Subject	Subject name	ID Number	Full name	Mark of Exam
SBJ1	Listening A	No1	Le Van Quyet	5.0
SBJ3	Reading A	No2	Le Van Quyet	3.0
SBJ7	Reading D	No4	Doan Van Chien	8.0
SBJ7	Reading D	No5	Tran Van Dau	3.0
SBJ8	Writing D	No5	Tran Van Dau	4.0

Figure 4.44: Form Management Mark

- Step 3: A User wants to add mark (THE SAME STEP 3 – 4.2).

The screenshot shows the same software interface as Figure 4.44. A red arrow points to the "Add" button at the bottom left of the control panel. The table below the buttons shows one record:

ID Subject	Subject name	ID Number	Full name	Mark of Exam
SBJ1	Listening A	No1	Le Van Quyet	5.0

Figure 4.45: Click the button “Add” in management mark

Step 4: A User wants to edit mark (THE SAME STEP 4 – 4.2).

The screenshot shows a software window titled "Management mark". At the top, there are dropdown menus for "ID NUMBER" (No1), "Subject ID" (SBJ1), and "MARK". Below these are buttons for "Add", "Edit" (highlighted with a red box), "Delete", "Save", "Reset", "Report", and "Close". To the right, there are fields for "Student name" (STU1) and "Subject name" (Listening A). A large red arrow points from the "Edit" button at the top to the "Edit" button at the bottom. Below the buttons is a table listing student marks:

ID Subject	Subject name	ID Number	Full name	Mark of Exam
SBJ1	Listening A	No1	Le Van Quyet	5.0
SBJ3	Reading A	No2	Le Van Quyet	3.0
SBJ7	Reading D	No4	Doan Van Chien	8.0
SBJ7	Reading D	No5	Tran Van Dau	3.0
SBJ8	Writing D	No5	Tran Van Dau	4.0

Figure 4.46: Click the button “Edit” in management mark

Step 5: A User wants to delete mark (THE SAME STEP 5 – 4.2)

The screenshot shows a software window titled "Management mark". At the top, there are dropdown menus for "ID NUMBER" (No1), "Subject ID" (SBJ1), and "MARK". Below these are buttons for "Add", "Edit", "Delete" (highlighted with a red box), "Save", "Reset", "Report", and "Close". To the right, there are fields for "Student name" (STU1) and "Subject name" (Listening A). A large red arrow points from the "Delete" button at the top to the "Delete" button at the bottom. Below the buttons is a table listing student marks:

ID Subject	Subject name	ID Number	Full name	Mark of Exam
SBJ1	Listening A	No1	Le Van Quyet	5.0
SBJ3	Reading A	No2	Le Van Quyet	3.0
SBJ7	Reading D	No4	Doan Van Chien	8.0
SBJ7	Reading D	No5	Tran Van Dau	3.0
SBJ8	Writing D	No5	Tran Van Dau	4.0

Figure 4.47: Click the button “Delete” in management mark

Step 6: A User wants to report mark (THE SAME STEP 6 – 4.2).

The screenshot shows a Java Swing application window titled 'eProject Java – Group 2'. The window contains several input fields and buttons. At the top right is a 'Change Password' button. Below it are two dropdown menus: 'ID NUMBER' set to 'No1' and 'Subject ID' set to 'SBJ1'. To the right of these are 'Student name' (STU1) and 'Subject name' (Listening A). Below these are three text input fields: 'MARK' (empty), 'Full name' (Le Van Quyet), and 'Mark of Exam' (5.0). At the bottom are buttons for 'Add', 'Edit', 'Delete', 'Save', 'Reset', 'Report' (which is highlighted with a red box and arrow), and 'Close'.

ID Subject	Subject name	ID Number	Full name	Mark of Exam
SBJ1	Listening A	No1	Le Van Quyet	5.0
SBJ3	Reading A	No2	Le Van Quyet	3.0
SBJ7	Reading D	No4	Doan Van Chien	8.0
SBJ7	Reading D	No5	Tran Van Dau	3.0
SBJ8	Writing D	No5	Tran Van Dau	4.0

Figure 4.48: Click the button “Report” in management mark

Step 7: A User wants to close form (SAME a STEP 7 – 4.2).

The screenshot shows the same Java application window as Figure 4.48. The 'Report' button has been replaced by a 'Close' button at the bottom right. All other elements (input fields, dropdowns, table, and other buttons) remain the same. A red arrow points to the 'Close' button.

ID Subject	Subject name	ID Number	Full name	Mark of Exam
SBJ1	Listening A	No1	Le Van Quyet	5.0
SBJ3	Reading A	No2	Le Van Quyet	3.0
SBJ7	Reading D	No4	Doan Van Chien	8.0
SBJ7	Reading D	No5	Tran Van Dau	3.0
SBJ8	Writing D	No5	Tran Van Dau	4.0

Figure 4.49: Click the button “close” in management mark

4.7 Management Certificate Store.

- Step 1: In form system management certificate. Click the button “Management Certificate Store”.

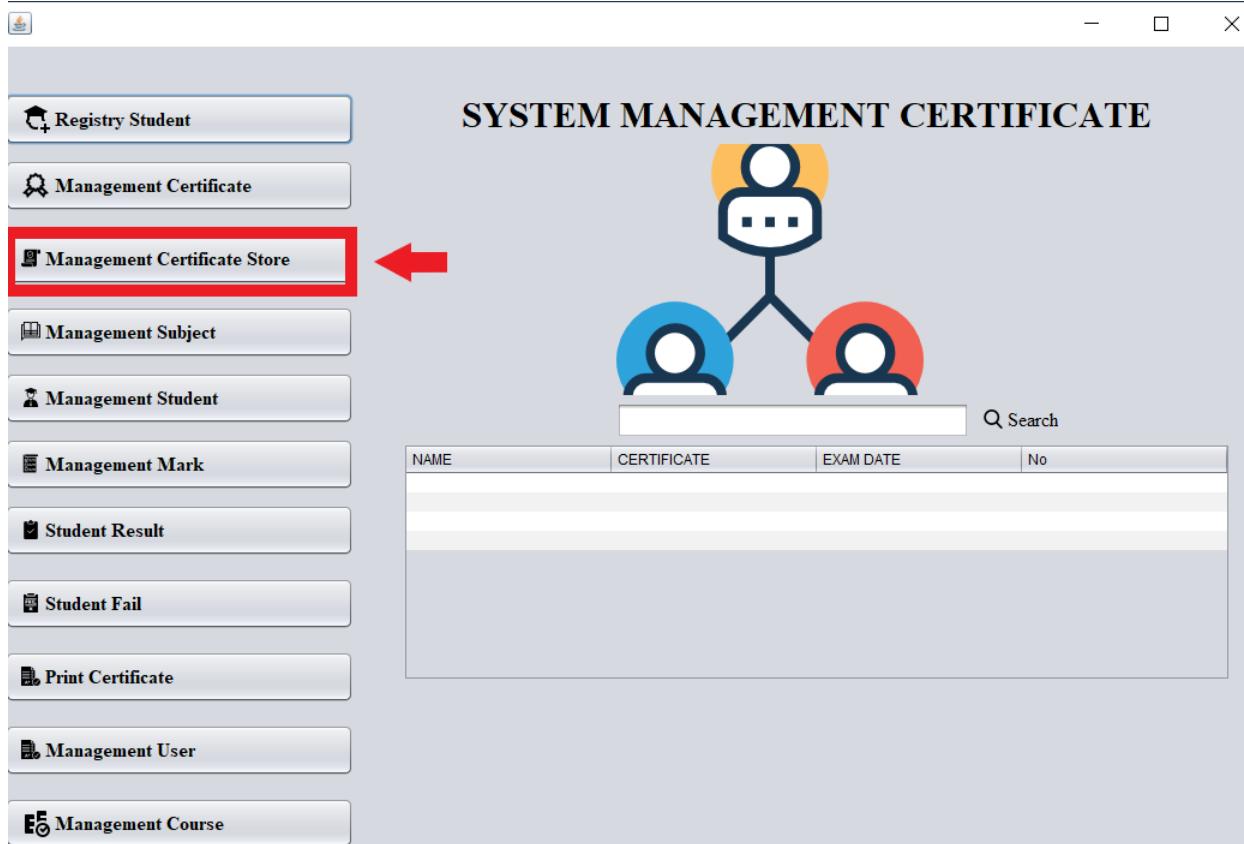


Figure 4.50: Click the button “Management Certificate Store”

- Step 2: Display form Management Certificate Store.

The screenshot shows a Windows application window titled 'Form Management Certificate Store'. The window has standard minimize, maximize, and close buttons at the top right. Inside, there are four input fields with dropdown arrows: 'No. Certificate' (CERN01), 'ID Number' (No1), 'Student ID' (STU1), and 'Student Name' (STU1). Below these are six buttons: '+ Add', 'Edit', 'Delete', 'Save', 'Reset', and 'Report'. A 'Close' button is also present. At the bottom is a table with columns: Identity No, ID Student, Full name, ID Number, and Certificate name. The table currently contains one row with the values: CERN01, No1, STU1, No1, and CER1 respectively.

Identity No	ID Student	Full name	ID Number	Certificate name
CERN01	No1	STU1	No1	CER1

Figure 4.51: Form Management Certificate Store

- Step 3: A User wants to add Certificate Store (THE SAME STEP 3 – 4.2).

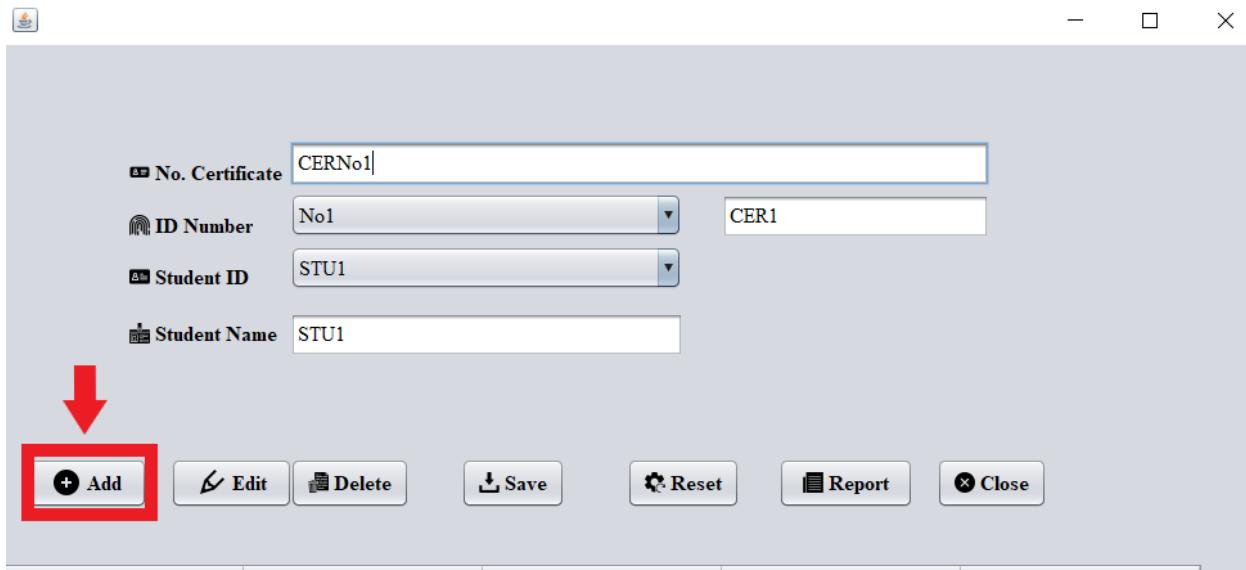


Figure 4.52: Click the button “add” in Management Certificate Store

- Step 4: A User wants to edit Certificate Store (THE SAME STEP 4 – 4.2).

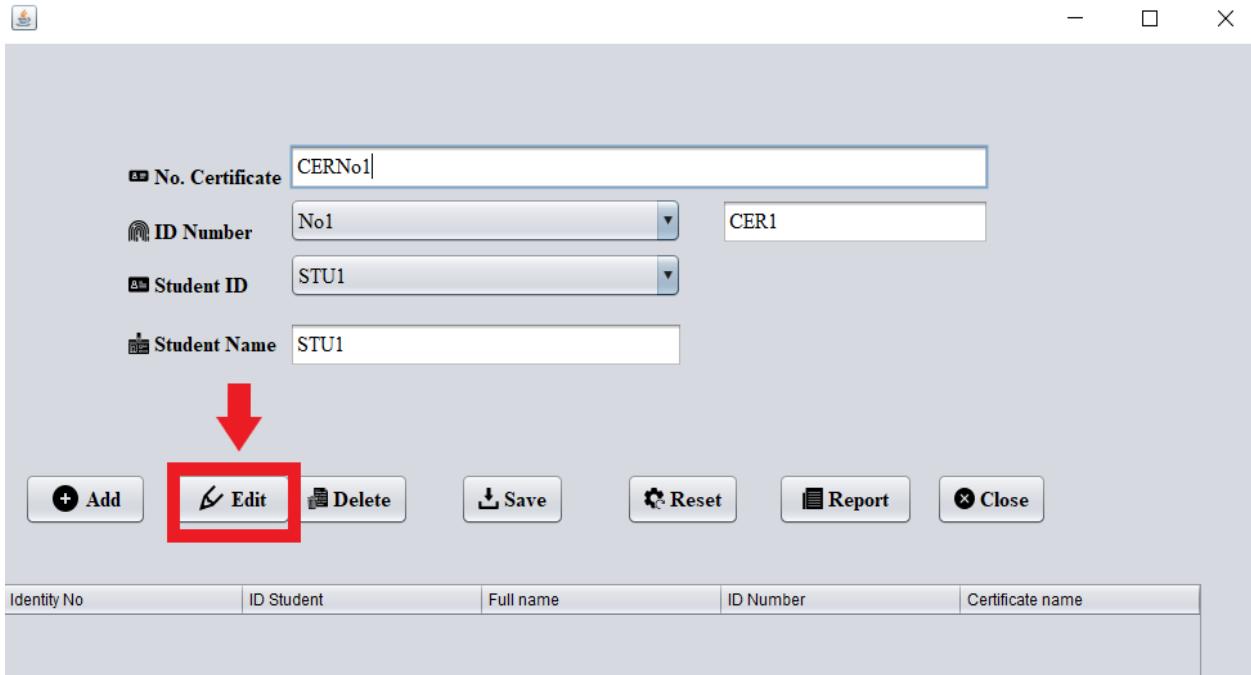


Figure 4.53: Click the button “edit” in Management Certificate Store

- Step 5: A User wants to delete Certificate Store (THE SAME STEP 5 – 4.2).

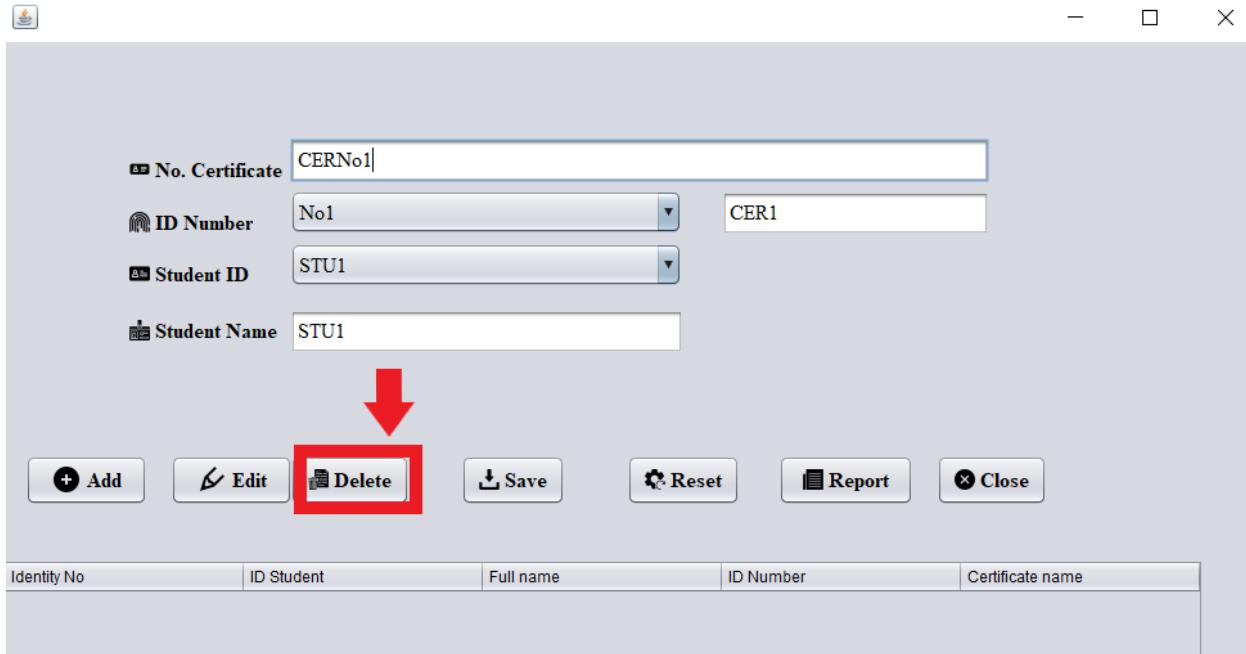


Figure 4.54: Click the button “delete” in Management Certificate Store

- Step 6: A user wants to report Certificate Store (THE SAME STEP 6 – 4.2).

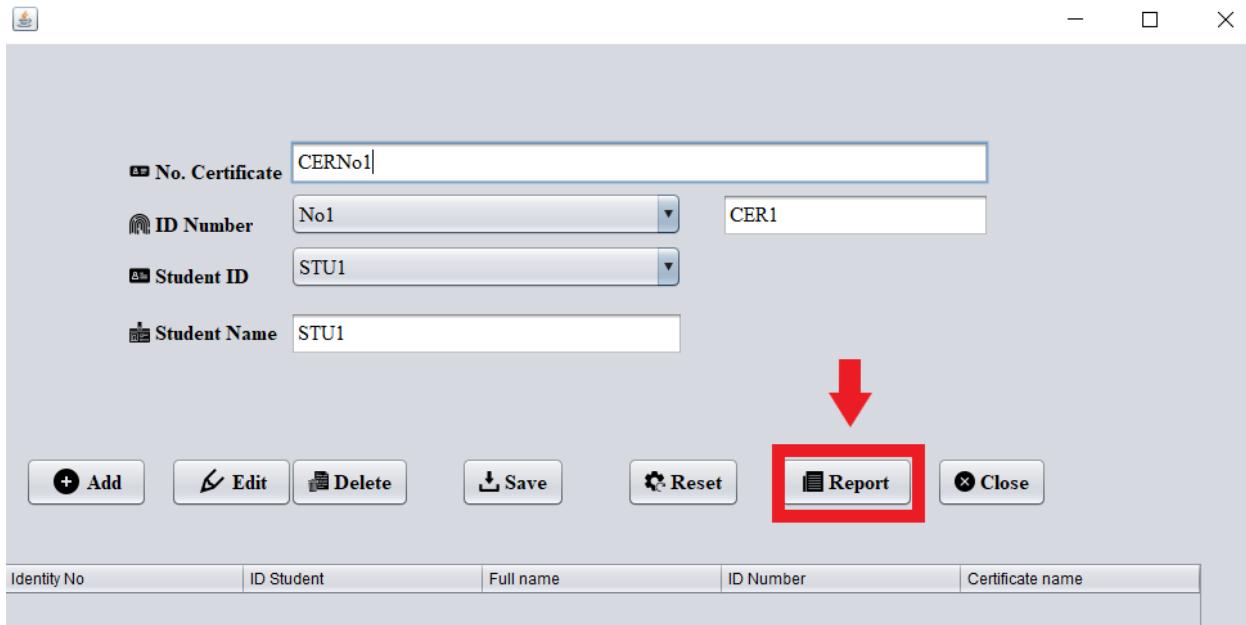


Figure 4.55: Click the button “report” in Management Certificate Store

- Step 7: A user wants to close form (THE SAME STEP 3 – 4.2).

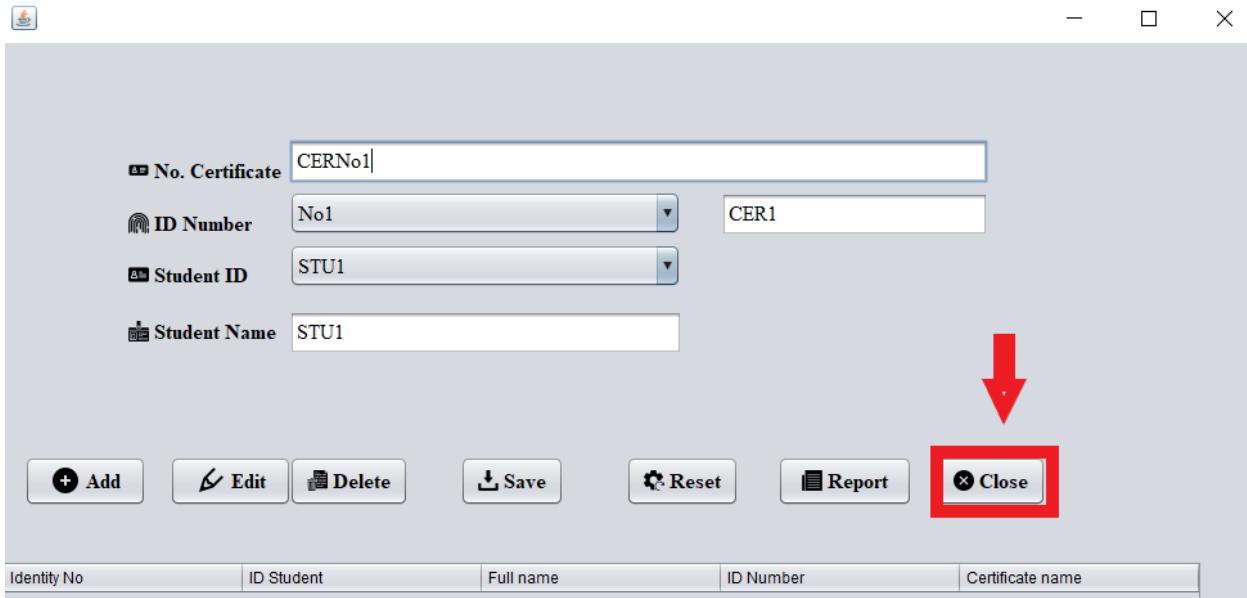


Figure 4.56: Click the button “close” in Management Certificate Store

4.8 Management User

- Step 1: In form system management certificate.
Click the button “Management User”.

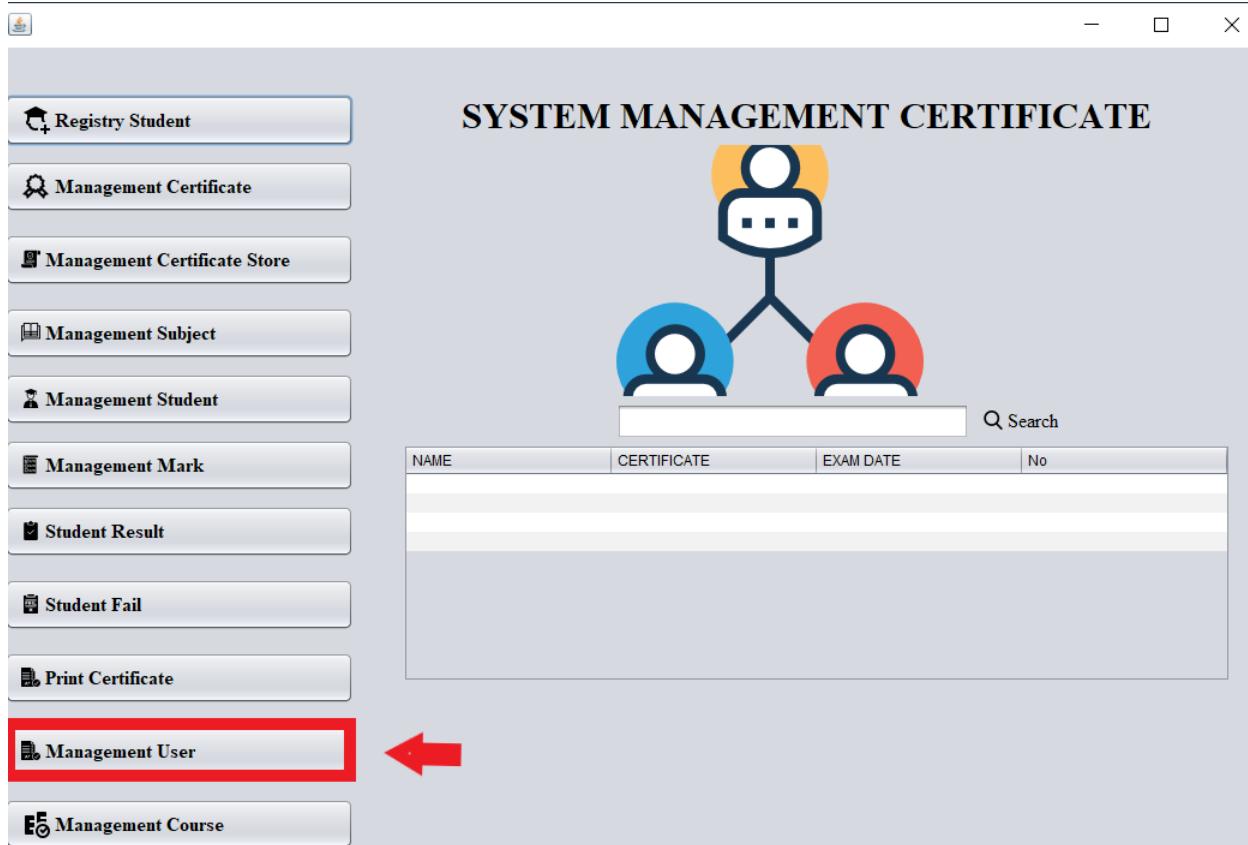


Figure 4.57: Click the button “Management User”

- Step 2: Display form Management User.

The screenshot shows a Windows application window titled "Management User". The main area contains a form with fields for ID User (US1), Username, Password, Roles (Admin), Full Name, Gender (Male selected), Day Of Birth (Nov 26, 2019), Phone, Email, and Address. Below the form is a table listing four users:

ID	Username	Password	Roles	Full name	Gender	DOB	Phone	Email	Address
US2	NLKhanh	010000003...	Staff	KHANH N...	FEMALE	1990-12-03	123456789	NLKhanh...	CAN THO
US3	TTTHANG	01000000D...	Keeper	THANG TO...	MALE	1990-12-03	123456789	TTTHANG...	CAN THO
US4	NPTHANH	0100000052...	Admin	THANH NG...	FEMALE	1990-12-03	123456789	NPTHANH...	CAN THO

At the bottom are buttons for Add (+), Edit, Delete, Save, Reset, and Close.

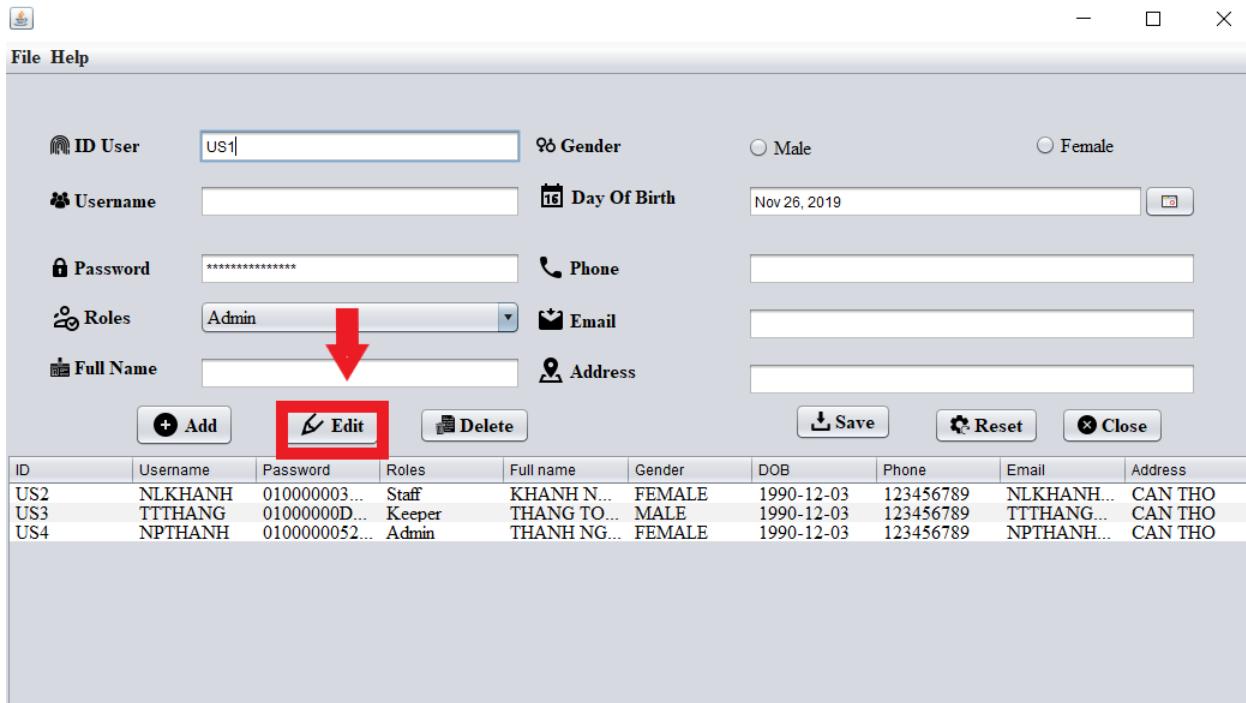
Figure 4.58: Form Management User

- Step 3: A user wants to add information user (THE SAME STEP 3 – 4.2).

The screenshot shows the same "Management User" application window. A red arrow points to the "Add" button at the bottom left of the form. The rest of the interface and data table are identical to Figure 4.58.

Figure 4.59: Click the button “add” in Management User

- Step 4: A user wants to edit information user (THE SAME STEP 4 – 4.2).

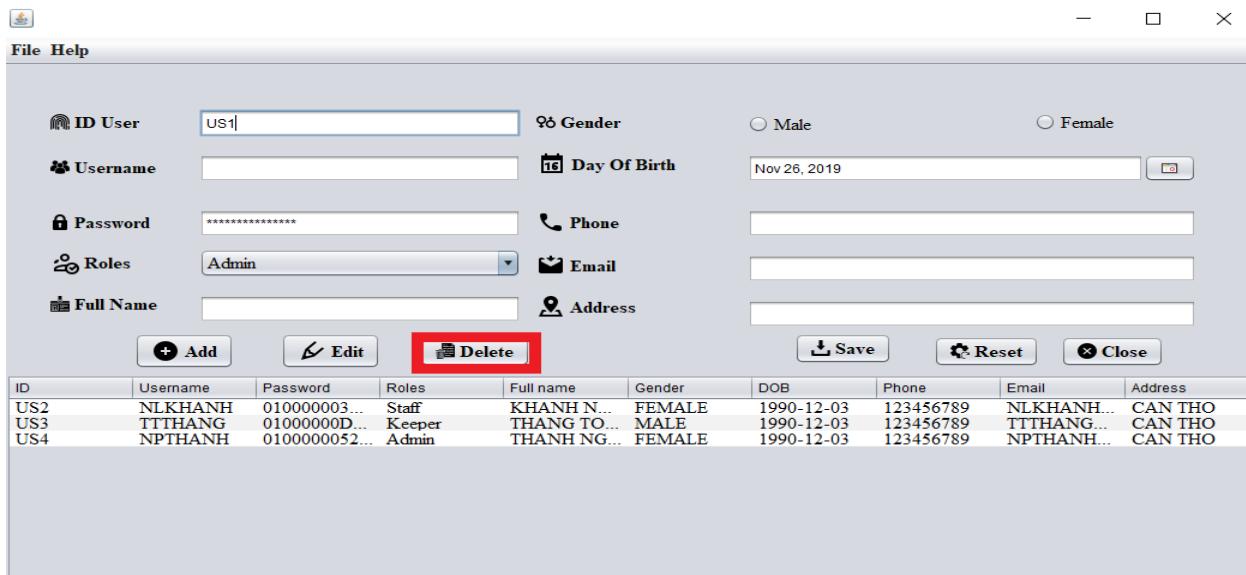


The screenshot shows a software window titled "File Help". Inside, there's a form for managing users. The "ID User" field contains "US1". The "Gender" section has two radio buttons: "Male" (selected) and "Female". The "Username" field is empty. The "Day Of Birth" field shows "Nov 26, 2019". The "Password" field contains "*****". The "Phone" field is empty. The "Roles" dropdown menu is set to "Admin". The "Full Name" field is empty. Below the form is a table with four rows of user data. At the bottom of the form are buttons for "+ Add", "Edit" (highlighted with a red arrow), "Delete", "Save", "Reset", and "Close".

ID	Username	Password	Roles	Full name	Gender	DOB	Phone	Email	Address
US2	NLKhanh	010000003...	Staff	KHANH N...	FEMALE	1990-12-03	123456789	NLKhanh...	CAN THO
US3	TTTHANG	01000000D...	Keeper	THANG TO...	MALE	1990-12-03	123456789	TTTHANG...	CAN THO
US4	NPTHANH	0100000052...	Admin	THANH NG...	FEMALE	1990-12-03	123456789	NPTHANH...	CAN THO

Figure 4.60: Click the button “edit” in Management User

- Step 5: A user wants to delete information user (THE SAME STEP 5 – 4.2).



This screenshot is identical to Figure 4.60, showing the Management User interface. The "Edit" button at the bottom is highlighted with a red arrow. The table below shows the same four user entries.

ID	Username	Password	Roles	Full name	Gender	DOB	Phone	Email	Address
US2	NLKhanh	010000003...	Staff	KHANH N...	FEMALE	1990-12-03	123456789	NLKhanh...	CAN THO
US3	TTTHANG	01000000D...	Keeper	THANG TO...	MALE	1990-12-03	123456789	TTTHANG...	CAN THO
US4	NPTHANH	0100000052...	Admin	THANH NG...	FEMALE	1990-12-03	123456789	NPTHANH...	CAN THO

Figure 4.61: Click the button “delete” in Management User

- Step 6: A user wants to close a form (THE SAME STEP 7 – 4.2).

The screenshot shows a Java Swing application window titled "Management User". The window has a menu bar with "File" and "Help" options. The main area contains several input fields and buttons. On the left, there are fields for "ID User" (containing "US1"), "Gender" (with "Male" selected), "Username", "Day Of Birth" (set to "Nov 26, 2019"), "Password" (redacted), "Phone", "Roles" (set to "Admin"), "Email", "Full Name", and "Address". Below these fields are buttons for "+ Add", "Edit", "Delete", "Save", "Reset", and "Close". The "Close" button is highlighted with a red box and has a red arrow pointing to it from below. At the bottom, there is a table with columns: ID, Username, Password, Roles, Full name, Gender, DOB, Phone, Email, and Address. The table contains four rows of data:

ID	Username	Password	Roles	Full name	Gender	DOB	Phone	Email	Address
US2	NLKHANH	010000003...	Staff	KHANH N...	FEMALE	1990-12-03	123456789	NLKHANH...	CAN THO
US3	TTTHANG	01000000D...	Keeper	THANG TO...	MALE	1990-12-03	123456789	TTTHANG...	CAN THO
US4	NPTHANH	0100000052...	Admin	THANH NG...	FEMALE	1990-12-03	123456789	NPTHANH...	CAN THO

Figure 4.62: Click the button “close” in Management User

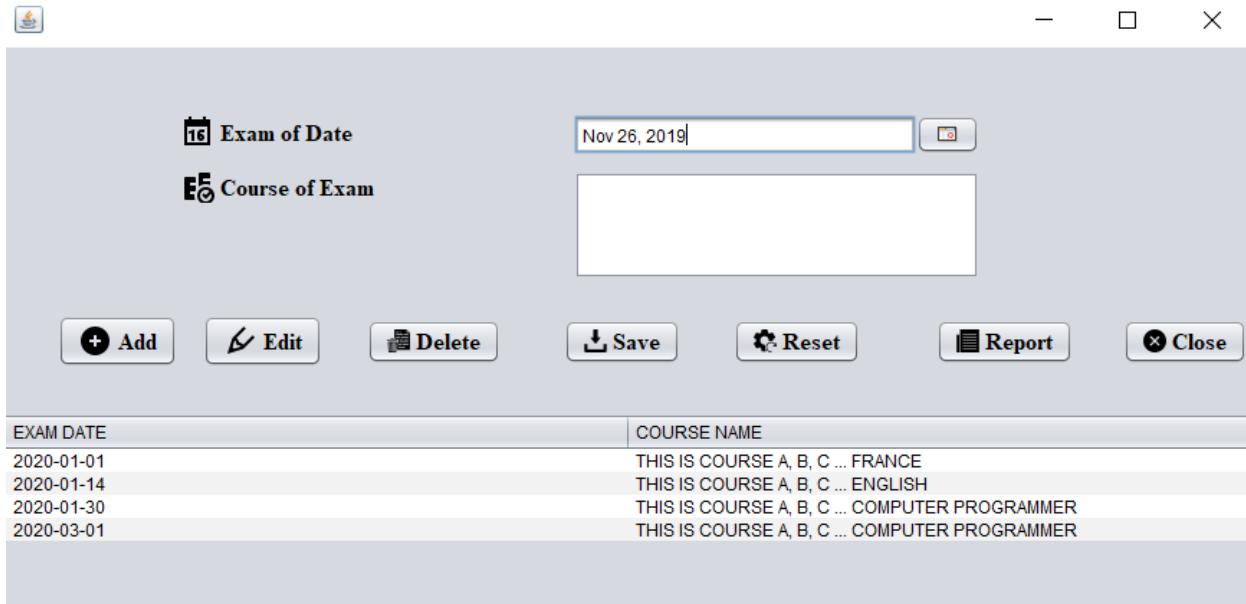
4.9 Management Course

- Step 1: In form system management certificate. Click the button “Management Course”.



Figure 4.63: Click the button “Management Course”

- Step 2: Display form Management Course.

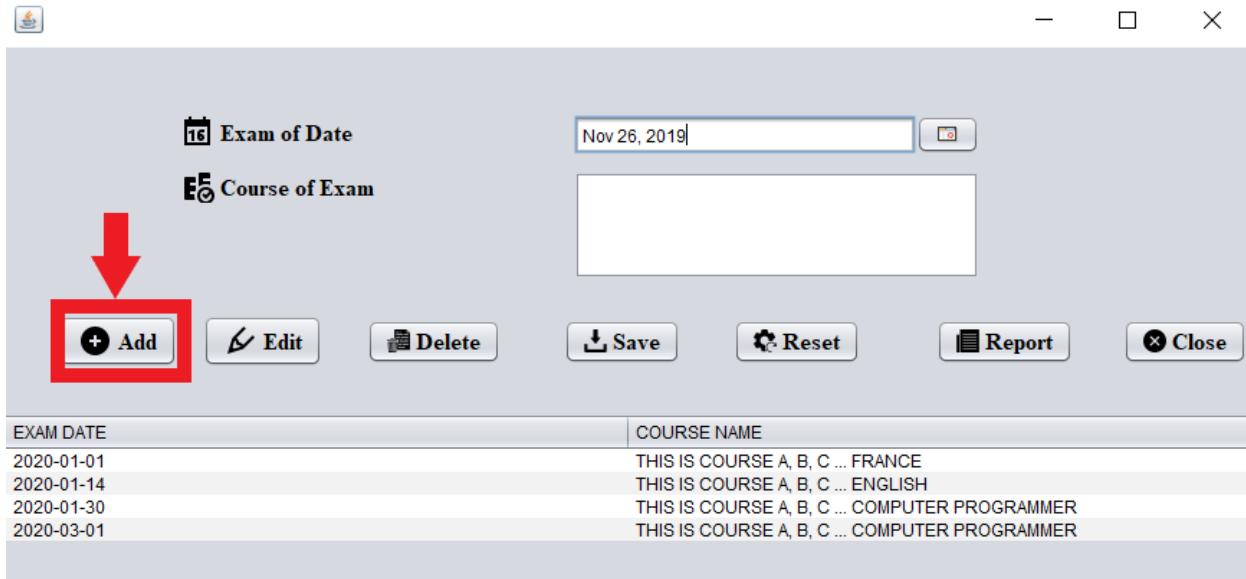


The screenshot shows a Windows application window titled 'Management Course'. At the top, there are fields for 'Exam of Date' (set to 'Nov 26, 2019') and 'Course of Exam' (empty). Below these are buttons for 'Add', 'Edit', 'Delete', 'Save', 'Reset', 'Report', and 'Close'. A table below lists course details:

EXAM DATE	COURSE NAME
2020-01-01	THIS IS COURSE A, B, C ... FRANCE
2020-01-14	THIS IS COURSE A, B, C ... ENGLISH
2020-01-30	THIS IS COURSE A, B, C ... COMPUTER PROGRAMMER
2020-03-01	THIS IS COURSE A, B, C ... COMPUTER PROGRAMMER

Figure 4.64: Form Management Course

- Step 3: A user wants to add information course (THE SAME STEP 3 – 4.2).



The screenshot shows the same 'Management Course' application window. A large red arrow points to the 'Add' button at the bottom left. The rest of the interface is identical to Figure 4.64, including the table of course details.

Figure 4.65: Click the button “add” in Management Course

- Step 4: A user wants to edit information courses (THE SAME STEP 4 – 4.2).

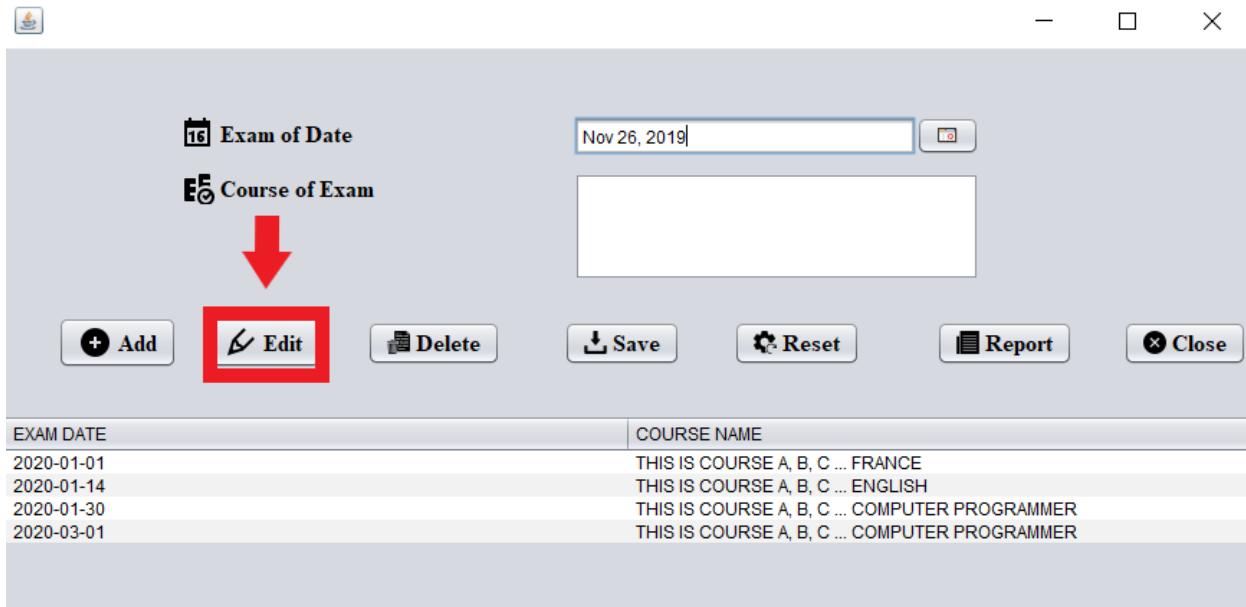


Figure 4.66: Click the button “edit” in Management Course

- Step 5: A user wants to delete information courses (THE SAME STEP 5 – 4.2).

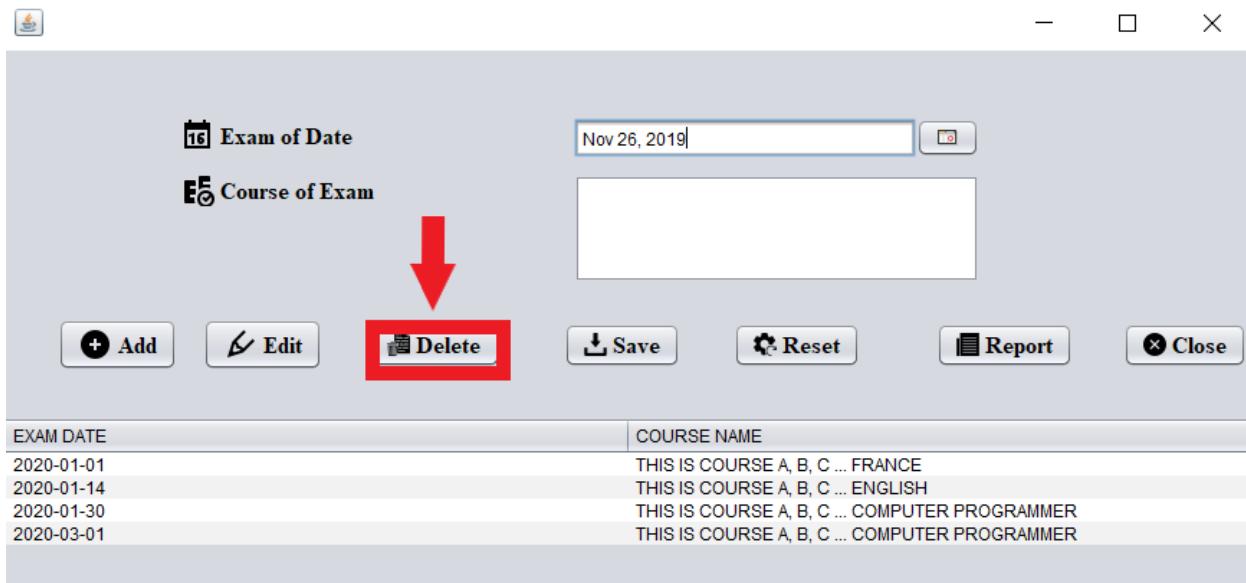
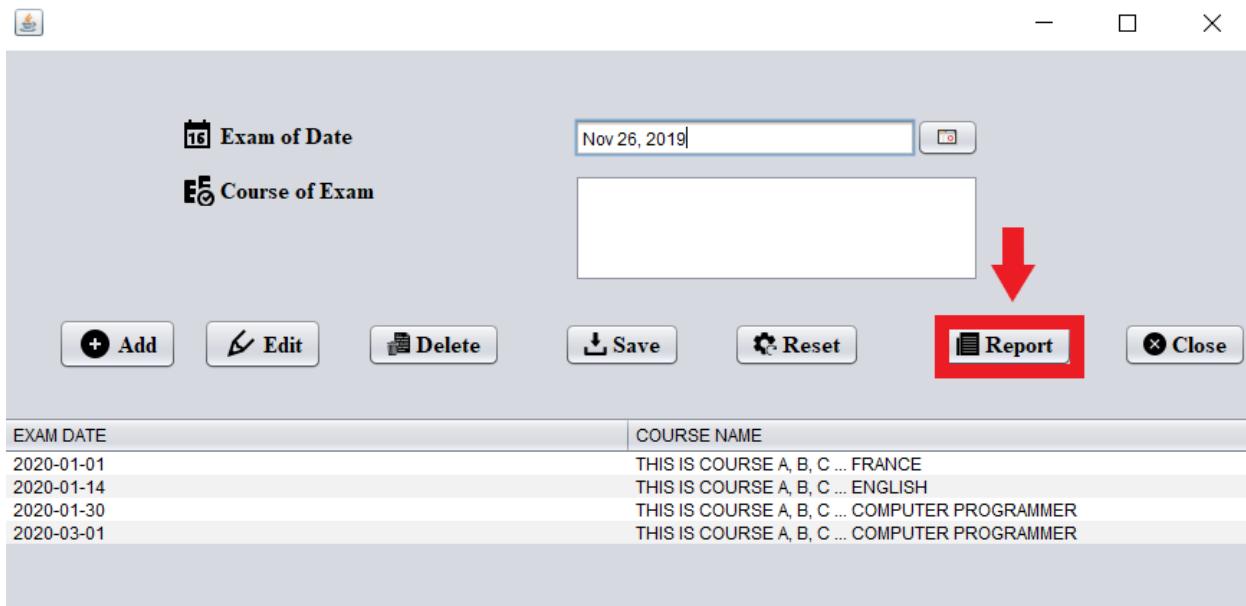


Figure 4.67: Click the button “delete” in Management Courses

- Step 6: A user wants to report information courses (THE SAME STEP 6 – 4.2).

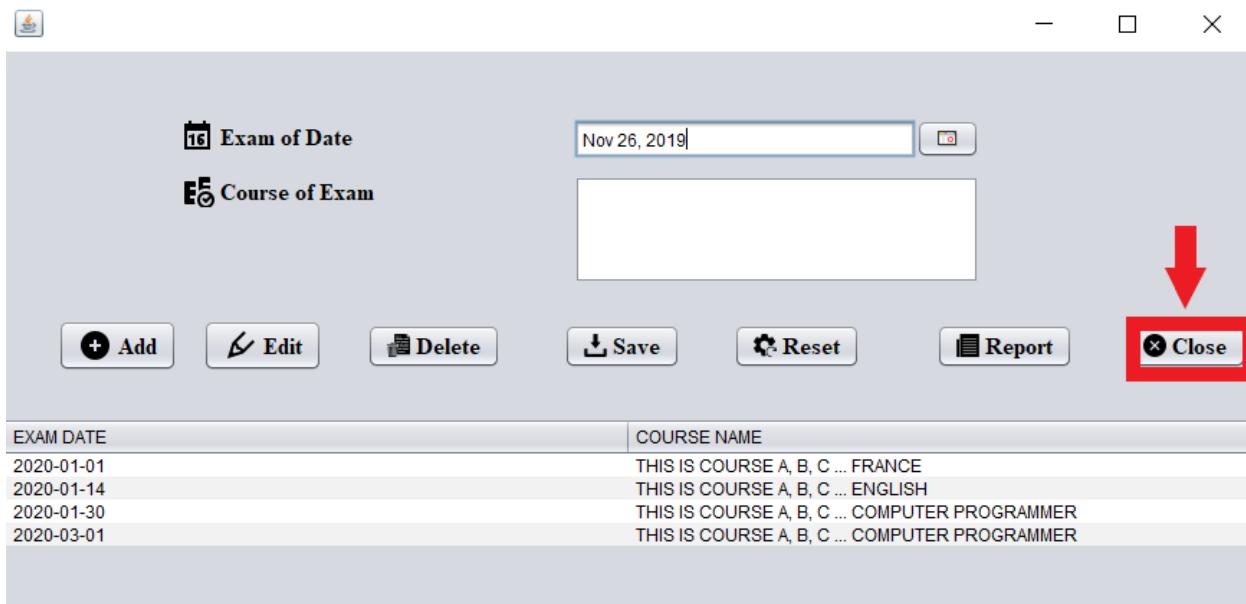


The screenshot shows a software window with a toolbar at the top containing 'Add', 'Edit', 'Delete', 'Save', 'Reset', 'Report' (which is highlighted with a red box and a red arrow pointing to it), and 'Close'. Below the toolbar is a table with two columns: 'EXAM DATE' and 'COURSE NAME'. The data in the table is as follows:

EXAM DATE	COURSE NAME
2020-01-01	THIS IS COURSE A, B, C ... FRANCE
2020-01-14	THIS IS COURSE A, B, C ... ENGLISH
2020-01-30	THIS IS COURSE A, B, C ... COMPUTER PROGRAMMER
2020-03-01	THIS IS COURSE A, B, C ... COMPUTER PROGRAMMER

Figure 4.68: Click the button “report” in Management Course

- Step 7: A user wants to form (THE SAME STEP 3 – 4.2).



The screenshot shows a software window with a toolbar at the top containing 'Add', 'Edit', 'Delete', 'Save', 'Reset', 'Report' (which is highlighted with a red box and a red arrow pointing to it), and 'Close'. Below the toolbar is a table with two columns: 'EXAM DATE' and 'COURSE NAME'. The data in the table is as follows:

EXAM DATE	COURSE NAME
2020-01-01	THIS IS COURSE A, B, C ... FRANCE
2020-01-14	THIS IS COURSE A, B, C ... ENGLISH
2020-01-30	THIS IS COURSE A, B, C ... COMPUTER PROGRAMMER
2020-03-01	THIS IS COURSE A, B, C ... COMPUTER PROGRAMMER

Figure 4.69: Click the button “close” in Management Course

4.10 Student Result.

- Step 1: In form system management certificate. Click the button “Student Result”.

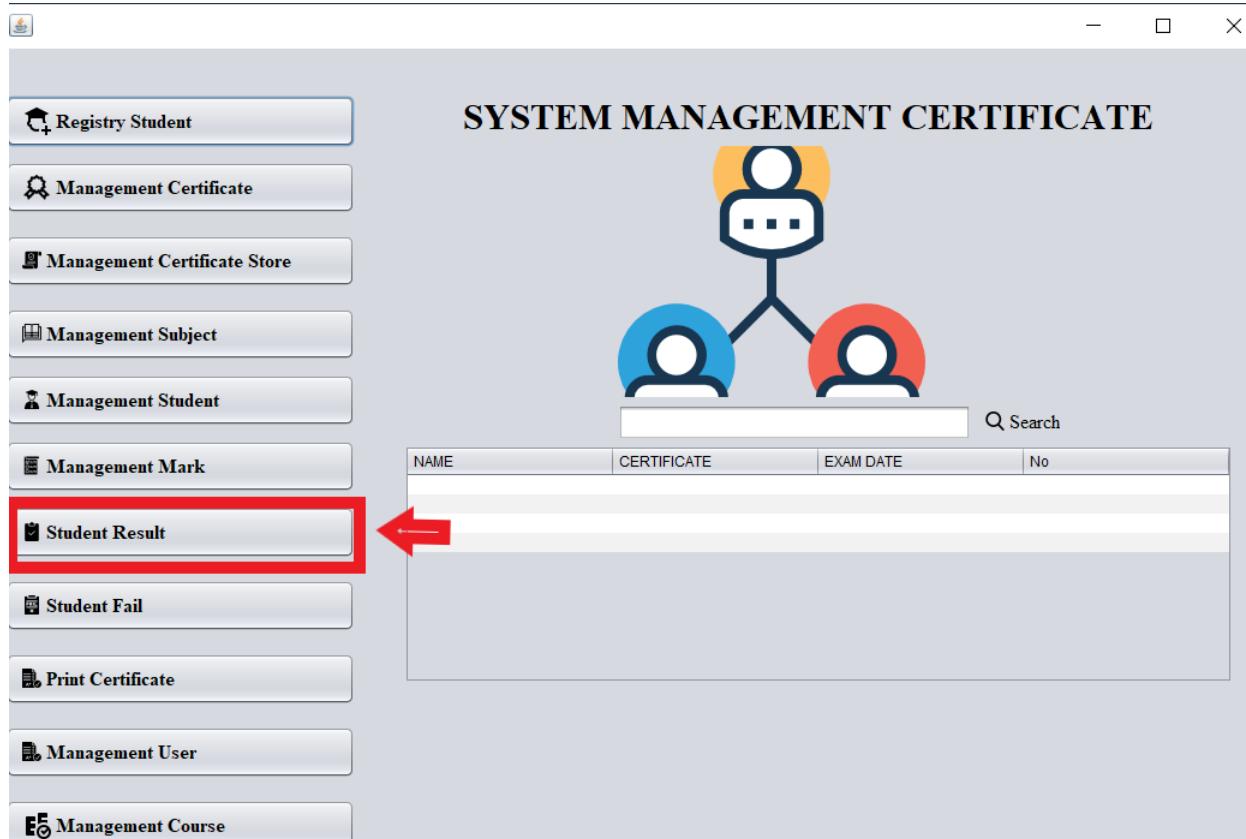


Figure 4.70: Click the button “Student Result”

- Step 2: Display form of Student Result

The screenshot shows a report titled 'Sum of Pass' with a page number '2'. At the top, there is a message 'Notify: Database has been Successfully'. Below the message are three buttons: 'Report' (highlighted in blue) and 'Close'. A table displays student information:

ID Student	Full name	ID Certificate	Certificate ...	Exam of da...	ID of numb...	AVG Mark	Grade
STU1	Le Van Qu...	CER1	ENGLISH ...	2020-01-14	No1	5.0	C
STU3	Doan Van ...	CER3	ENGLISH ...	2020-01-30	No4	8.0	A

Figure 4.71: Form Student Result

- Step 3: A user wants to report Student Result

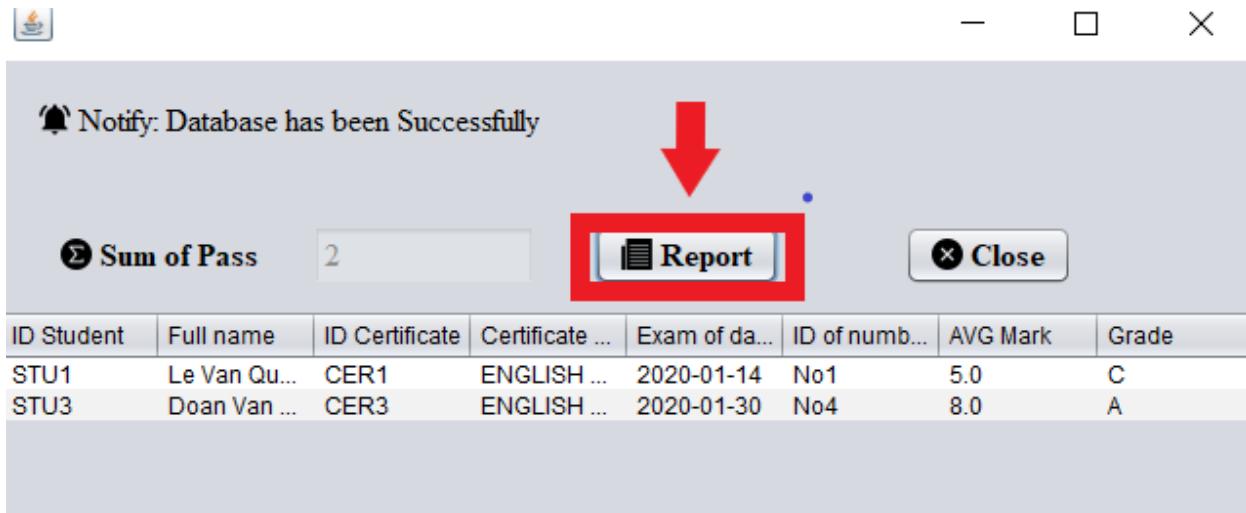


Figure 4.72: Click the button “Report” in Student result

After clicking the button “Report”

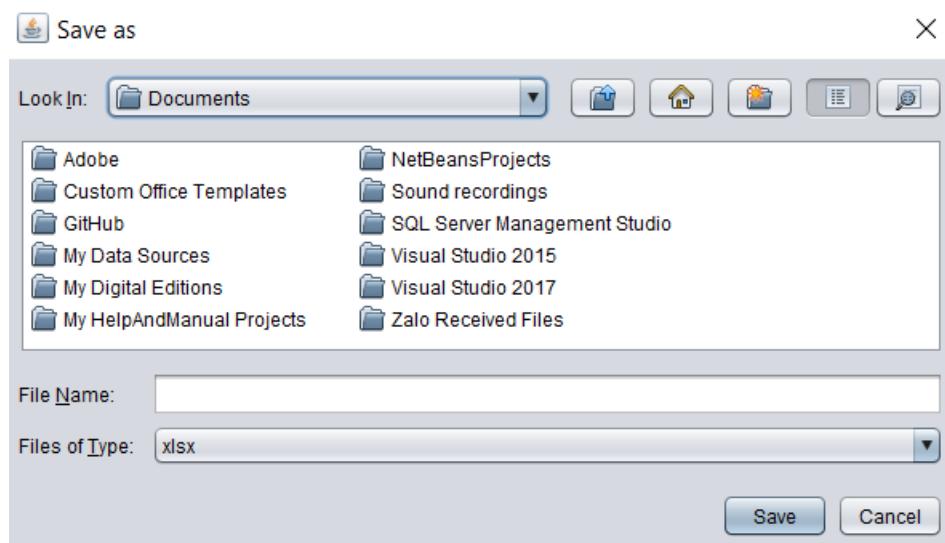


Figure 4.73: After clicking the button “Report”

- Step 4: A user wants to close a form of Student Pass.

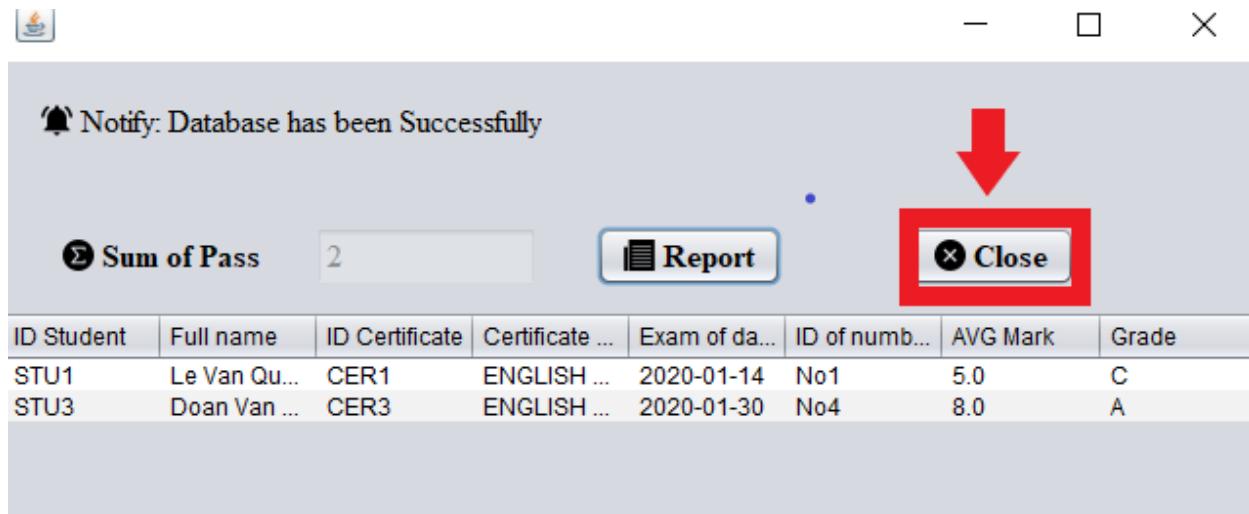


Figure 4.74: Click the button “close” in student result

4.11 Student Fail.

- Step 1: In form system management certificate. Click the button “Student Fail”.

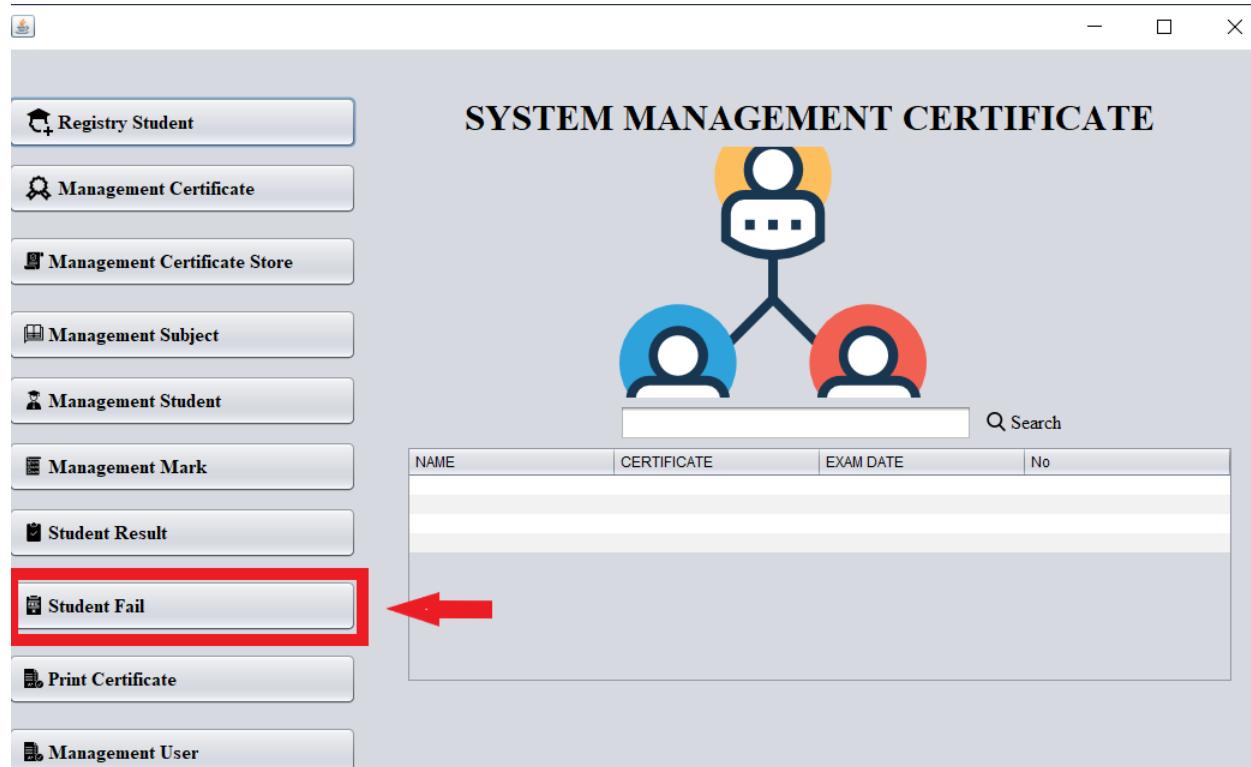


Figure 4.75: Click the button “Student Fail”

- Step 2: Display form Student Fail.

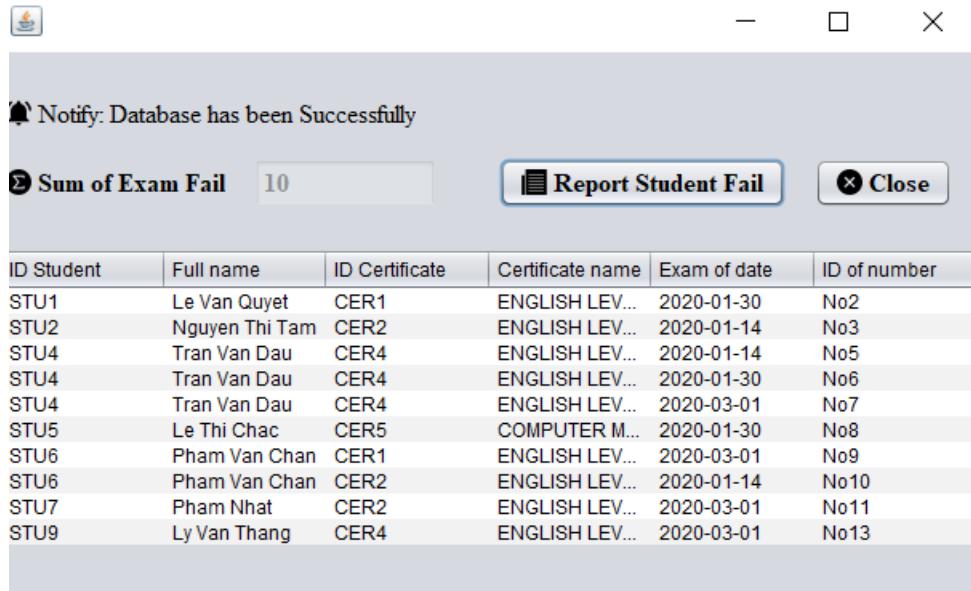


Figure 4.76: Form Student Fail

- Step 3: A user wants to report Student Fail.

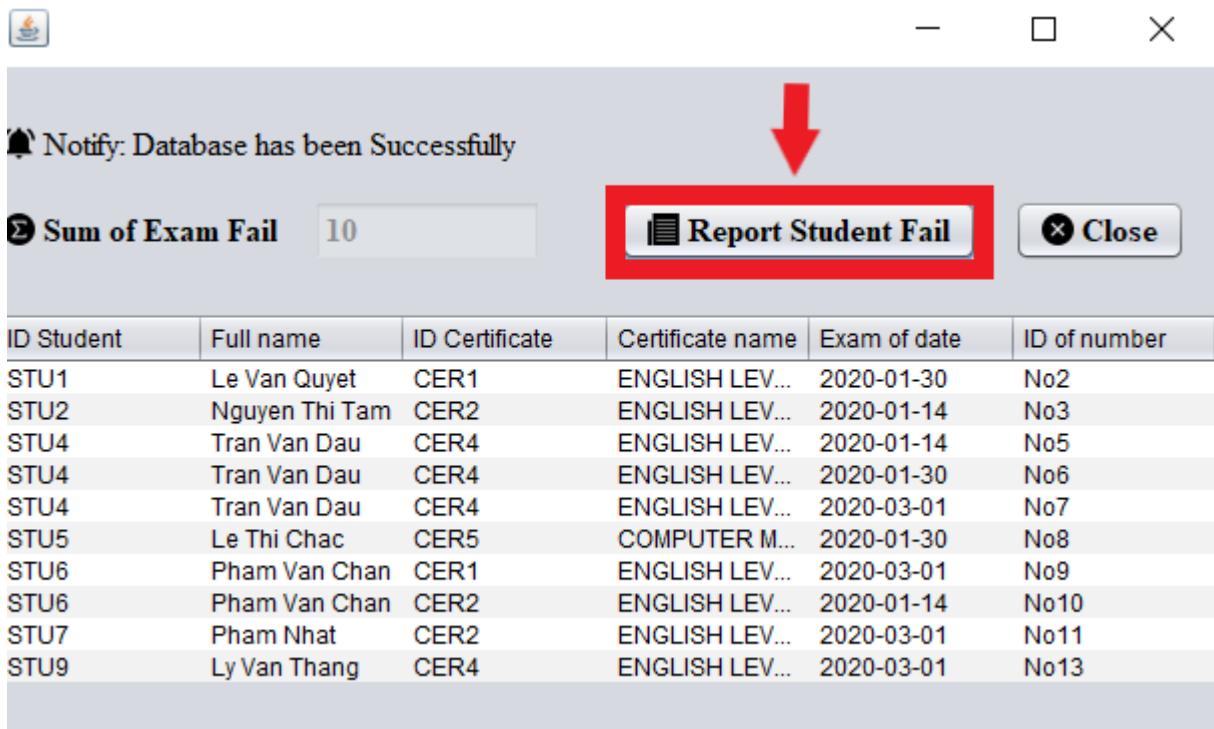


Figure 4.77: Click the button “Report Student Fail”

After that clicking a button “Report”.

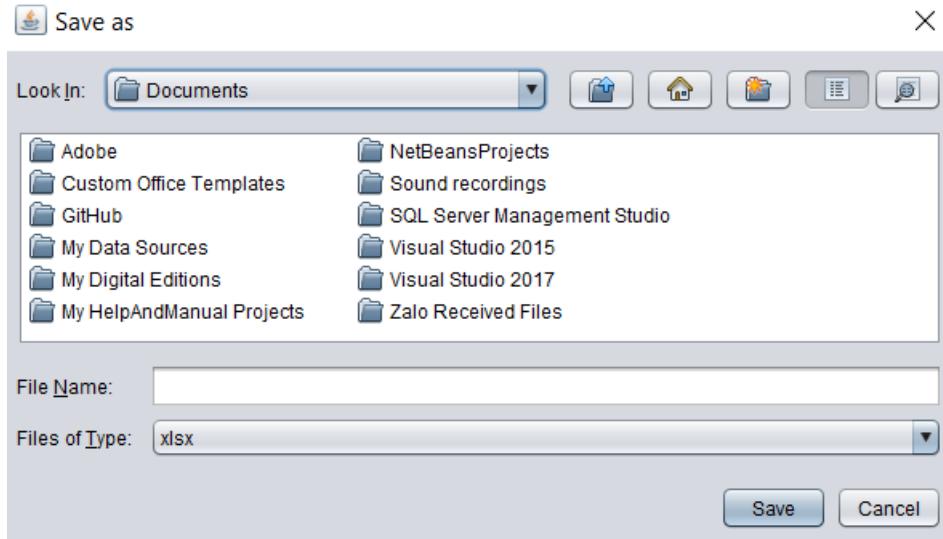


Figure 4.78: After click the button “Report Student Fail”

- Step 4: A user wants to close a form of Student Fail.

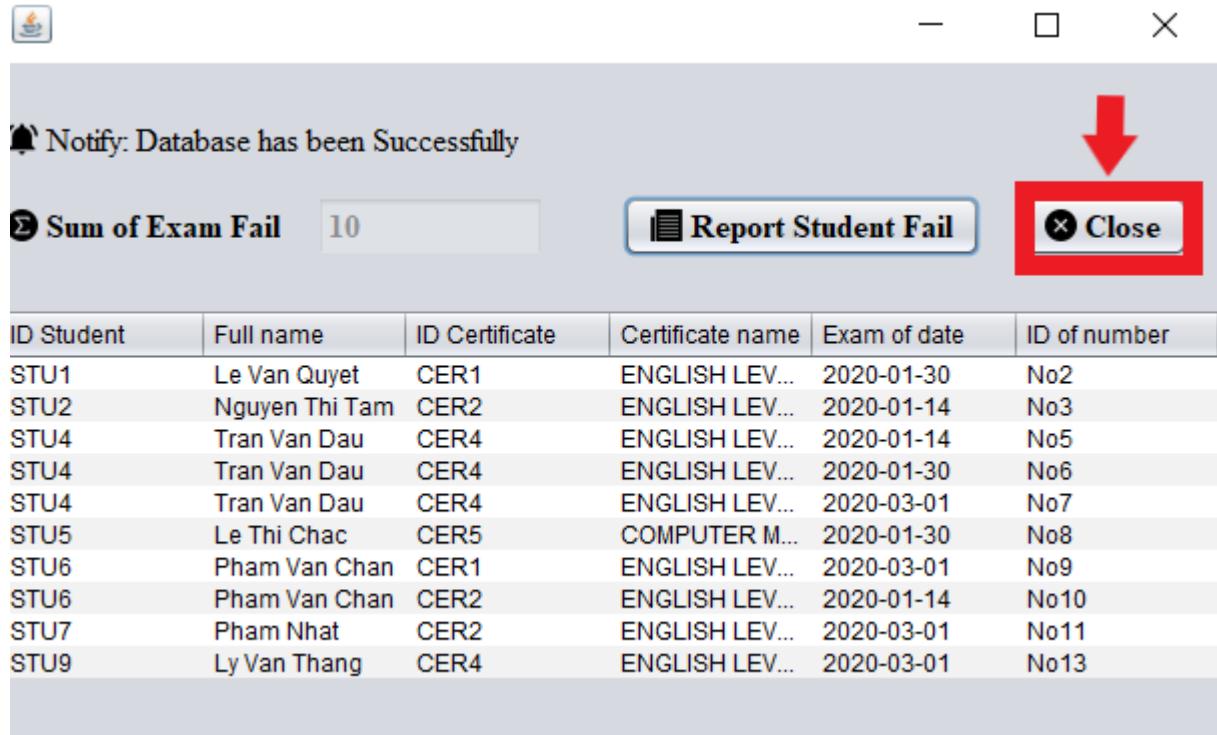
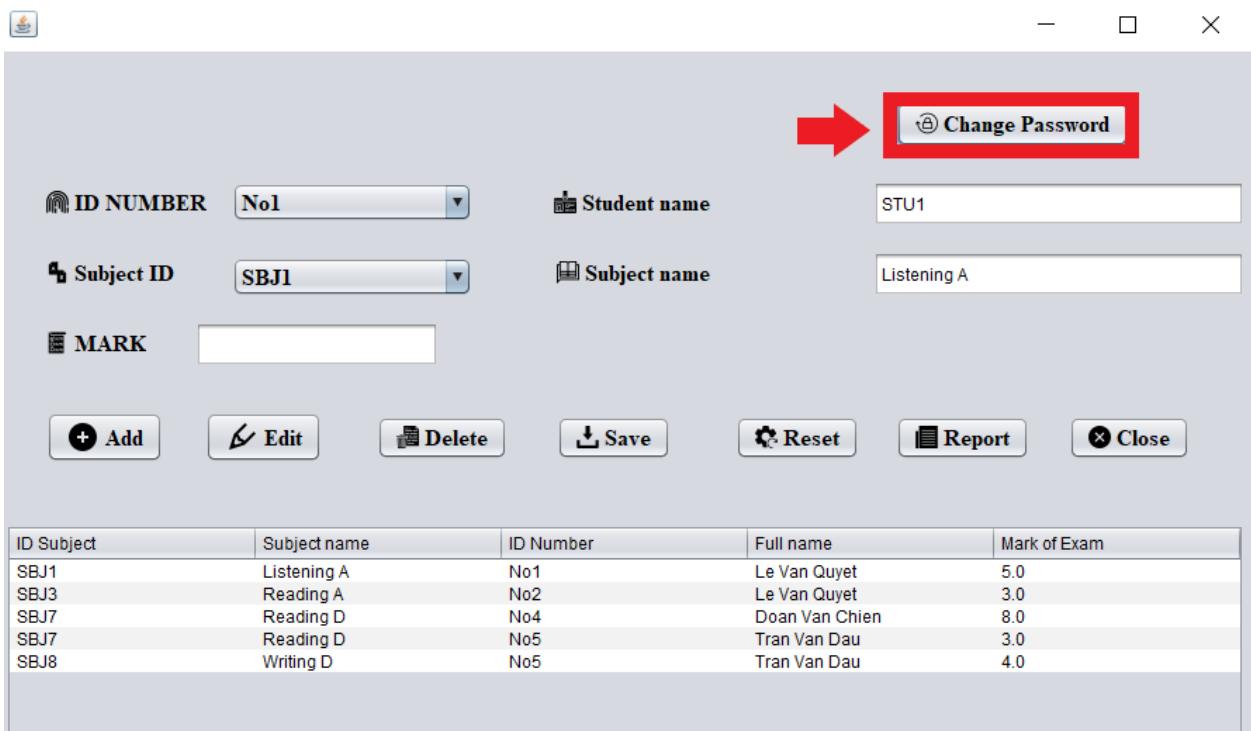


Figure 4.79: Click the button “close” in student fail

4.12 Change Password

- Step 1: Click the button “Change Password” in form Management Mark.

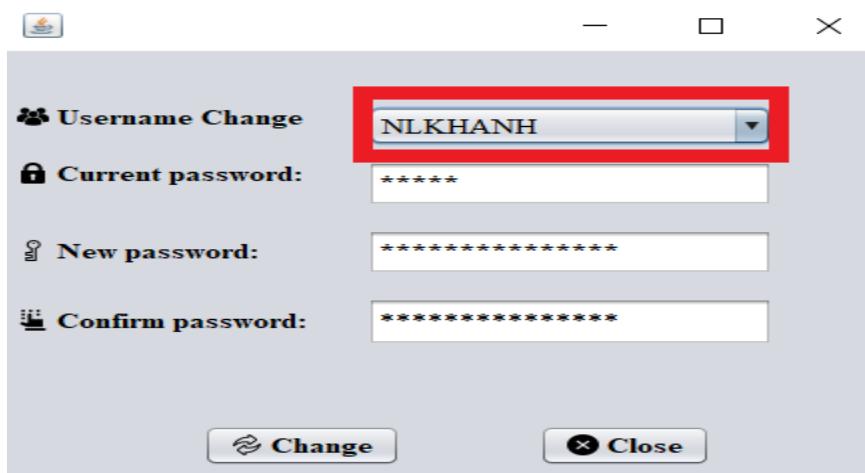


The screenshot shows a Windows-style application window titled "Management Mark". At the top, there are input fields for "ID NUMBER" (No1), "Student name" (STU1), "Subject ID" (SBJ1), and "Subject name" (Listening A). Below these are buttons for "+ Add", "Edit", "Delete", "Save", "Reset", "Report", and "Close". A large table below the buttons lists student data:

ID Subject	Subject name	ID Number	Full name	Mark of Exam
SBJ1	Listening A	No1	Le Van Quyet	5.0
SBJ3	Reading A	No2	Le Van Quyet	3.0
SBJ7	Reading D	No4	Doan Van Chien	8.0
SBJ7	Reading D	No5	Tran Van Dau	3.0
SBJ8	Writing D	No5	Tran Van Dau	4.0

Figure 4.80: Click the button “Change Password” in form Management Mark

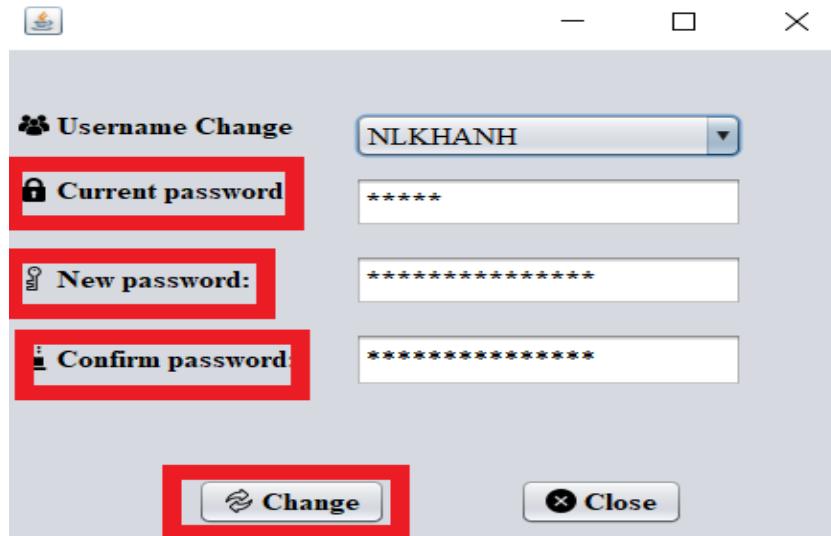
- Step 2: Select a user wants to change password



The screenshot shows a dialog box titled "Username Change". It contains four input fields: "Current password:" (*****), "New password:" (*****), "Confirm password:" (*****), and a dropdown menu labeled "NLKHANH". At the bottom are "Change" and "Close" buttons.

Figure 4.81: Select a user wants to change password

- Step 3: Enter current password, new password and Confirm Password. And click the button “Change”.



- Step 4: A user wants to close a change password.

Figure 4.82: Enter Current password, new password, and Confirm Password and then click the button “Change”.

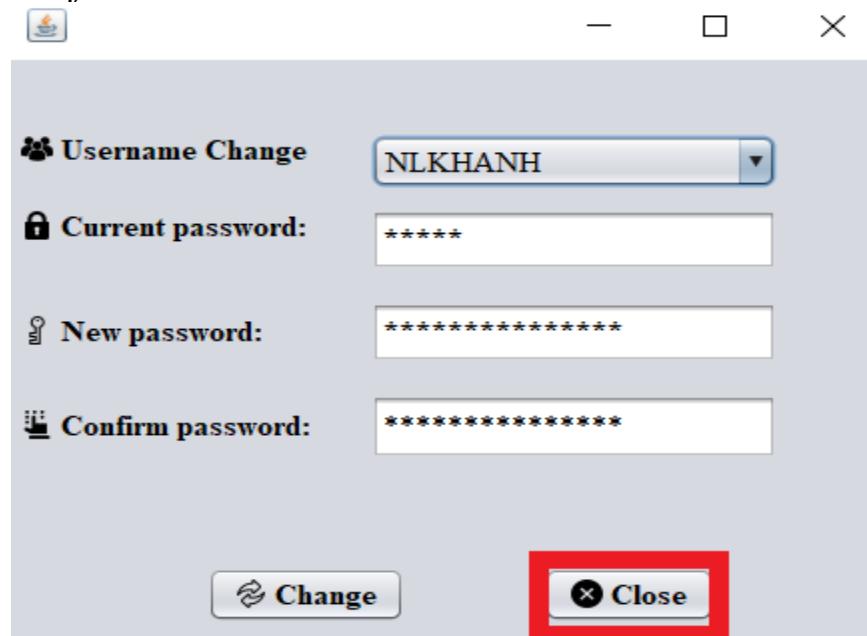


Figure 4.83: Click the button “close” in the change to a password

After clicking the button “close” in change password. Back to form Management Mark.

4.13 Print Certificate.

- Step 1: In form system management certificate. Click the button “Print Certificate”.

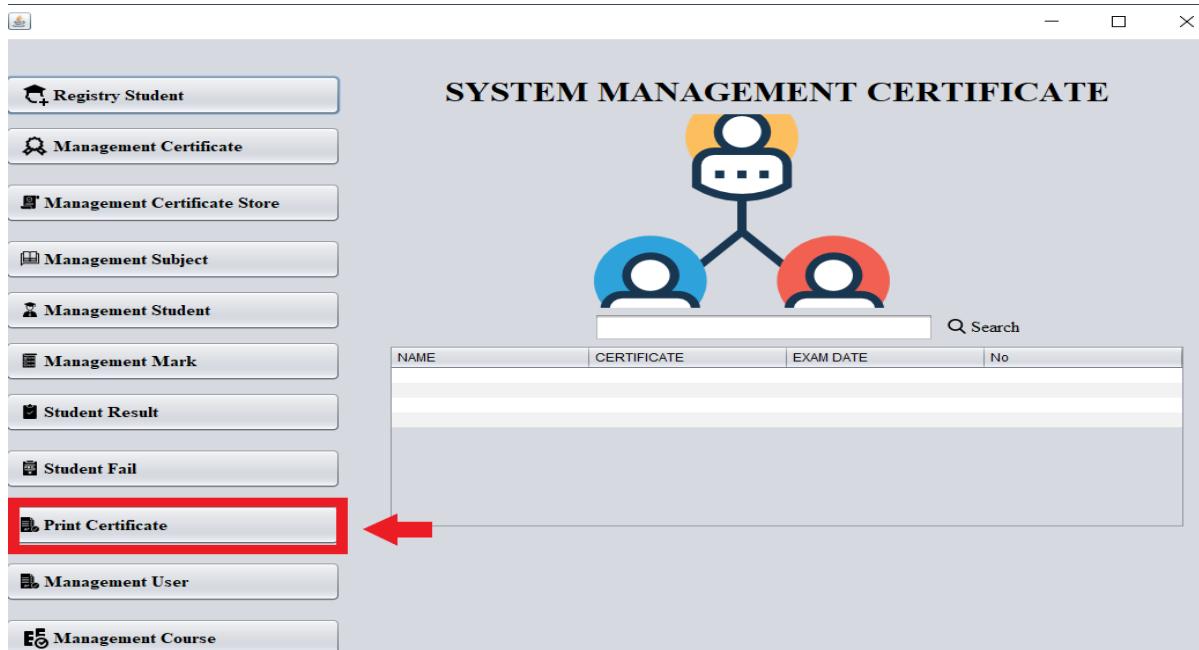


Figure 4.84: Click the button “Print Certificate”

- Step 2: Display Form “Print Certificate”.

Figure 4.85: Form Print Certificate

- Step 3: Enter Identity of number in the search to text and click the button “Search” and then display the information certificate of the student.



Figure 4.86: Enter Identity of number in the search text and click the button “Search”

- Step 4: Clicking the button “Exam Result” and then display a form “Student Result”.



Figure 4.87: Clicking the button “Exam Result”. Display form “Student Result”

- Step 5: Display form after clicking the button “Print”. Select a

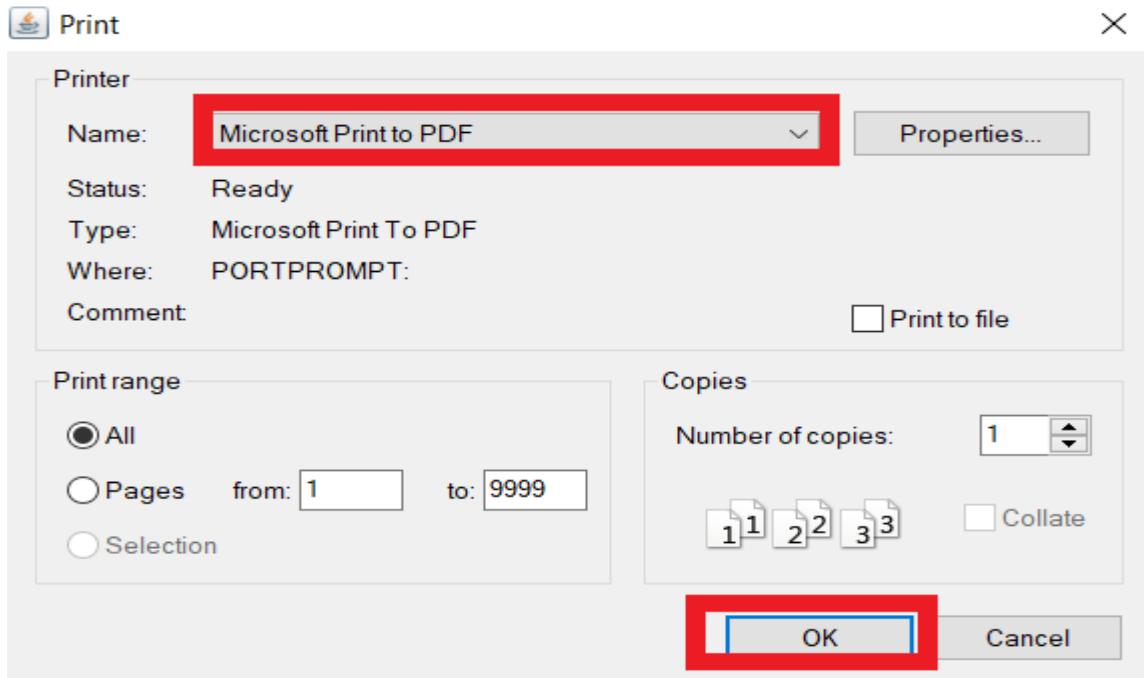


Figure 4.88: Display form after clicking the button “Print” print type and click the button “OK” or “Cancel”.