SHRI VILEPARLE KELAVANI MANDAL'S
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING
(Autonomous College Affiliated to the University of Mumbai)
NAAC ACCREDITED with "A" GRADE (CGPA : 3.18)

JAVA-DBMS MINI PROJECT

Title :

Imperial Bull : A Stock Management System

Problem Statement :

The Program has been designed to allow an user to register,login, view, buy and sell Stocks.

The Information entered by the user is stored in MySQL and can only be modified by the Admin.

Here the main job is to create a Phone-based application for many users which can access this on their mobile phones and can easily register and start investing in the Stock Market hassle free.

Use Netbeans for Java and MySQL for DBMS part of the project.
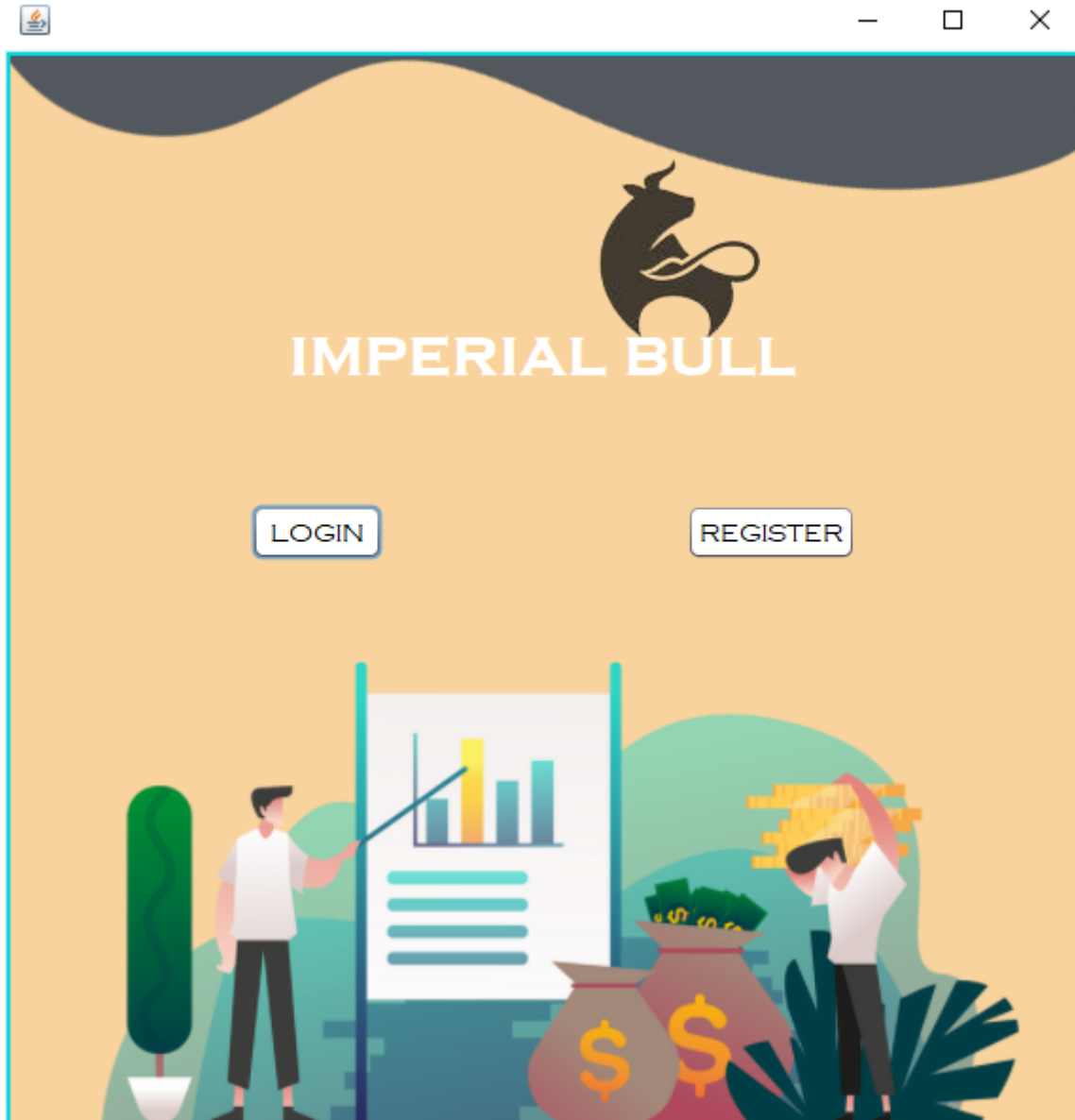
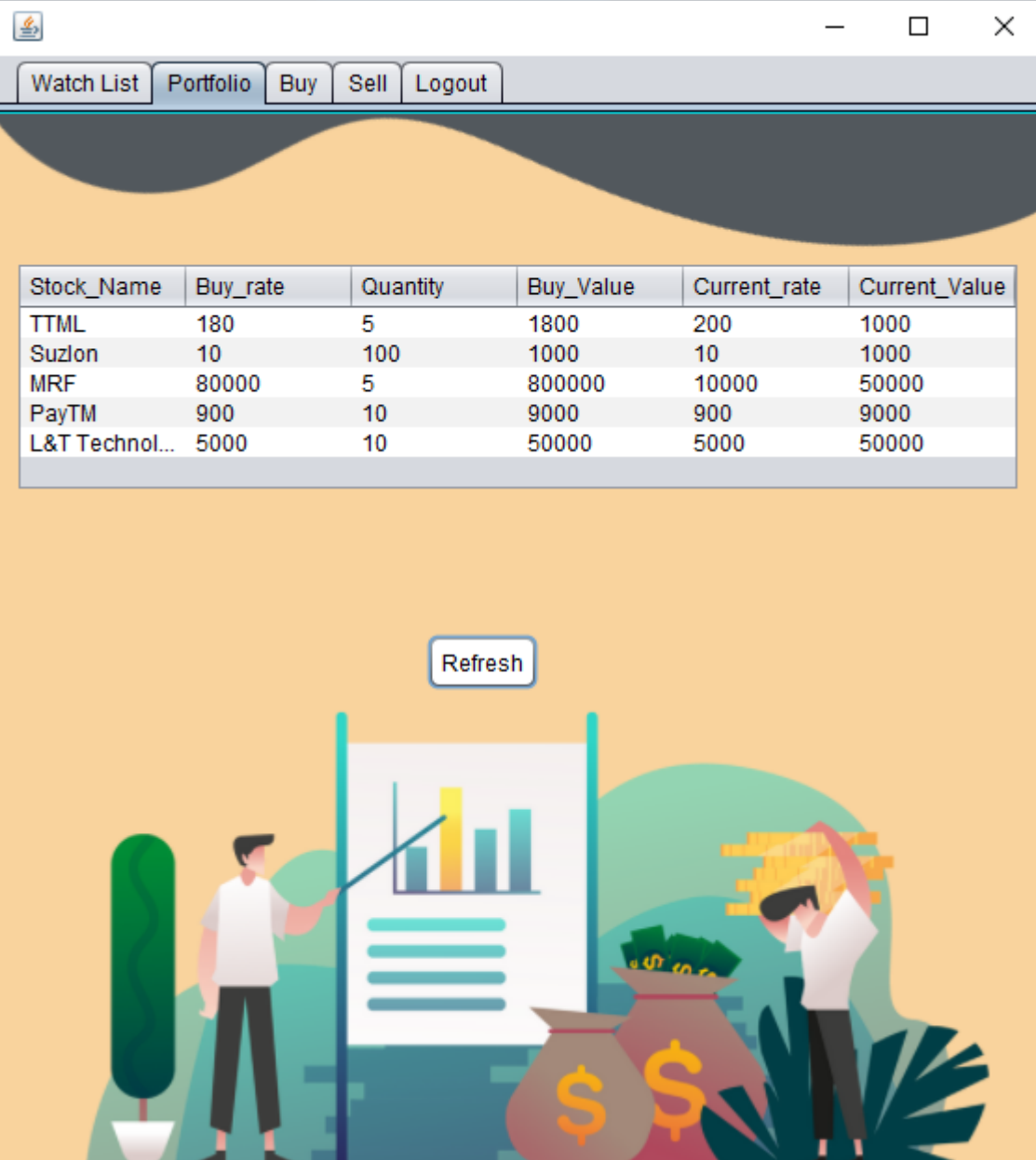## Group Members :

Shlok Mangle - 60003200179

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Front End design :

MAIN MENU :

PORTFOLIO :

BUYING A STOCK :

SELLING A STOCK :

Event handling code (any 1):

```java
private void BuyActionPerformed(java.awt.event.ActionEvent evt) {
     String value = Stock_name.getSelectedItem().toString();
     String Quantity = quantity.getText();
     String Buy_Rate = buy_rate.getText();

     try {
         con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/stock?user=root&password=Shlok@0972");
         ps = con.prepareStatement("insert into portfolio
(Stock_Name,Quantity,Buy_Rate,Buy_Value,Current_Rate,User_Name)
values (?,?,?,?*?,?,?)");
         ps.setString(1, value);
         ps.setString(2, Quantity);
         ps.setString(3, Buy_Rate);
         ps.setString(4, Quantity);
         ps.setString(5, Buy_Rate);
         ps.setString(6, Buy_Rate);
         ps.setString(7, username);
         ps.executeUpdate();
         JOptionPane.showMessageDialog(this,"Your Purchase Is
Successful");

     } catch (SQLException ex) {
         Logger.getLogger(Home.class.getName()).log(Level.SEVERE, null,
ex);
     }
   }
```

ER Diagram
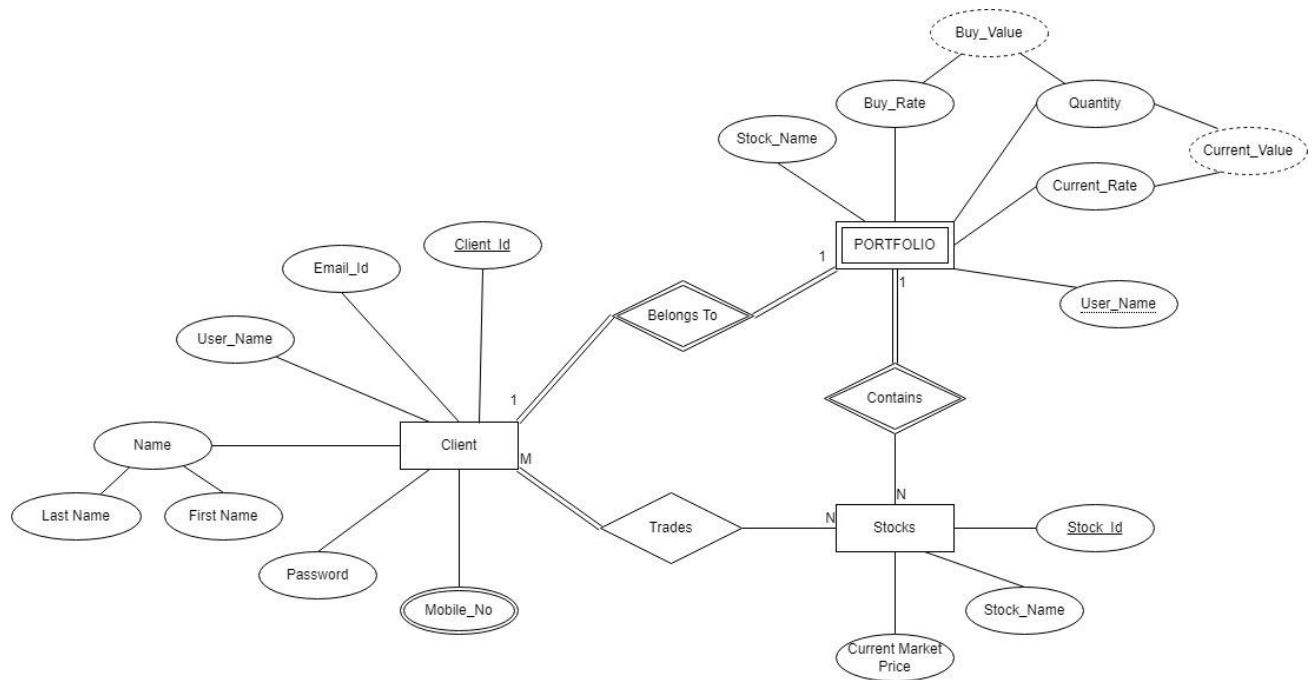
Mapping of ER diagram to Tables
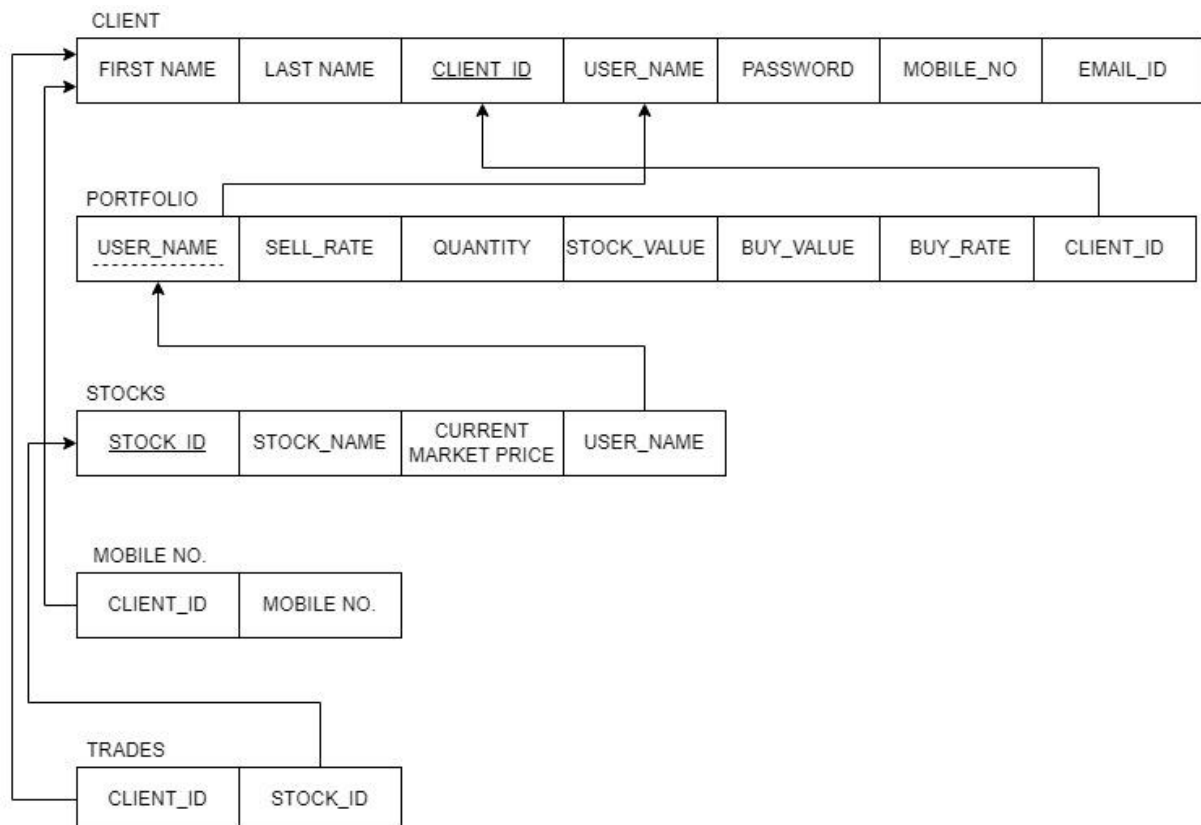
Connectivity code :

con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/stock?user=root&password=Shlok@0972");

Tables with rows :

Schema (followed by table screenshot):

Client
(Client_Id INTEGER, First_Name Varchar(45), Last_Name Varchar(45), Phone_No Integer, Pan_No Varchar(10), User_Name Varchar(45), Password Varchar(45))

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Client_Id	INT	☑	☑	☐	☐	☐	☐	☑	☐	
First_Name	VARCHAR(45)	☐	☑	☐	☐	☐	☐	☐	☐	
Last_Name	VARCHAR(45)	☐	☑	☐	☐	☐	☐	☐	☐	
Pan_No	VARCHAR(10)	☐	☑	☐	☐	☐	☐	☐	☐	
Phone_No	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
Email_Id	VARCHAR(45)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
User_Name	VARCHAR(45)	☐	☑	☑	☐	☐	☐	☐	☐	
Password	VARCHAR(45)	☐	☑	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	

Stock
(Stock_Id INTEGER , Stock_Name Varchar(45), CMP INTEGER)

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Stock_Id	INT	☑	☑	☐	☐	☐	☐	☐	☐	
Stock_Name	VARCHAR(45)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
CMP	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
		☐	☐	☐	☐	☐	☐	☐	☐	

Portfolio

(Stock_Name Varchar(45) , Buy_rate INTEGER , Quantity INTEGER , Buy_value INTEGER , Current_rate INTEGER , User_name Varchar(45) , Current_Value INTEGER)

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
◇ Stock_Name	VARCHAR(45)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ Buy_rate	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ Quantity	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ Buy_Value	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ Current_rate	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ User_Name	VARCHAR(45)	☐	☐	☐	☐	☐	☐	☐	☐	NULL
◇ Current_Value	INT	☐	☐	☐	☐	☐	☐	☐	☐	NULL

Foreign Key: (Portfolio Table)

Foreign Key Name	Referenced Table
User_Name	`stock`.`client`

Triggers Used:

```
CREATE DEFINER=`root`@`localhost` TRIGGER `portfolio_BEFORE_INSERT` BEFORE INSERT ON `portfolio` FOR EACH ROW BEGIN
    SET NEW.Current_Value = (NEW.Current_rate * NEW.Quantity);
END
```

```
CREATE DEFINER=`root`@`localhost` TRIGGER `portfolio_BEFORE_UPDATE` BEFORE UPDATE ON `portfolio` FOR EACH ROW BEGIN
    SET NEW.Current_Value = (NEW.Current_rate * NEW.Quantity);
END
```

Conclusion :

Hence , We have successfully created a Mobile based Application to Trade Stocks and display it in the Portfolio using JAVA and SQL.