Mini Project – EduHereApp

AIM:

To Create a java swing project on computer education with verification and registration with database connection.

Database.java (used to make connection to MYSQL database with mysql_connector_9.0.1.jar file)

Code:

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

public class Database {
    private static final String URL =
"jdbc:mysql://localhost:3306/course_registration?useSSL=false&
allowPublicKeyRetrieval=true";
    private static final String USER = "root";
    private static final String PASSWORD = "1234";

    public static Connection getConnection() throws
SQLException {
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
        } catch (ClassNotFoundException e) {
            System.out.println("MySQL JDBC Driver not
found.");
            e.printStackTrace();
            return null;
        }
        return DriverManager.getConnection(URL, USER,
PASSWORD);
    }
}
```

MainApp.java

Code:

```
import javax.swing.*;
import java.awt.*;

public class MainApp extends JFrame {
    private final CardLayout cardLayout;
    private final JPanel mainPanel;

    public MainApp() {
        setTitle("Welcome to A2J Education");
        setSize(600, 400);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setLocationRelativeTo(null);

        cardLayout = new CardLayout();
        mainPanel = new JPanel(cardLayout);

        mainPanel.add(new EntryPage(mainPanel, cardLayout),
"EntryPage");
        mainPanel.add(new RegistrationPage(mainPanel,
cardLayout), "Register");
        mainPanel.add(new VerificationPage(mainPanel,
cardLayout), "Verify");

        add(mainPanel);
        cardLayout.show(mainPanel, "EntryPage");
```

```
        setExtendedState(JFrame.MAXIMIZED_BOTH);  // Make the
window full screen


    }


    public static void main(String[] args) {
        SwingUtilities.invokeLater(() -> {
            MainApp app = new MainApp();
            app.setVisible(true);
        });
    }
}
```

EntryPage.java

Code:

```
import javax.swing.*;
import javax.swing.border.LineBorder;
import java.awt.*;


public class EntryPage extends JPanel {
    @SuppressWarnings("empty-statement")
    public EntryPage(JPanel mainPanel, CardLayout cardLayout)
{
        // Use GridBagLayout for centering
        setLayout(new GridBagLayout());
        GridBagConstraints gbc = new GridBagConstraints();
        gbc.insets = new Insets(10, 10, 10, 10); // Add
padding between components
```

```
        // Title label with border
        JLabel titleLabel = new JLabel("Welcome to A2J
Education");
        titleLabel.setFont(new Font("Showcard Gothic",
Font.BOLD, 50));  // Larger font for high resolution
        titleLabel.setForeground(Color.GREEN);

        // Add border around the title
         // Yellow border with thickness of 5

        gbc.gridx = 0;
        gbc.gridy = 0;
        gbc.anchor = GridBagConstraints.CENTER;
        add(titleLabel, gbc);

        // Join button
        JButton joinButton = new JButton("Join");
        joinButton.setFont(new Font("Calibri", Font.BOLD,
20));
        joinButton.setPreferredSize(new Dimension(150, 50));
// Medium size button
        gbc.gridx = 0;
        gbc.gridy = 1;
        gbc.anchor = GridBagConstraints.CENTER;
        add(joinButton, gbc);

        // Verify button
        JButton verifyButton = new JButton("Verify");
        verifyButton.setFont(new Font("Calibri", Font.BOLD,
20));
        verifyButton.setPreferredSize(new Dimension(150, 50));
// Medium size button
        gbc.gridx = 0;
```

```
        gbc.gridy = 2;
        gbc.anchor = GridBagConstraints.CENTER;
        add(verifyButton, gbc);

        // Button actions
        joinButton.addActionListener(e ->
cardLayout.show(mainPanel, "Register"));
        verifyButton.addActionListener(e ->
cardLayout.show(mainPanel, "Verify"));
    }

    @Override
    protected void paintComponent(Graphics g) {
        super.paintComponent(g);
        // Draw background image
        Image bgImage = new
ImageIcon(getClass().getResource("e.png")).getImage();
        g.drawImage(bgImage, 0, 0, getWidth(), getHeight(),
this);
    }
}
```

RegistrationPage.java

Code:

```
import javax.swing.*;
import java.awt.*;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.SQLException;
```

```
public class RegistrationPage extends JPanel {


    public RegistrationPage(JPanel mainPanel, CardLayout
cardLayout) {
        setLayout(new GridBagLayout());
        GridBagConstraints gbc = new GridBagConstraints();
        gbc.insets = new Insets(10, 10, 10, 10);


        // Name label and field
        JLabel nameLabel = new JLabel("Name:");
        nameLabel.setFont(new Font("Arial", Font.BOLD, 20));
// Increased font size for label
        gbc.gridx = 0;
        gbc.gridy = 0;
        gbc.anchor = GridBagConstraints.LINE_END;
        add(nameLabel, gbc);


        JTextField nameField = new JTextField(30);  //
Increased size for text field
        nameField.setFont(new Font("Arial", Font.BOLD, 20));
// Increased font size for text field
        gbc.gridx = 1;
        gbc.gridy = 0;
        gbc.anchor = GridBagConstraints.LINE_START;
        add(nameField, gbc);


        // Email label and field
        JLabel emailLabel = new JLabel("Email:");
        emailLabel.setFont(new Font("Arial", Font.BOLD, 20));
// Increased font size for label
        gbc.gridx = 0;
        gbc.gridy = 1;
```

```
        gbc.anchor = GridBagConstraints.LINE_END;
        add(emailLabel, gbc);

        JTextField emailField = new JTextField(30);  // 
Increased size for text field
        emailField.setFont(new Font("Arial", Font.BOLD, 20)); 
// Increased font size for text field
        gbc.gridx = 1;
        gbc.gridy = 1;
        gbc.anchor = GridBagConstraints.LINE_START;
        add(emailField, gbc);

        // Phone label and field
        JLabel phoneLabel = new JLabel("Phone:");
        phoneLabel.setFont(new Font("Arial", Font.BOLD, 20)); 
// Increased font size for label
        gbc.gridx = 0;
        gbc.gridy = 2;
        gbc.anchor = GridBagConstraints.LINE_END;
        add(phoneLabel, gbc);

        JTextField phoneField = new JTextField(30);  // 
Increased size for text field
        phoneField.setFont(new Font("Arial", Font.BOLD, 20)); 
// Increased font size for text field
        gbc.gridx = 1;
        gbc.gridy = 2;
        gbc.anchor = GridBagConstraints.LINE_START;
        add(phoneField, gbc);

        // Course label and dropdown
        JLabel courseLabel = new JLabel("Course:");
```

```
        courseLabel.setFont(new Font("Arial", Font.BOLD, 20));
// Increased font size for label
        gbc.gridx = 0;
        gbc.gridy = 3;
        gbc.anchor = GridBagConstraints.LINE_END;
        add(courseLabel, gbc);

        String[] courses = {"MS OFFICE","C","Java", "Python",
"C++", "HTML & CSS", "JavaScript","ANGULAR"};
        JComboBox<String> courseDropdown = new
JComboBox<>(courses);
        courseDropdown.setFont(new Font("Arial", Font.BOLD,
20)); // Increased font size for dropdown
        gbc.gridx = 1;
        gbc.gridy = 3;
        gbc.anchor = GridBagConstraints.LINE_START;
        add(courseDropdown, gbc);

        // Register button (same size)

        JButton registerButton = new JButton("Register");
        registerButton.setFont(new Font("Calibri", Font.BOLD,
20));
        registerButton.setPreferredSize(new Dimension(150,
50));
        gbc.gridx = 0;
        gbc.gridy = 4;
        gbc.gridwidth = 2;
        gbc.anchor = GridBagConstraints.CENTER;
        add(registerButton, gbc);

        // Back button (same size)
        JButton backButton = new JButton("Back");
```

```
        backButton.setFont(new Font("Calibri", Font.BOLD,
20));
        backButton.setPreferredSize(new Dimension(150, 50));
        gbc.gridx = 0;
        gbc.gridy = 5;
        gbc.gridwidth = 2;
        gbc.anchor = GridBagConstraints.CENTER;
        add(backButton, gbc);

        // Button Actions
        registerButton.addActionListener(e -> {
            String name = nameField.getText();
            String email = emailField.getText();
            String phone = phoneField.getText();
            String course = (String)
courseDropdown.getSelectedItem();

            try (Connection conn = Database.getConnection()) {
                String query = "INSERT INTO users (name,
email, phone, course) VALUES (?, ?, ?, ?)";
                try (PreparedStatement stmt =
conn.prepareStatement(query)) {
                    stmt.setString(1, name);
                    stmt.setString(2, email);
                    stmt.setString(3, phone);
                    stmt.setString(4, course);
                    stmt.executeUpdate();
                    JOptionPane.showMessageDialog(this,
"Registered successfully for " + course);
                }
            } catch (SQLException ex) {
```

```
                JOptionPane.showMessageDialog(this, "Error: "
+ ex.getMessage(), "Database Error",
JOptionPane.ERROR_MESSAGE);
            }
        });

        backButton.addActionListener(e ->
cardLayout.show(mainPanel, "EntryPage"));
    }

    @Override
    protected void paintComponent(Graphics g) {
        super.paintComponent(g);
        Image bgImage = new
ImageIcon(getClass().getResource("e.png")).getImage();
        g.drawImage(bgImage, 0, 0, getWidth(), getHeight(),
this);
    }
}
```

VerificationPage.java

Code:

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionListener;

public class TravelPackagesPage extends JPanel {
    public TravelPackagesPage(ActionListener
navigationListener) {
        setLayout(new BorderLayout());
        setBackground(StyleUtils.BACKGROUND_COLOR);

        // Title
        JLabel title =
StyleUtils.createTitleLabel("<html><h1>Travel
```

```
Packages</h1><p>Explore our exclusive packages.</p></html>");
        add(title, BorderLayout.NORTH);

        // Travel Package Information
        JPanel packagesPanel = new JPanel(new GridLayout(3, 1,
10, 10));

packagesPanel.setBackground(StyleUtils.BACKGROUND_COLOR);
        String[] packages = {"Paris Getaway", "Swiss Alps
Adventure", "Goa Retreat"};
        String[] details = {"5 Days - ₹102000", "7 Days -
₹152000", "4 Days - ₹76000"};

        for (int i = 0; i < packages.length; i++) {
            JPanel packagePanel = new JPanel(new
BorderLayout());
            packagePanel.setBackground(Color.WHITE);

packagePanel.setBorder(BorderFactory.createLineBorder(StyleUti
ls.SECONDARY_COLOR));

            JLabel packageLabel = new JLabel("<html><center>"
+ packages[i] + "<br>" + details[i] + "</center></html>",
JLabel.CENTER);
            packageLabel.setFont(StyleUtils.SUBTITLE_FONT);
            packageLabel.setForeground(StyleUtils.TEXT_COLOR);

            JButton btnBook =
StyleUtils.createStyledButton("Book Now",
StyleUtils.SECONDARY_COLOR);
            btnBook.setActionCommand("BookingForm"); // Set
the ActionCommand to open BookingFormPage
            btnBook.addActionListener(navigationListener);

            packagePanel.add(packageLabel,
BorderLayout.CENTER);
            packagePanel.add(btnBook, BorderLayout.SOUTH);
            packagesPanel.add(packagePanel);
        }

        add(packagesPanel, BorderLayout.CENTER);

        // Back Button
        JButton btnBack = StyleUtils.createStyledButton("Back
to Home", StyleUtils.PRIMARY_COLOR);
        btnBack.setActionCommand("Home");
        btnBack.addActionListener(navigationListener);
```

```
        JPanel backPanel = new JPanel(new
FlowLayout(FlowLayout.CENTER));
        backPanel.setBackground(StyleUtils.BACKGROUND_COLOR);
        backPanel.add(btnBack);

        add(backPanel, BorderLayout.SOUTH);
    }
}
```

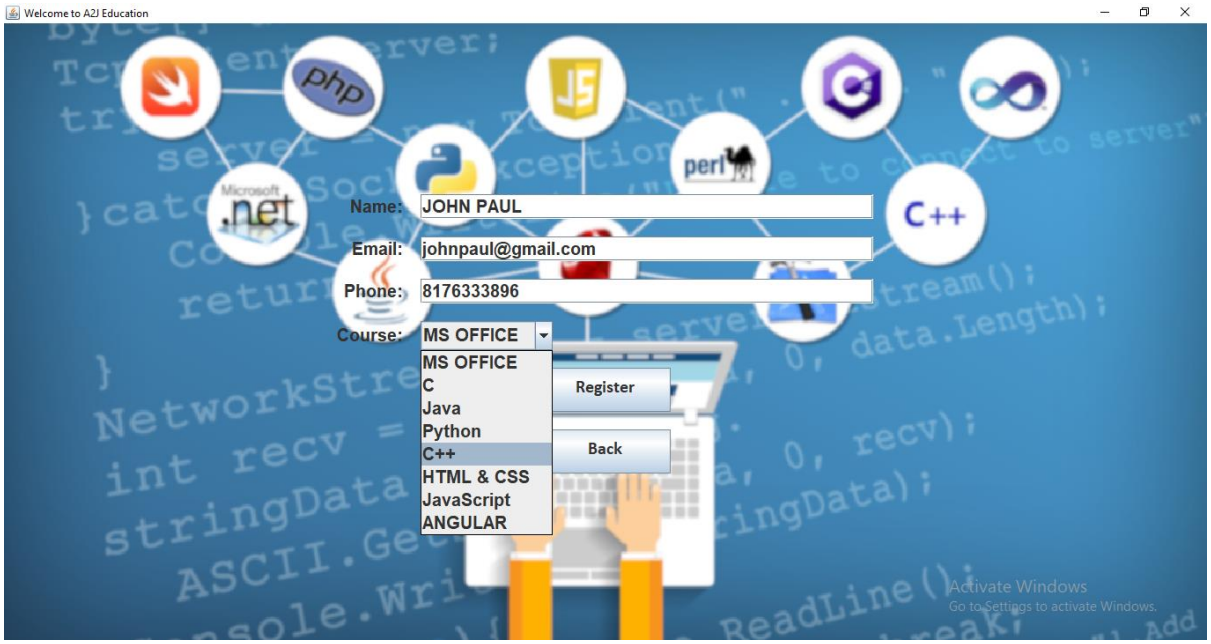
SQL:

```
CREATE DATABASE IF NOT EXISTS course_registration;

USE course_registration;


CREATE TABLE IF NOT EXISTS users (

    id INT AUTO_INCREMENT PRIMARY KEY,

    name VARCHAR(100),

    email VARCHAR(100),

    phone VARCHAR(15) UNIQUE,

    course VARCHAR(50)

);
```

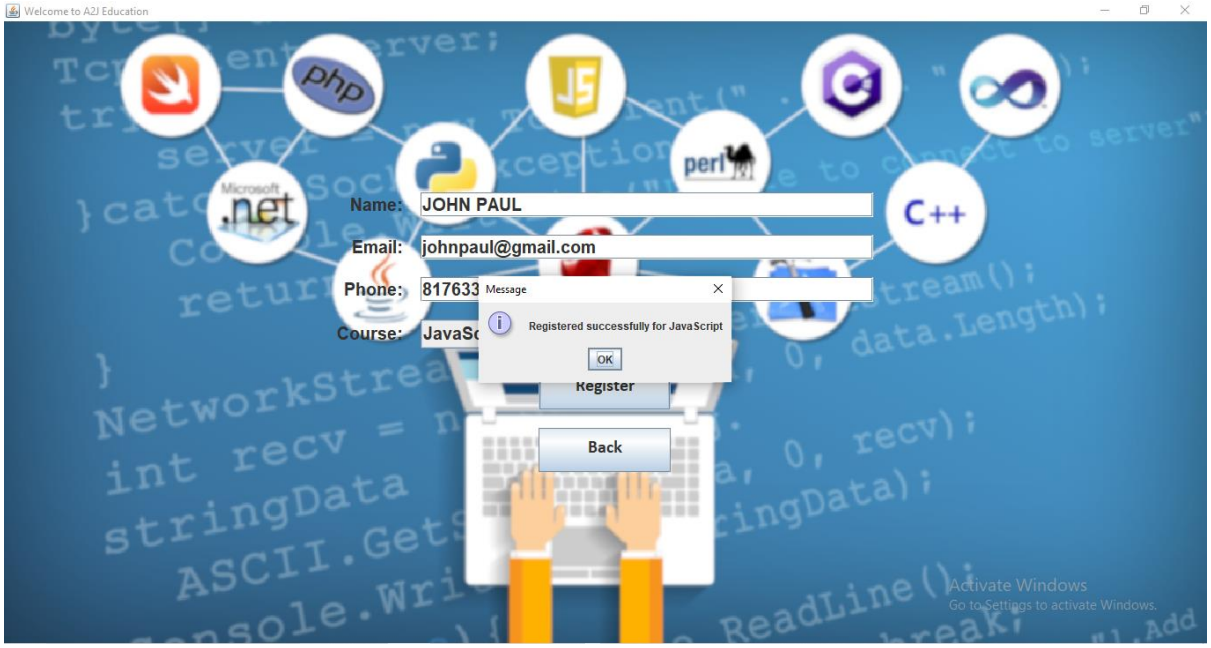
OUTPUT:

Entry Page

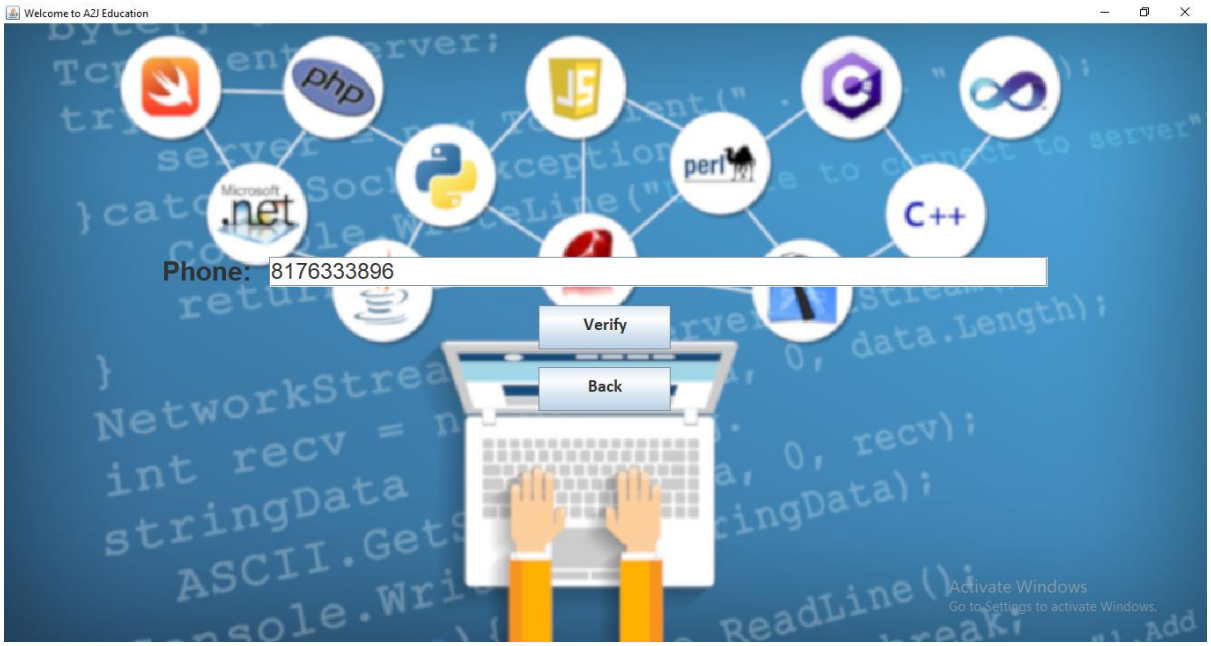
Join Page



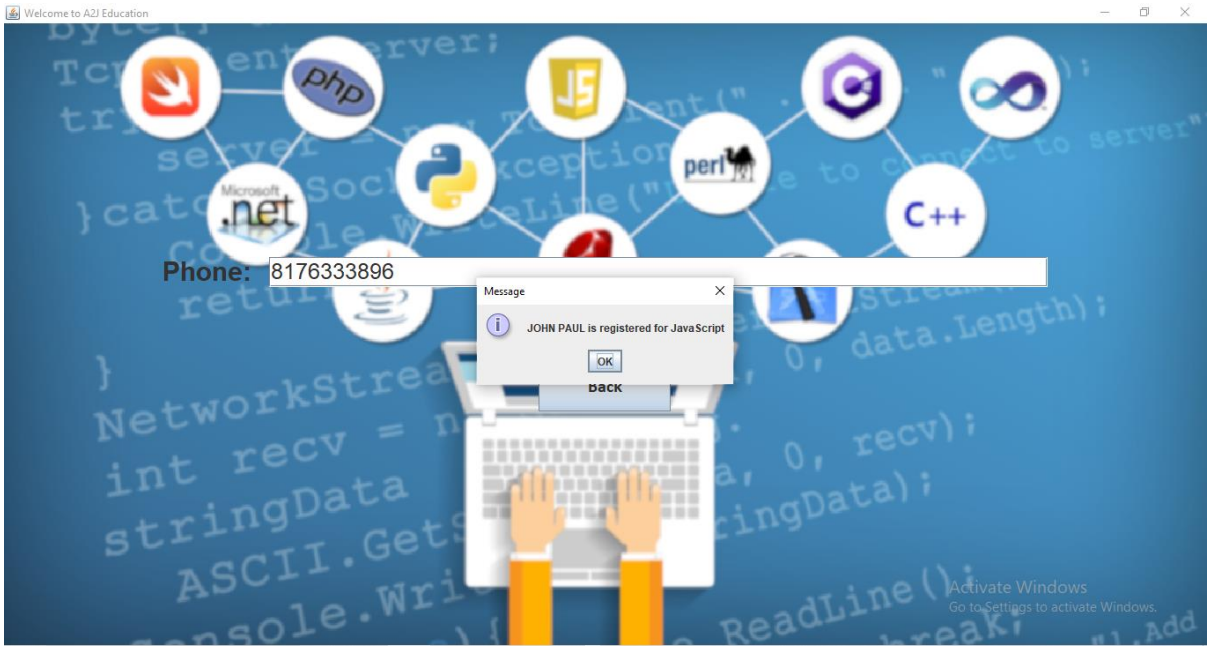
Registration



Verification Page



Verification Success



SQL

Result Grid | Filter Rows: | Edit: | Export/Import:

id	name	email	phone	course
1	n	n@gmail.com	9786805131	C
2	kumar	k@gmail	9123456780	Java
3	Jack James C V	jack@gmail.com	9943069914	Java
4	pro	pro@gmail.com	7878787878	Java
5	Amy	amy@gmail.com	7777777777	Python
6	Bharathi	bharathi@gmail.com	5555555555	Angularframework
7	Asdfg	asdfg@gmail.com	1593572585	Angularframework
8	pb	pb@gmail.com	6767676767	MS OFFICE
9	Vikram	vikram@gmail.com	9898989898	C++
10	JOHN PAUL	johnpaul@gmail.com	8176333896	JavaScript
NULL	NULL	NULL	NULL	NULL

BY

V AKASH DURAI

ARUN BHARATHI M B

JAYGANESH KANNAN