package src.bank.management.system;

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.sql.ResultSet;

import java.util.Date;

/\*\*

\* Withdraw class to handle withdrawal operations in the bank management system.

\*/

public class Withdrawal extends JFrame implements ActionListener {

private String pin;

private TextField amountTextField;

private JButton withdrawButton, backButton;

/\*\*

\* Constructor to initialize the withdrawal interface.

\*

\* @param pin User's PIN for authentication.

\*/

public Withdrawal(String pin) {

this.pin = pin;

// Setting up the background image

ImageIcon backgroundIcon = new ImageIcon(ClassLoader.getSystemResource("icon/atm2.png"));

Image scaledImage = backgroundIcon.getImage().getScaledInstance(1550, 830, Image.SCALE\_DEFAULT);

ImageIcon scaledIcon = new ImageIcon(scaledImage);

JLabel backgroundLabel = new JLabel(scaledIcon);

backgroundLabel.setBounds(0, 0, 1550, 830);

add(backgroundLabel);

// Adding labels

JLabel maxWithdrawalLabel = new JLabel("MAXIMUM WITHDRAWAL IS RS.10,000");

maxWithdrawalLabel.setForeground(Color.WHITE);

maxWithdrawalLabel.setFont(new Font("System", Font.BOLD, 16));

maxWithdrawalLabel.setBounds(460, 180, 700, 35);

backgroundLabel.add(maxWithdrawalLabel);

JLabel enterAmountLabel = new JLabel("PLEASE ENTER YOUR AMOUNT");

enterAmountLabel.setForeground(Color.WHITE);

enterAmountLabel.setFont(new Font("System", Font.BOLD, 16));

enterAmountLabel.setBounds(460, 220, 400, 35);

backgroundLabel.add(enterAmountLabel);

// Text field for entering the amount

amountTextField = new TextField();

amountTextField.setBackground(new Color(65, 125, 128));

amountTextField.setForeground(Color.WHITE);

amountTextField.setBounds(460, 260, 320, 25);

amountTextField.setFont(new Font("Raleway", Font.BOLD, 22));

backgroundLabel.add(amountTextField);

// Withdraw button

withdrawButton = new JButton("WITHDRAW");

withdrawButton.setBounds(700, 362, 150, 35);

withdrawButton.setBackground(new Color(65, 125, 128));

withdrawButton.setForeground(Color.WHITE);

withdrawButton.addActionListener(this);

backgroundLabel.add(withdrawButton);

// Back button

backButton = new JButton("BACK");

backButton.setBounds(700, 406, 150, 35);

backButton.setBackground(new Color(65, 125, 128));

backButton.setForeground(Color.WHITE);

backButton.addActionListener(this);

backgroundLabel.add(backButton);

// JFrame settings

setLayout(null);

setSize(1550, 1080);

setLocation(0, 0);

setVisible(true);

}

/\*\*

\* Handles button click events.

\*

\* @param e Action event.

\*/

@Override

public void actionPerformed(ActionEvent e) {

if (e.getSource() == withdrawButton) {

handleWithdraw();

} else if (e.getSource() == backButton) {

setVisible(false);

new MainClass(pin);

}

}

/\*\*

\* Handles the withdraw operation.

\*/

private void handleWithdraw() {

try {

String amountStr = amountTextField.getText();

Date date = new Date();

if (amountStr.isEmpty()) {

JOptionPane.showMessageDialog(null, "Please enter the Amount you want to withdraw");

return;

}

double amount = Double.parseDouble(amountStr);

// Validate if amount exceeds maximum limit

if (amount > 10000) {

JOptionPane.showMessageDialog(null, "The maximum withdrawal limit is Rs.10,000");

return;

}

Connn conn = new Connn();

ResultSet resultSet = conn.statement.executeQuery("SELECT \* FROM bank WHERE pin = '" + pin + "'");

double balance = 0;

// Calculate current balance

while (resultSet.next()) {

if (resultSet.getString("type").equals("Deposit")) {

balance += resultSet.getDouble("amount");

} else {

balance -= resultSet.getDouble("amount");

}

}

// Check if balance is sufficient

if (balance < amount) {

JOptionPane.showMessageDialog(null, "Insufficient Balance");

return;

}

// Update the balance in the database

conn.statement.executeUpdate("INSERT INTO bank VALUES('" + pin + "', '" + date + "', 'Withdrawal', '" + amount + "')");

JOptionPane.showMessageDialog(null, "Rs. " + amount + " Debited Successfully");

setVisible(false);

new MainClass(pin);

} catch (NumberFormatException ex) {

JOptionPane.showMessageDialog(null, "Please enter a valid amount");

} catch (Exception ex) {

JOptionPane.showMessageDialog(null, "An error occurred: " + ex.getMessage());

}

}

public static void main(String[] args) {

new Withdrawal("");

}

}