**JAVA PROJECT**

**1.RETRIEVE DATA USING PREPARED STATEMENT**

package javafxapplication24;

import javafx.application.Application;

import javafx.geometry.Insets;

import javafx.scene.Scene;

import javafx.scene.control.Button;

import javafx.scene.control.Label;

Import javafx.scene.control.TextArea;

import javafx.scene.control.TextField;

import javafx.scene.layout.VBox;

Import javafx.stage.Stage;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

public class DatabaseApp extends Application {

private static final String DB\_URL = "jdbc:mysql://localhost:3306/hr";

private static final String DB\_USER = "root";

private static final String DB\_PASSWORD = "root";

@Override

public void start(Stage primaryStage) {

primaryStage.setTitle("Database Access");

Label idLabel = new Label("Employee ID:");

TextField idTextField = new TextField();

idTextField.setPromptText("Enter employee ID");

TextArea textArea = new TextArea();

textArea.setEditable(false);

Button fetchDataButton = new Button("Show Employee Details");

fetchDataButton.setOnAction(e -> fetchData(idTextField.getText(), textArea));

VBox vbox = new VBox(10, idLabel, idTextField, fetchDataButton, textArea);

vbox.setPadding(new Insets(10));

Scene scene = new Scene(vbox, 400, 300);

primaryStage.setScene(scene);

primaryStage.show();

}

private void fetchData(String employeeId, TextArea textArea) {

String query = "SELECT \* FROM customers WHERE id = ?";

try (Connection conn = DriverManager.getConnection(DB\_URL, DB\_USER, DB\_PASSWORD);

PreparedStatement pstmt = conn.prepareStatement(query)) {

pstmt.setInt(1, Integer.parseInt(employeeId));

ResultSet rs = pstmt.executeQuery();

StringBuilder sb = new StringBuilder();

if (rs.next()) {

sb.append("ID: ").append(rs.getInt("id"))

.append(", Name: ").append(rs.getString("name"))

.append("\n");

} else {

sb.append("No employee found with ID ").append(employeeId);

}

textArea.setText(sb.toString());

} catch (NumberFormatException e) {

textArea.setText("Error: Invalid employee ID format.");

} catch (Exception e) {

textArea.setText("Error: " + e.getMessage());

}

}

public static void main(String[] args) {

launch(args);

}

}

