

Art Gallery Project

Group 5

Members:

Nguyễn Duy Phúc - ITDSIU21030

Tô Anh Khoa - ITITIU21225

Nguyễn Hữu Minh Nguyễn - ITITIU21089

Trần Nguyễn Nam Anh - ITITIU20162

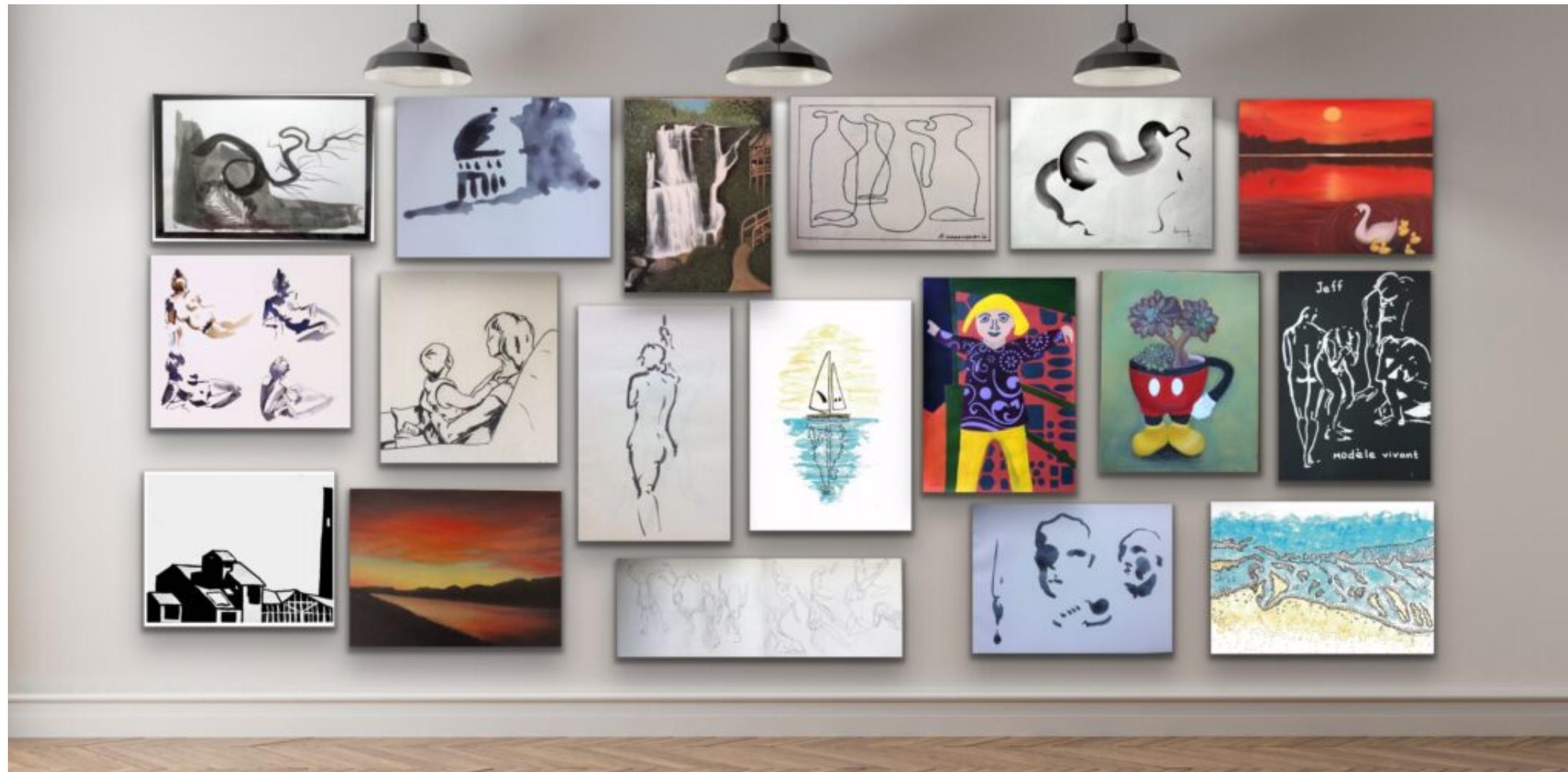
Phạm Đăng Quang - ITCSIU21147

Phạm Minh Nguyên - ITITUN21033

Table of contents:

- Introduction
- Result
- Conclusion
- Question and Answer

Objectives



Online gallery app

Objectives



Buy artwork

Methods

+ Java (Netbeans)



Apache NetBeans

+ MySQL



+ XAMPP

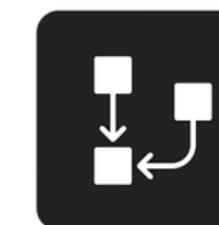


XAMPP

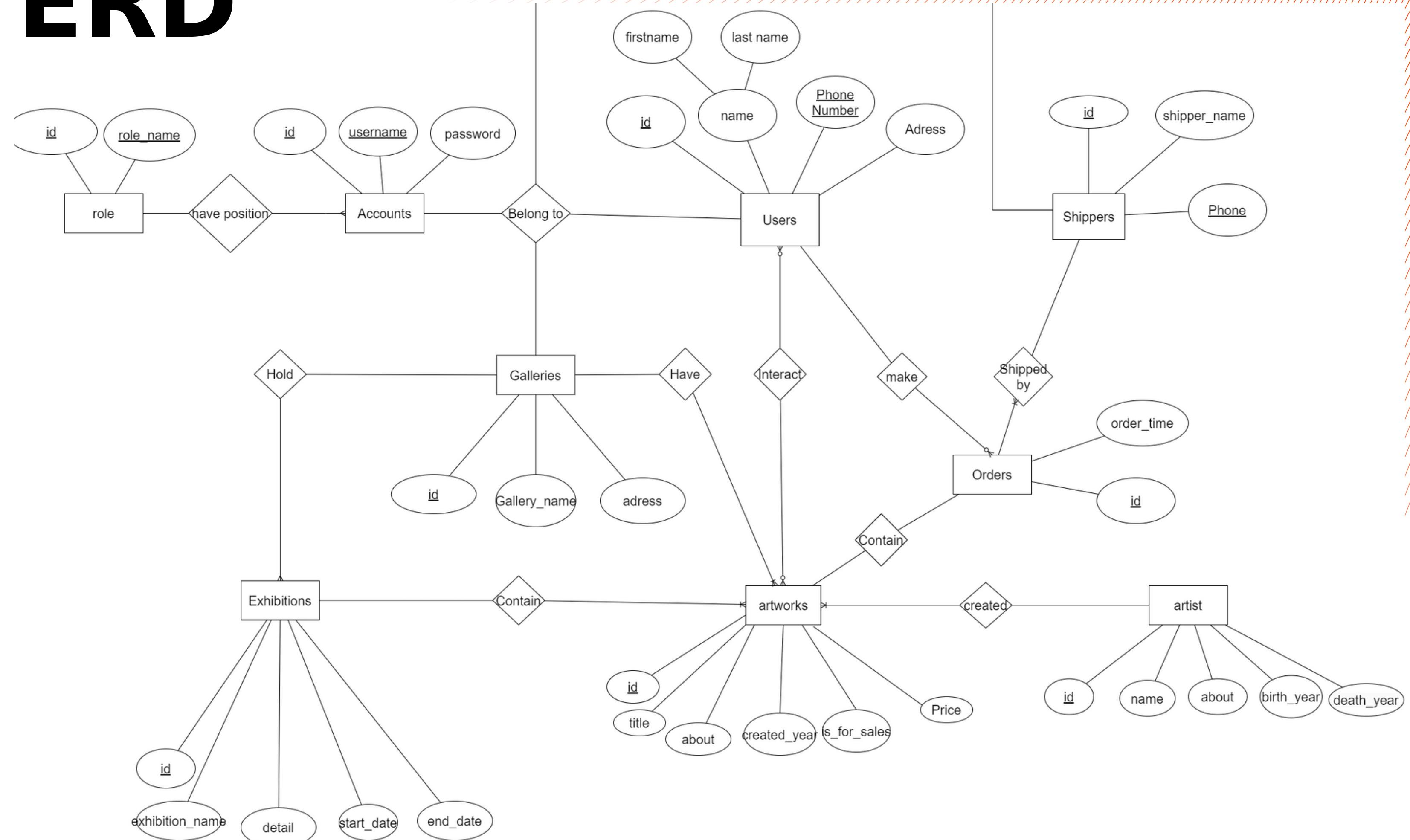
+ Draw.io



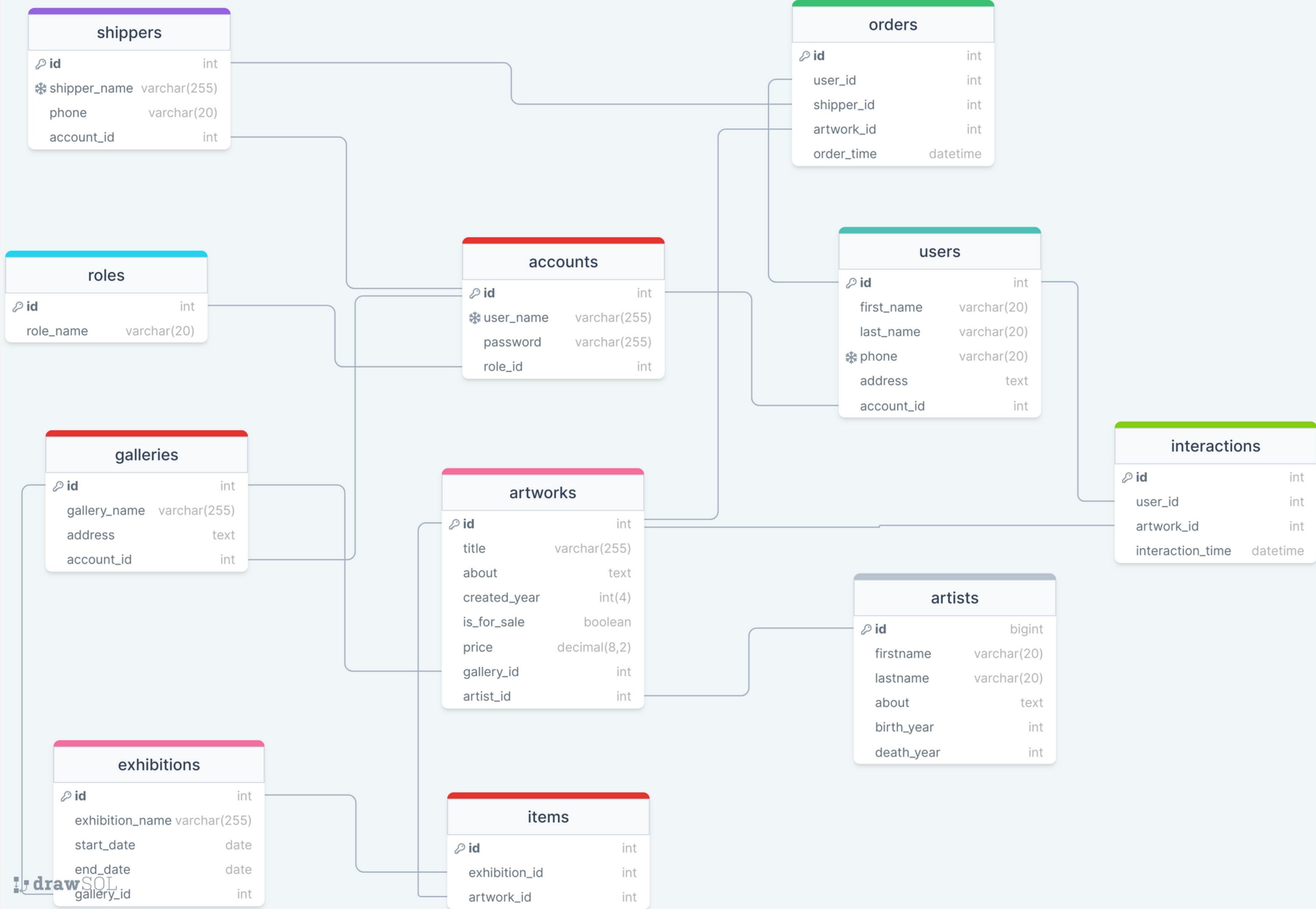
+ Drawsql.com



ERD



Tables



Normalization

1 NF	Every table has primary key. There is no null value
2 NF	Every attribute must depend on key
3 NF	No transitive dependencies
BCNF	Each attribute in the table must depend on the key, the whole key, and nothing but the key

Roles	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY ROLE_NAME varchar(20) NOT NULL UNIQUE
Accounts	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY USER_NAME varchar(255) NOT NULL PASSWORD varchar(255) NOT NULL ROLE_ID int unsigned NOT NULL
Users	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY FIRST_NAME varchar(20) NOT NULL LAST_NAME varchar(20) NOT NULL PHONE varchar(20) NOT NULL UNIQUE ADDRESS text NOT NULL ACCOUNT_ID int unsigned NOT NULL
Galleries	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY GALLERY_NAME varchar(255) NOT NULL ADDRESS_TEXT TEXT NOT NULL
	ACCOUNT_ID int unsigned NOT NULL
Shippers	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY SHIPPER_NAME varchar(255) NOT NULL PHONE varchar(20) NOT NULL ACCOUNT_ID int unsigned NOT NULL



Artworks	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY TITLE varchar(255) NOT NULL ABOUT text NOT NULL CREATED_YEAR int NOT NULL IS_FOR_SALE boolean NOT NULL PRICE decimal(8, 2) NOT NULL GALLERY_ID int UNSIGNED NOT NULL ARTIST_ID int UNSIGNED NOT NULL
Artists	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY FULLNAME varchar(255) NOT NULL ABOUT text NOT NULL BIRTH_YEAR year NOT NULL DEATH_YEAR year NOT NULL
Exhibitions	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY EXHIBITION_NAME varchar(255) NOT NULL DETAIL text NOT NULL START_DATE date NOT NULL NOT NULL END_DATE date NOT NULL GALLERY_ID int unsigned NOT NULL

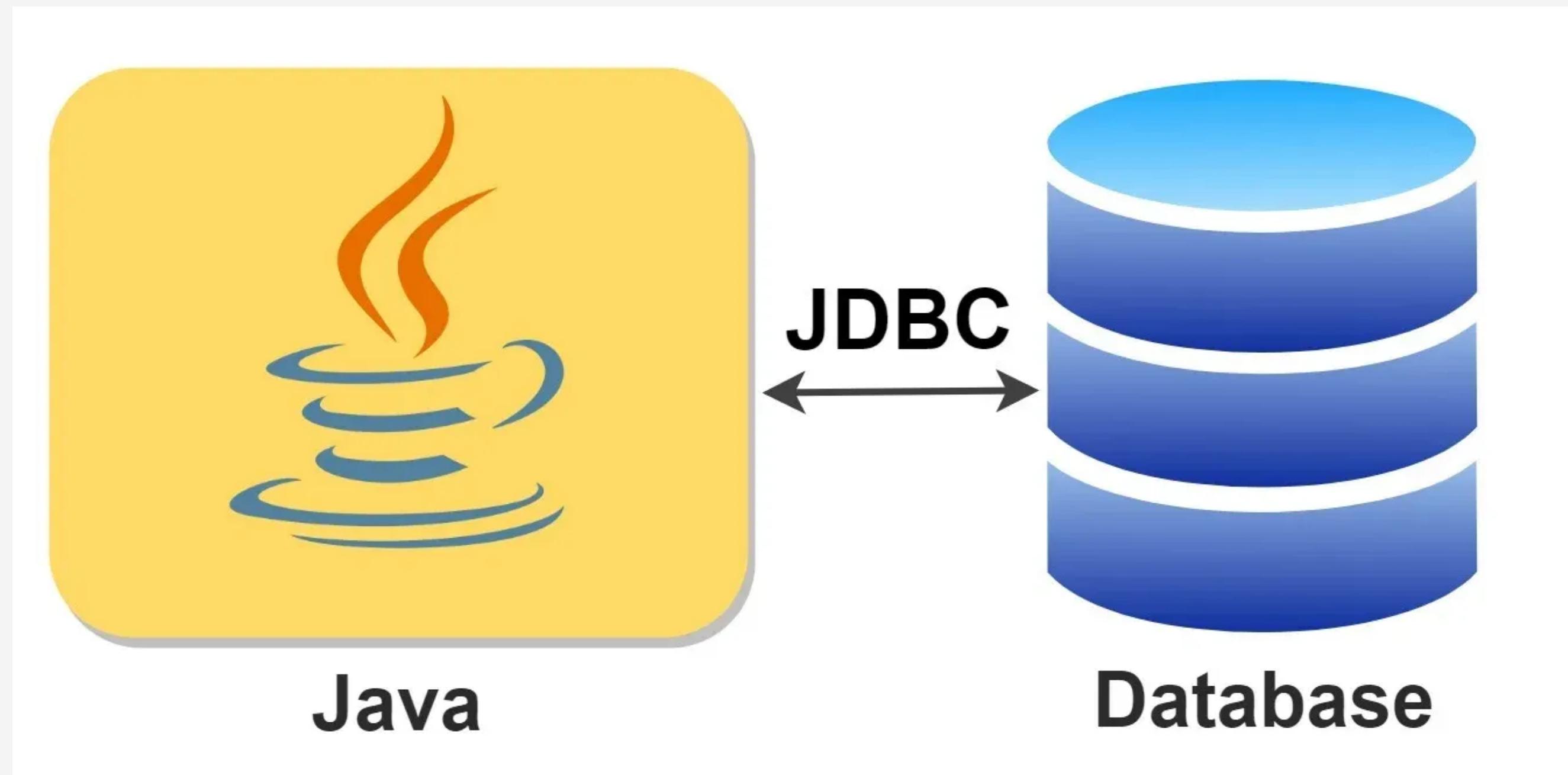


Items	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY EXHIBITION_ID int unsigned NOT NULL ARTWORK_ID int unsigned NOT NULL
-------	---

Orders	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY USER_ID int unsigned NOT NULL SHIPPER_ID int unsigned NOT NULL ARTWORK_ID int unsigned NOT NULL ORDER_TIME datetime NOT NULL
--------	---

Interactions	ID int unsigned NOT NULL AUTO_INCREMENT PRIMARY KEY USER_ID int unsigned NOT NULL ARTWORK_ID int unsigned NOT NULL INTERACTION_TIME datetime NOT NULL
--------------	--

CONNECTION



localhost/phpmyadmin/index.php?route=/database/structure&db=artgallery

Máy chủ: 127.0.0.1 » Cơ sở dữ liệu: artgallery

Cấu trúc SQL Tim kiếm Truy vấn Xuất Nhập Thao tác Đặc quyền Thủ tục Sự kiện Bấy Theo dõi Bộ thiết kế

Bộ lọc

Có chứa từ:

Bảng	Hành động	Hàng	Kiểu	Bảng mã đối chiếu	Kích thước	Tổng chi phí
accounts	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	6	InnoDB	utf8mb4_general_ci	48,0 KiB	-
artists	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	6	InnoDB	utf8mb4_general_ci	16,0 KiB	-
artworks	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	3	InnoDB	utf8mb4_general_ci	48,0 KiB	-
exhibitions	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	2	InnoDB	utf8mb4_general_ci	32,0 KiB	-
galleries	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	2	InnoDB	utf8mb4_general_ci	32,0 KiB	-
interactions	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	4	InnoDB	utf8mb4_general_ci	48,0 KiB	-
items	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	3	InnoDB	utf8mb4_general_ci	48,0 KiB	-
orders	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	3	InnoDB	utf8mb4_general_ci	64,0 KiB	-
roles	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	4	InnoDB	utf8mb4_general_ci	32,0 KiB	-
shippers	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	1	InnoDB	utf8mb4_general_ci	32,0 KiB	-
users	Duyệt Cấu trúc Tìm kiếm Chèn Rỗng Xóa	2	InnoDB	utf8mb4_general_ci	48,0 KiB	-
11 bảng	Tổng	36	InnoDB	utf8mb4_general_ci	448,0 KiB	0 B

Theo dõi bảng Lưu mục đã chọn

In Từ điển dữ liệu

Bảng điều khiển

MySQL Community Downloads

◀ Connector/J

General Availability (GA) Releases Archives 

Connector/J 8.2.0

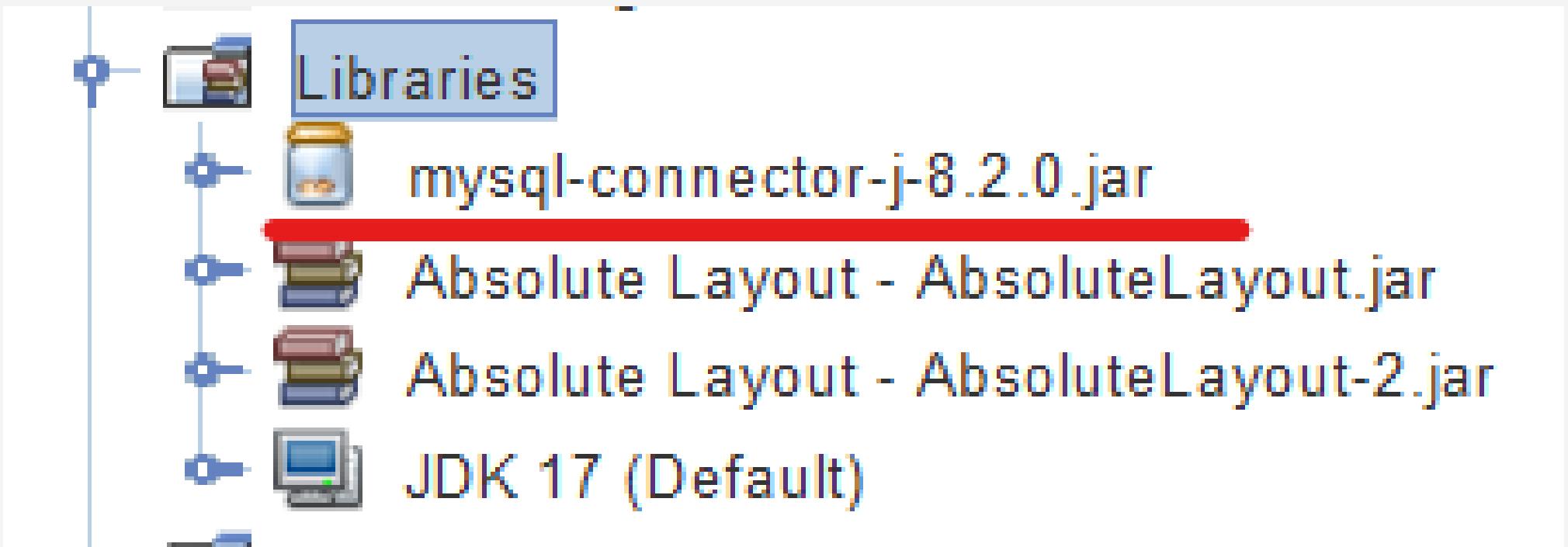
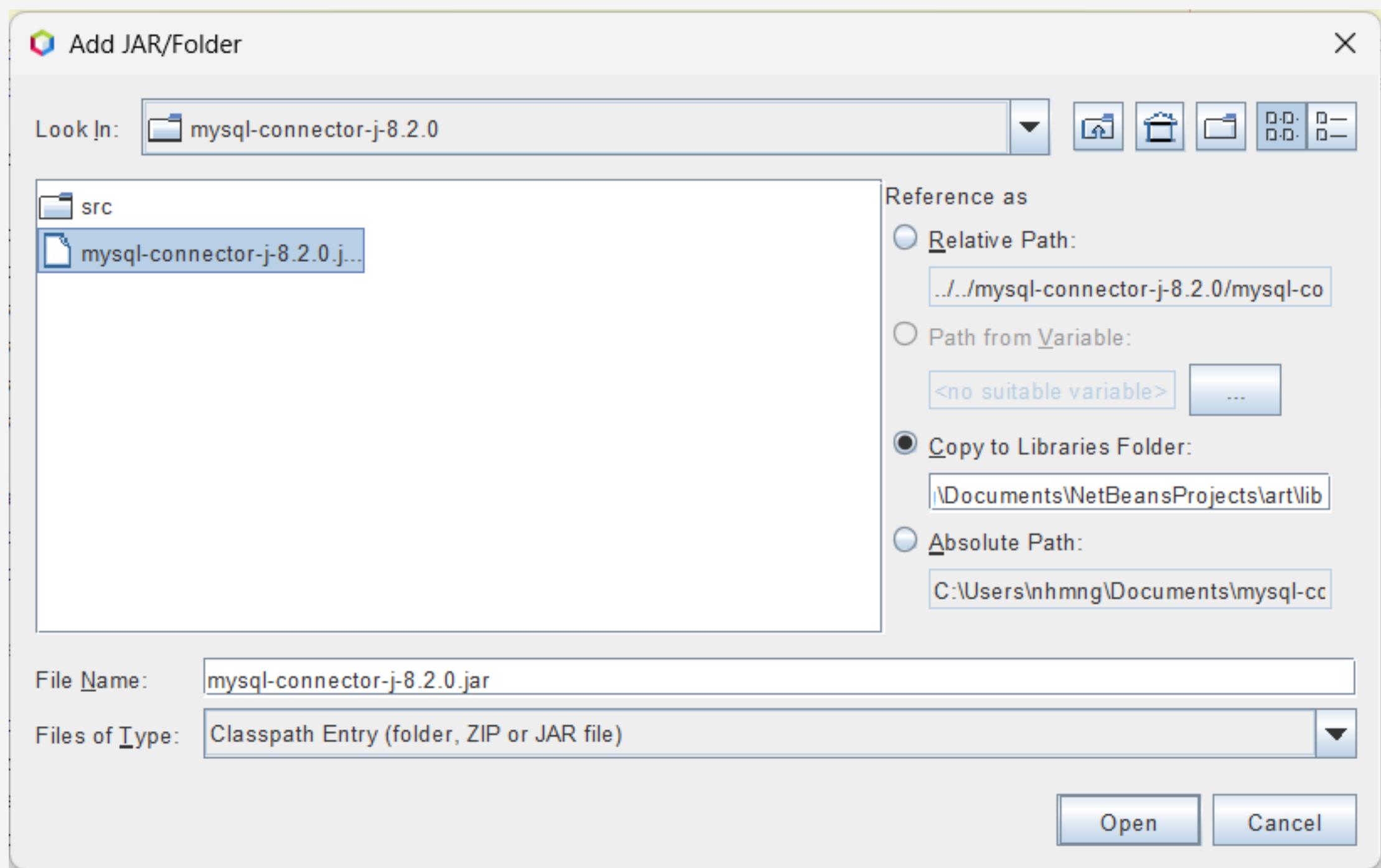
Select Operating System:

Platform Independent

Platform Independent (Architecture Independent), Compressed TAR Archive (mysql-connector-j-8.2.0.tar.gz)	8.2.0	4.0M	Download
Platform Independent (Architecture Independent), ZIP Archive (mysql-connector-j-8.2.0.zip)	8.2.0	4.8M	Download

 We suggest that you use the [MD5 checksums](#) and GnuPG signatures to verify the integrity of the packages you download.

ADD LIBRARY





<default config>



Projects X Services

- art
 - Source Packages
 - art
 - art.Admin
 - art.DAO
 - ConnectionProvider.java
 - art.Galleries
 - art.Shipper
 - art.User
 - Test Packages
 - Libraries
 - mysql-connector-j-8.2.0.jar
 - Absolute Layout - AbsoluteLayout.jar
 - Absolute Layout - AbsoluteLayout-2.jar
 - JDK 17 (Default)
 - Test Libraries
 - pdmproject

ConnectionProvider.java x

Source History

```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4   */
5  package art.DAO;
6
7  import java.sql.Connection;
8  import java.sql.DriverManager;
9
10 public class ConnectionProvider {
11     public static Connection getCon(){
12         try{
13             Class.forName("com.mysql.cj.jdbc.Driver");
14             Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/artgallery?useSSL=false", "root", "");
15             return con;
16         }
17         catch(Exception e){
18             System.out.println(e);
19             return null;
20         }
21     }
22 }
23
```

ConnectionProvider

RESULT

LOGIN PAGE

WELCOME

Username:

Password:

LOGIN

SIGN UP

CLOSE

[BACK](#)

SIGN UP

Username

Password

First name

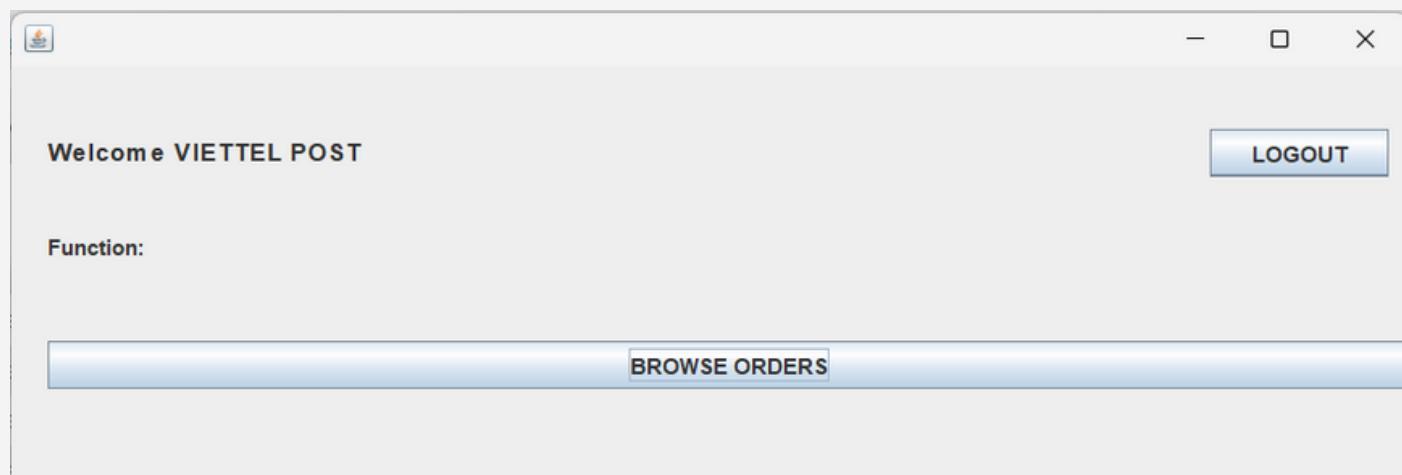
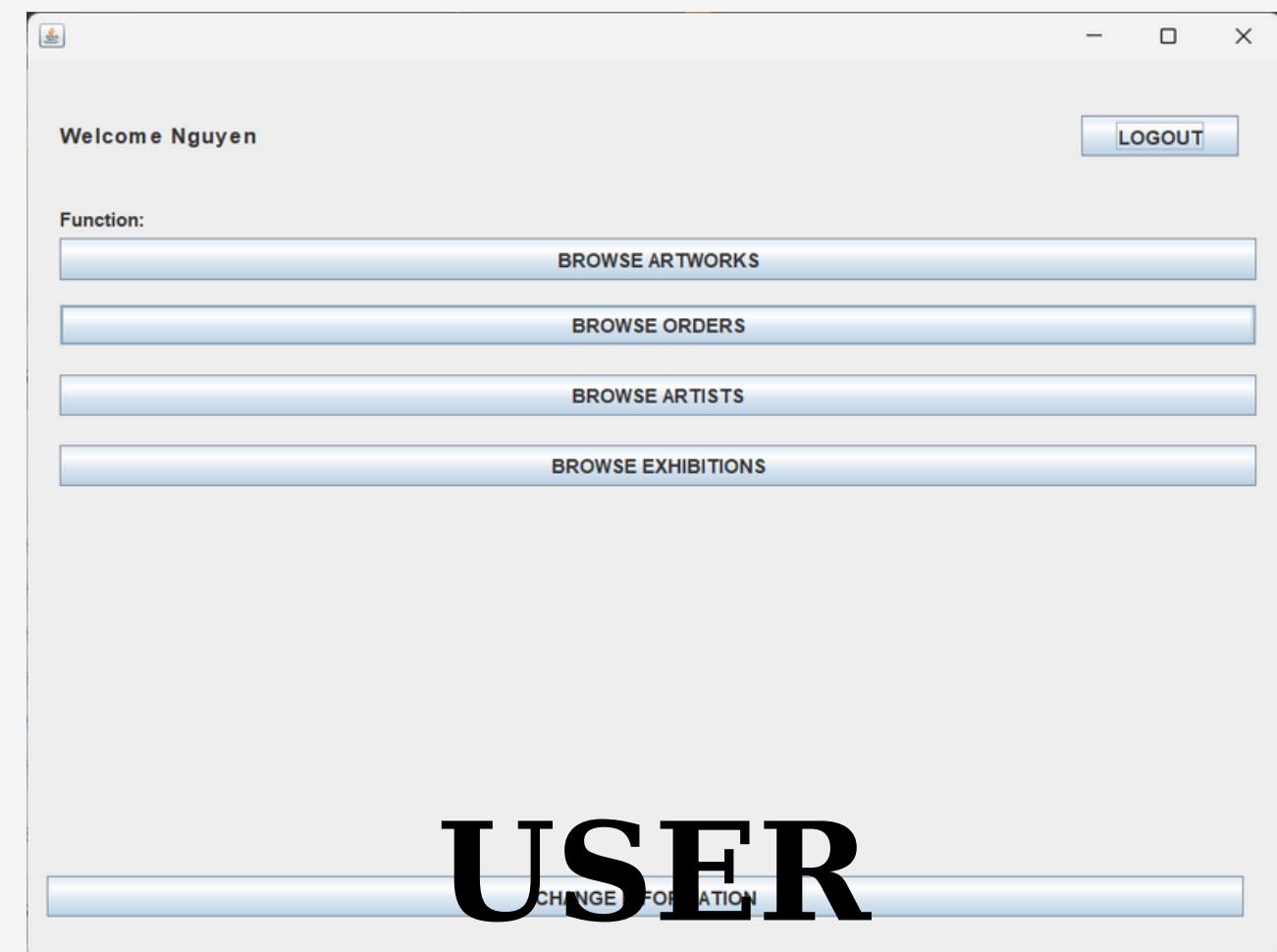
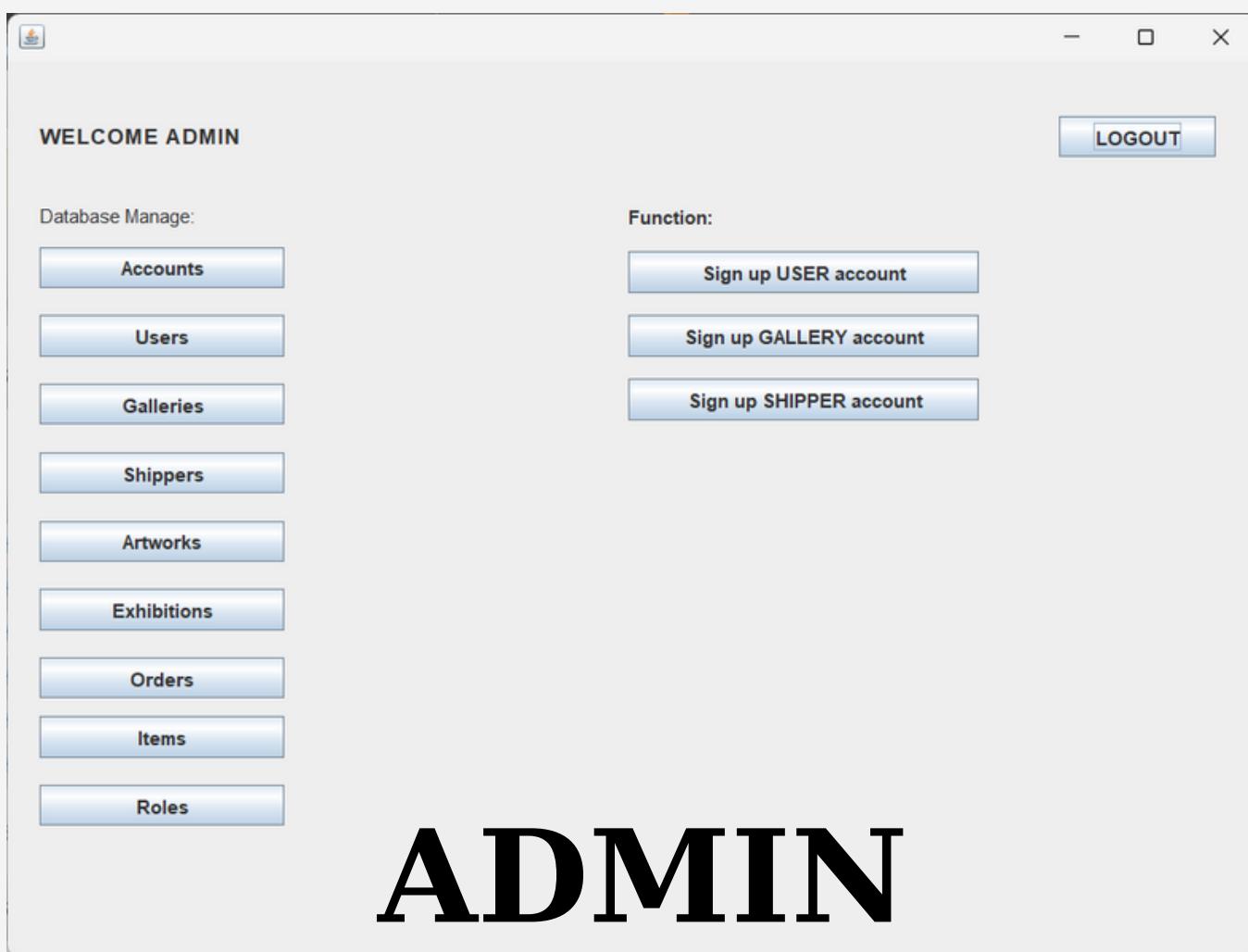
Last name

Phone

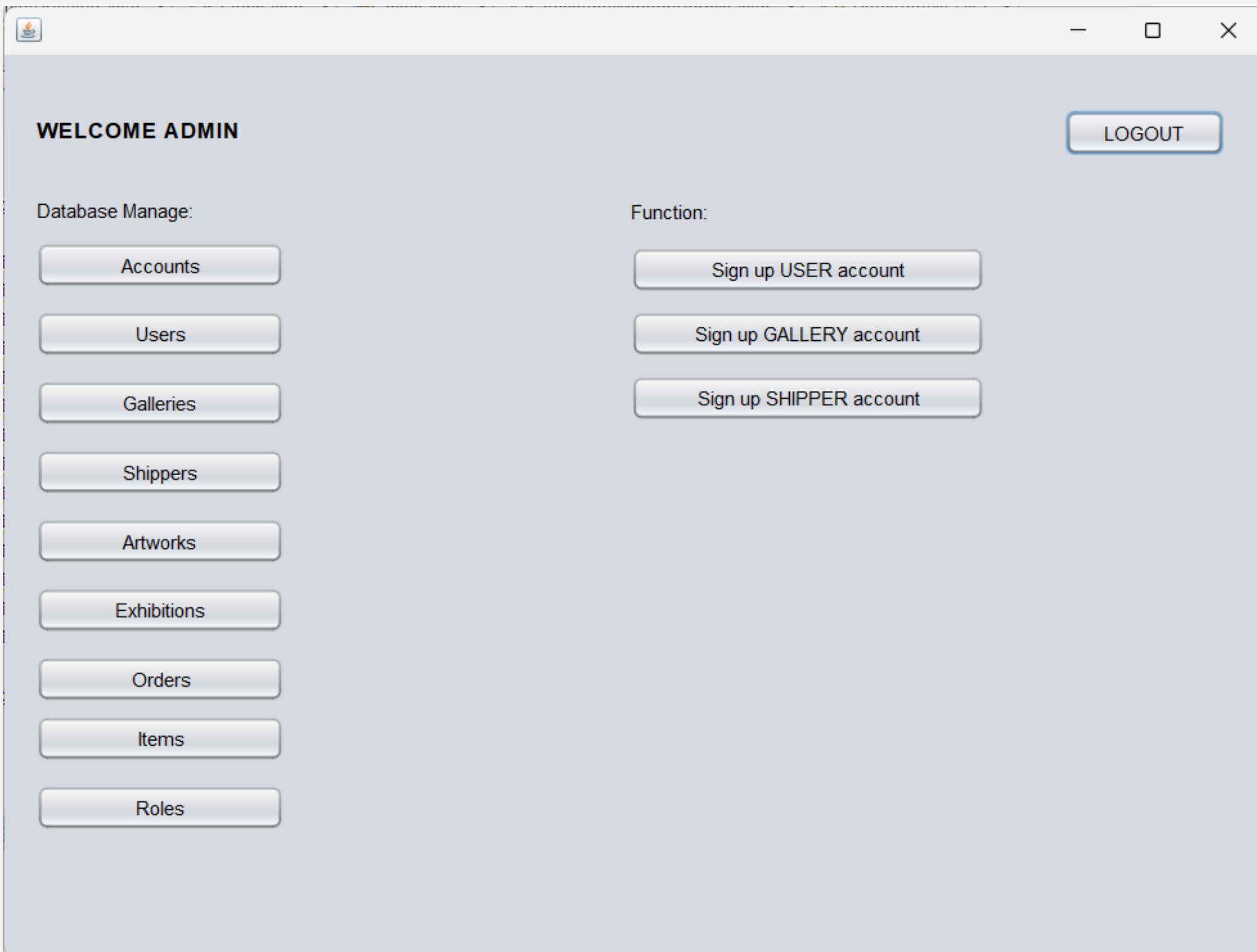
Address

[SIGN UP](#)

```
private void loginButtonActionPerformed(java.awt.event.ActionEvent evt) {  
    String username = txtusername.getText();  
    String password = txtpassword.getText();  
  
    int temp = 0;  
    try{  
        Connection con = ConnectionProvider.getCon();  
        Statement st = con.createStatement();  
        ResultSet rs = st.executeQuery("SELECT * FROM `accounts` where username = '"+username+"' and password = '"+password+"'");  
  
        while (rs.next()) {  
            temp = 1;  
            setVisible(false);  
            if (rs.getInt("role_id") == 1){  
                new HomeAdmin(rs.getInt("id")).setVisible(true);  
            }  
            else if( rs.getInt("role_id") == 2){  
                new HomeUser(rs.getInt("id")).setVisible(true);  
            }  
            else if( rs.getInt("role_id") == 3){  
                new HomeGallery(rs.getInt("id")).setVisible(true);  
            }  
            else if( rs.getInt("role_id") == 4){  
                new HomeShipper(rs.getInt("id")).setVisible(true);  
            }  
        }  
        if (temp == 0){  
            JOptionPane.showMessageDialog(null,"Wrong username or password");  
        }  
    }  
    catch(Exception e){  
        JOptionPane.showMessageDialog(null,e);  
    }  
}
```



ADMIN HOMEPAGE



Have access to all table

Creating account with
different roles

Account Manage

ID	Username	Password	RoleID
1	admin	password	1
2	shipper1	123	4
3	gallery1	123	3
4	gallery2	1234	3
5	user1	abc	2
6	user2	abcd	2

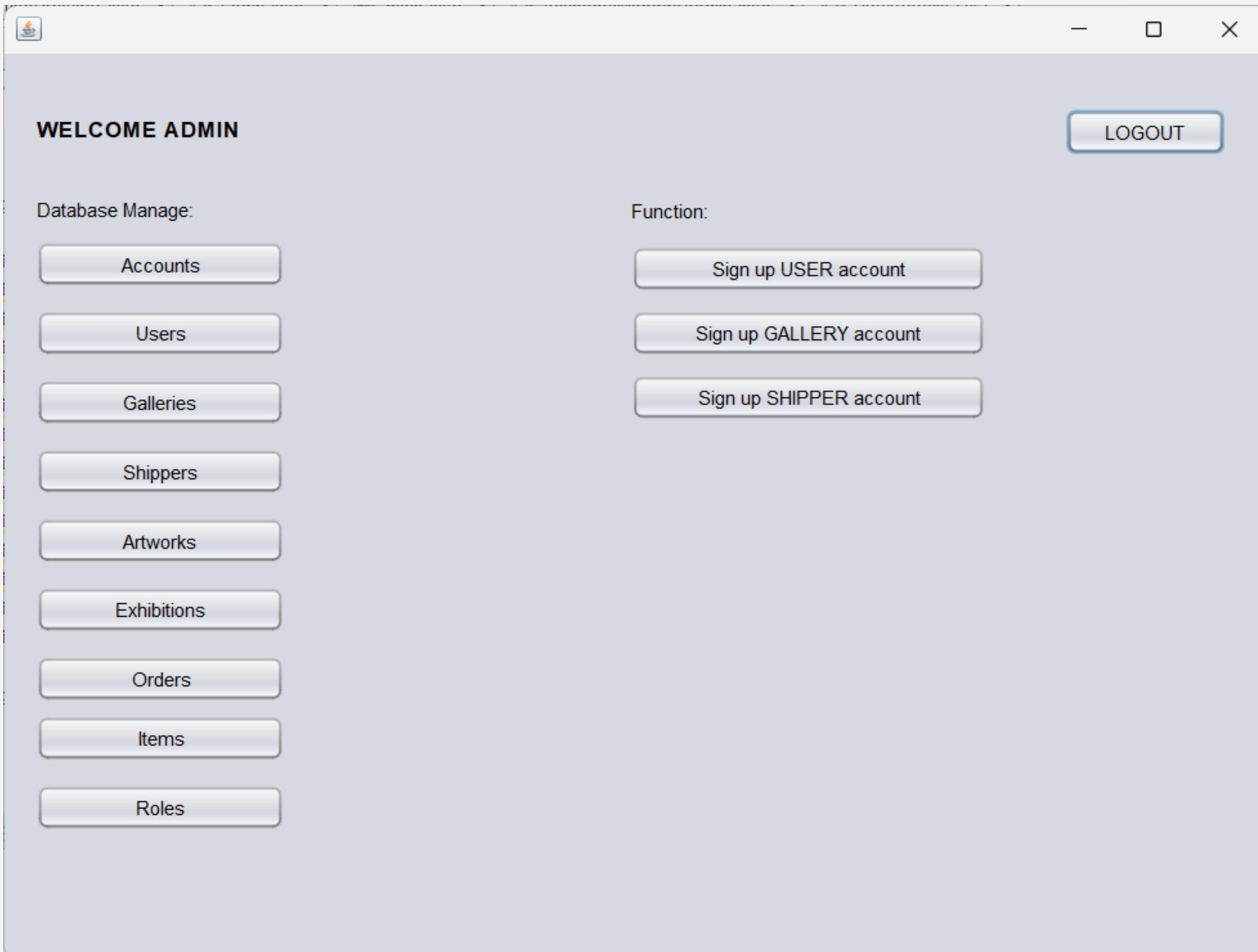
ID

Username

Password

Role

ADMIN HOMEPAGE



Have access to all table

Creating account with
different roles

SIGN UP FORM

[BACK](#)

SIGN UP

Username

Password

First name

Last name

Phone

Address

SIGN UP

GALLERY

BACK

SIGN UP

Username

Password

Galleries name

Address

SIGN UP

SHIPPER

BACK

SIGN UP

Username

Password

Shipper name

Phone

SIGN UP

ADMIN

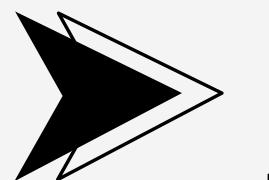
Have access to all tables

Can view, update, add, and delete data

Creating account with different roles

Flaw in security

The data can be stolen if admin account got leaked



Should only have one admin account, and manage carefully



USER

- □ ×

WELCOME USER:

LOGOUT

Function:

BROWSE ARTWORKS

BROWSE ORDERS

BROWSE ARTISTS

BROWSE EXHIBITIONS

CHANGE INFORMATION

[BACK](#)

Artworks Manage

Title	About	Created ...	For sale?	Price	Gallery ID	Artist ID
Self-Port...	Van Gog...	1887	0	0.00	1	1
Almond ...	Almond ...	1890	1	2000.00	1	1
The Old ...	Van Gog...	1885	0	0.00	1	1

Title

Almond Blossom

About

Almond Blossom Large blossom branches like this against a blue sky were one of Van Gogh's favourite subjects.

Created year

1890

For sale

True

Price

2000.00

Gallery name

Van Gogh Museum

Artist name

Vincent Van Gogh

LIKE

BUY

Select Shipper

ID	Shipper_name	Phone
1	VIETTEL POST	3456789

ID

1

Shipper name

VIETTEL POST

Phone

3456789

SELECT

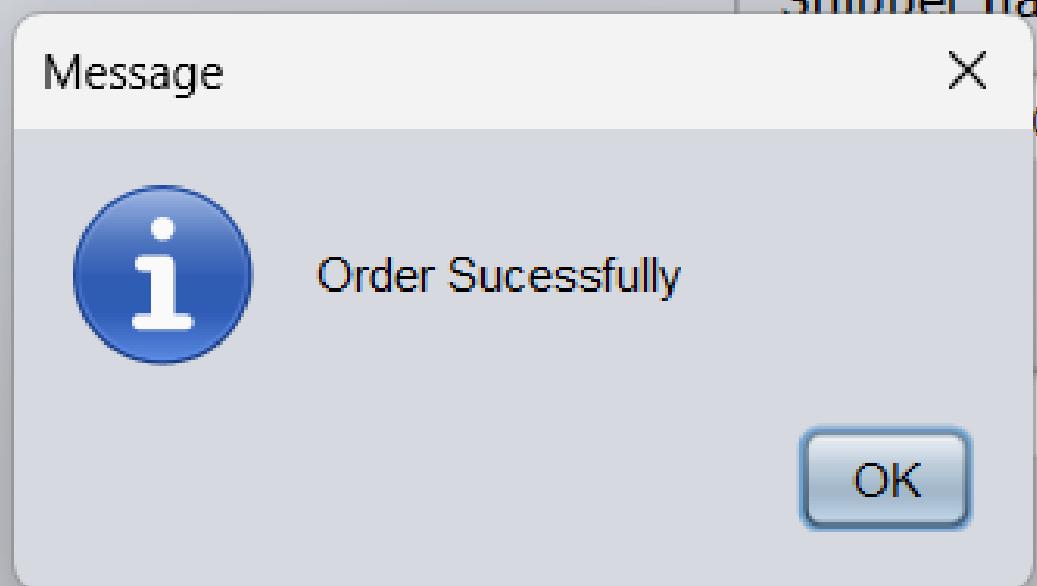
CLOSE

Select Shipper

ID	Shipper_name	Phone
1	VIETTEL POST	3456789

ID
1

Shinner name
OST



SELECT

CLOSE

[BACK](#)

Oder Manage

ID	Shipper ID	Artwork ID	Order time
1	1	2	2024-01-04 02:23:17

Order ID

1

Shipper ID

1

Shipper name

VIETTEL POST

Artwork ID

2

Artwork's title

Almond Blossom

Order time

2024-01-04 02:23:17

[BACK](#)

Artists Manage

Artist name	About	Birth year	Death year
Vincent Van G...	This Dutch Po...	1853	1890
Leonardo da Vi...	The celebrated...	1452	1519
Salvador Dali	The king of Sur...	1904	1989
Edvard Munch	A Norwegian p...	1863	1944
Johannes Ver...	This 17th centu...	1632	1675
Claude Monet	The iconic Fre...	1840	1926

Artist name

About

This Dutch Post-Impressionist artist is considered to be one of the greatest painters of all time.

Birth year

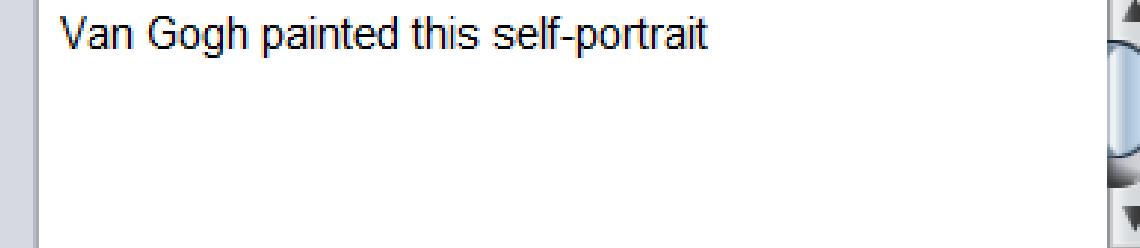
Death year

[BROWSE ARTWORK](#)

[BACK](#)

Artworks Manage

Title	About	Created ...	For sale?	Price	Gallery ID	Artist ID
Self-Port...	Van Gog...	1887	0	0.00	1	1
Almond ...	Almond ...	1890	1	2000.00	1	1
The Old ...	Van Gog...	1885	0	0.00	1	1

Title**About****Created year****For sale****Price****Gallery name****Artist name**[LIKE](#)[BUY](#)

BACK

Exhibitions

Exhibition na...	Detail	Start date	End date	Gallery
Van Gough e...	Van Gough's...	2023-12-01	2023-12-30	1
Van Gough e...	Van Gough's...	2023-12-01	2023-12-30	1

Exhibition name

Van Gough exhibition

Detail

Van Gough's painting exhibition

Start date

2023-12-01

End date

2023-12-30

Gallery

Van Gogh Museum

Gallery address

Museumplein 6, 1071 DJ Amsterdam

BROWSE ARTWORK

[BACK](#)

Artworks Manage

Title	About	Created ...	For sale?	Price	Gallery ID	Artist ID
Self-Port...	Van Gog...	1887	0	0.00	1	1

Title**About****Created year****For sale****Price****Gallery name****Artist name**

ACCOUNT INFORMATION

First name

Phone

Address

First name

GALLERY

WELCOME

LOGOUT

Manage Database

Function

[Manage Artist](#)

[Add Artwork](#)

[Manage Artwork](#)

[Manage Exhibition](#)

Add Artworks

Title

About

Created year

For sale

True ▾

Price

SAVE

RESET

CLOSE

Select Artist

MANAGE

ID	NAME
1	Vincent Van Gogh
2	Leonardo da Vinci
3	Salvador Dali
4	Edvard Munch
5	Johannes Vermeer
6	Claude Monet

Exhibition Manage

ID	Exhibition...	Detail	Start date	End date
1	Van Gou...	Van Gou...	2023-12-	2023-12-
2	Van Gou...	Van Gou...	2023-12-	2023-12-

MANAGE ARTWORK FOR EXHIBITION

ID

1

Name

Van Gough exhibition

Detail

Van Gough's painting exhibition

Start date

2023-12-01

End date

2023-12-30

UPDATE

SAVE

DELETE

RESET

CLOSE

Exhibition Manage

Exhibition artworks

ID	Start date
1	Self-Portrait with Grey Fel...
2	Almond Blossom

Available artworks

ID	TITLE
3	The Old Church Tower at...

ADD

REMOVE

BACK

SHIPPER

The image shows a screenshot of a Windows application window titled "SHIPPER". The window has a standard title bar with a close button (X) and a minimize button (-). In the top-left corner, there is a small icon of a steaming coffee cup. The main area of the window is light gray and contains the word "WELCOME" in bold black capital letters. In the top-right corner of this area, there is a blue rectangular button with the word "LOGOUT" in white. Below the welcome message, the word "Function:" is displayed in blue. At the bottom of the window, there is a horizontal button with the text "BROWSE ORDERS" in blue.

WELCOME

LOGOUT

Function:

BROWSE ORDERS

DEMO