Mini Project – Journify

DONE BY

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AIM:

To Create a java swing project on travel booking with login and registration with database connection.

DatabaseConnection.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 DatabaseConnection {
    private static final String URL = "jdbc:mysql://localhost:3306/journify";
    private static final String USER = "root";
    private static final String PASSWORD = "Changeme@123";

    public static Connection getConnection() throws SQLException {
        return DriverManager.getConnection(URL, USER, PASSWORD);
     }
}
```

LoginPage.java(used to login to verify the user authentication)

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
public class LoginPage extends JPanel {
  private JTextField txtUsername;
  private JPasswordField txtPassword;
  public LoginPage(ActionListener navigationListener) {
    setLayout(new BorderLayout());
    setBackground(StyleUtils.BACKGROUND COLOR);
    // Title and Introduction
    JLabel title = StyleUtils.createTitleLabel("<html><h1>Login</h1>Welcome back!
Please log in to continue.</html>");
    add(title, BorderLayout.NORTH);
    // Login Form Panel
    JPanel formPanel = new JPanel(new GridLayout(3, 2, 10, 10));
    formPanel.setBorder(BorderFactory.createEmptyBorder(50, 100, 50, 100));
    formPanel.setBackground(Color.WHITE);
    JLabel lblUsername = new JLabel("Username:", JLabel.RIGHT);
    lblUsername.setFont(StyleUtils.SUBTITLE FONT);
    lblUsername.setForeground(StyleUtils.TEXT COLOR);
    txtUsername = new JTextField();
    formPanel.add(lblUsername);
    formPanel.add(txtUsername);
    JLabel lblPassword = new JLabel("Password:", JLabel.RIGHT);
    lblPassword.setFont(StyleUtils.SUBTITLE FONT);
    lblPassword.setForeground(StyleUtils.TEXT COLOR);
    txtPassword = new JPasswordField();
    formPanel.add(lblPassword);
    formPanel.add(txtPassword);
    add(formPanel, BorderLayout.CENTER);
    // Buttons Panel
    JPanel buttonPanel = new JPanel(new FlowLayout());
```

```
buttonPanel.setBackground(StyleUtils.BACKGROUND COLOR);
    JButton btnLogin = StyleUtils.createStyledButton("Login",
StyleUtils.SECONDARY_COLOR);
    btnLogin.setActionCommand("Login");
    btnLogin.addActionListener(e -> {
       // Placeholder for login authentication
       JOptionPane.showMessageDialog(this, "Logged in successfully!");
       navigationListener.actionPerformed(new ActionEvent(this,
ActionEvent.ACTION PERFORMED, "Home"));
    });
    JButton btnRegister = StyleUtils.createStyledButton("Register",
StyleUtils.PRIMARY COLOR);
    btnRegister.setActionCommand("Register");
    btnRegister.addActionListener(navigationListener);
    buttonPanel.add(btnLogin);
    buttonPanel.add(btnRegister);
    add(buttonPanel, BorderLayout.SOUTH);
  }
  public String getUsername() {
    return txtUsername.getText();
  }
  public String getPassword() {
    return new String(txtPassword.getPassword());
```

}

RegisterPage.java(used to create a new user by asking them the credentials)

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
public class RegisterPage extends JPanel {
  private JTextField txtUsername, txtEmail;
  private JPasswordField txtPassword;
  public RegisterPage(ActionListener navigationListener) {
    setLayout(new BorderLayout());
    setBackground(StyleUtils.BACKGROUND COLOR);
    // Title and Introductory Text
    JLabel title = StyleUtils.createTitleLabel("<html><h1>Register</h1>Create a new
account to start your journey.</html>");
    add(title, BorderLayout.NORTH);
    // Registration Form Panel
    JPanel formPanel = new JPanel(new GridLayout(4, 2, 10, 10));
    formPanel.setBorder(BorderFactory.createEmptyBorder(50, 100, 50, 100));
    formPanel.setBackground(Color.WHITE);
    formPanel.add(new JLabel("Username:", JLabel.RIGHT));
    txtUsername = new JTextField();
    formPanel.add(txtUsername);
    formPanel.add(new JLabel("Email:", JLabel.RIGHT));
    txtEmail = new JTextField();
    formPanel.add(txtEmail);
    formPanel.add(new JLabel("Password:", JLabel.RIGHT));
    txtPassword = new JPasswordField();
    formPanel.add(txtPassword);
    add(formPanel, BorderLayout.CENTER);
    // Buttons Panel
```

```
JPanel buttonPanel = new JPanel(new FlowLayout());
    buttonPanel.setBackground(StyleUtils.BACKGROUND COLOR);
    JButton btnRegister = StyleUtils.createStyledButton("Register",
StyleUtils.SECONDARY_COLOR);
    btnRegister.addActionListener(e -> {
       // Placeholder for registration logic
       JOptionPane.showMessageDialog(this, "Registration successful! Please log in.");
       navigationListener.actionPerformed(new ActionEvent(this,
ActionEvent.ACTION PERFORMED, "Login"));
    });
    JButton btnBack = StyleUtils.createStyledButton("Back to Login",
StyleUtils.PRIMARY COLOR);
    btnBack.setActionCommand("Login");
    btnBack.addActionListener(navigationListener);
    buttonPanel.add(btnRegister);
    buttonPanel.add(btnBack);
    add(buttonPanel, BorderLayout.SOUTH);
  public String getUsername() {
    return txtUsername.getText();
  }
  public String getEmail() {
    return txtEmail.getText();
  public String getPassword() {
    return new String(txtPassword.getPassword());
  }
}
```

HomePage.java(Used as dashboard)

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionListener;
public class HomePage extends JPanel {
  public HomePage(ActionListener navigationListener) {
    setLayout(new BorderLayout());
    setBackground(StyleUtils.BACKGROUND COLOR);
    // Title and Welcome Message
    JLabel title = StyleUtils.createTitleLabel("<html><h1>Welcome to
Journify!</hl></html>");
    JLabel welcomeMessage = new JLabel("<html>Discover amazing travel
experiences...</html>", JLabel.CENTER);
    welcomeMessage.setFont(StyleUtils.SUBTITLE FONT);
    welcomeMessage.setForeground(StyleUtils.TEXT COLOR);
    JPanel welcomePanel = new JPanel(new GridLayout(2, 1));
    welcomePanel.setBackground(StyleUtils.BACKGROUND COLOR);
    welcomePanel.add(title);
    welcomePanel.add(welcomeMessage);
    add(welcomePanel, BorderLayout.NORTH);
    // Featured Destinations with Full-Box Images
    JPanel featuredPanel = new JPanel(new GridLayout(1, 4, 10, 10));
    featuredPanel.setBackground(StyleUtils.BACKGROUND COLOR);
    // Destination information
    String[] destinations = {"Paris", "Switzerland", "Goa", "Egypt"};
    String[] descriptions = {
         "<html><center>Paris<br/>br>The city of love and lights.</center></html>",
         "<html><center>Switzerland<br>Land of scenic Alps and
serenity.</center></html>",
         "<html><center>Goa<br>Beach paradise of India.</center></html>",
         "<html><center>Egypt<br/>br>Land of ancient wonders.</center></html>"
    };
    String[] imagePaths = {
         "src/images/paris.jpg",
         "src/images/switzerland.jpg",
         "src/images/goa.jpg",
         "src/images/egypt.jpg"
    };
    // Adding destinations to the panel
    for (int i = 0; i < destinations.length; <math>i++) {
```

```
JPanel destinationPanel = new JPanel(new BorderLayout());
      destinationPanel.setBackground(Color.WHITE);
destinationPanel.setBorder(BorderFactory.createLineBorder(StyleUtils.SECONDARY COL
OR));
      // Load and set full-box image
      FullBoxImageLabel imageLabel = new FullBoxImageLabel(new
ImageIcon(imagePaths[i]));
      destinationPanel.add(imageLabel, BorderLayout.CENTER);
      JLabel destinationLabel = new JLabel(descriptions[i], JLabel.CENTER);
      destinationLabel.setFont(StyleUtils.SUBTITLE FONT);
      destinationLabel.setForeground(StyleUtils.TEXT COLOR);
      destinationPanel.add(destinationLabel, BorderLayout.SOUTH);
      featuredPanel.add(destinationPanel);
    }
    add(featuredPanel, BorderLayout.CENTER);
    // Navigation Buttons
    JPanel buttonPanel = new JPanel(new FlowLayout(FlowLayout.CENTER, 15, 15));
    buttonPanel.setBackground(StyleUtils.BACKGROUND COLOR);
    JButton btnTravelPackages = StyleUtils.createStyledButton("Travel Packages",
StyleUtils.PRIMARY COLOR);
    JButton btnHotelsPlaces = StyleUtils.createStyledButton("Hotels & Places",
StyleUtils.PRIMARY COLOR);
    JButton btnAboutUs = StyleUtils.createStyledButton("About Us",
StyleUtils.PRIMARY COLOR);
    JButton btnBookingForm = StyleUtils.createStyledButton("Booking Form",
StyleUtils.SECONDARY COLOR);
    JButton btnLogout = StyleUtils.createStyledButton("Logout", Color.RED);
    btnTravelPackages.setActionCommand("TravelPackages");
    btnHotelsPlaces.setActionCommand("HotelsPlaces");
    btnAboutUs.setActionCommand("AboutUs");
    btnBookingForm.setActionCommand("BookingForm");
    btnLogout.setActionCommand("Logout");
    btnTravelPackages.addActionListener(navigationListener);
    btnHotelsPlaces.addActionListener(navigationListener);
    btnAboutUs.addActionListener(navigationListener);
    btnBookingForm.addActionListener(navigationListener);
    btnLogout.addActionListener(navigationListener);
```

```
buttonPanel.add(btnTravelPackages);
  buttonPanel.add(btnHotelsPlaces);
  buttonPanel.add(btnAboutUs);
  buttonPanel.add(btnBookingForm);
  buttonPanel.add(btnLogout);
  add(buttonPanel, BorderLayout.SOUTH);
}
// Custom JLabel to make the image fill the entire label box
private class FullBoxImageLabel extends JLabel {
  private Image image;
  public FullBoxImageLabel(ImageIcon icon) {
    this.image = icon.getImage();
  }
  @Override
  protected void paintComponent(Graphics g) {
    super.paintComponent(g);
    if (image != null) {
       int width = getWidth();
       int height = getHeight();
       // Draw the image scaled to fit the entire label size
       g.drawImage(image, 0, 0, width, height, this);
  }
}
```

TravelPackages.java(used to display the Travel Packages available)

```
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>Explore our exclusive packages.</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; <math>i++) {
      JPanel packagePanel = new JPanel(new BorderLayout());
      packagePanel.setBackground(Color.WHITE);
packagePanel.setBorder(BorderFactory.createLineBorder(StyleUtils.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);
}
```

HotelsPlacesPage.java(used to display the info of the places and hotels to stay)

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

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

        // Title
```

```
JLabel title = StyleUtils.createTitleLabel("<html><h1>Hotels &
Places</h1>Discover popular hotels and places to visit.</html>");
    add(title, BorderLayout.NORTH);
    // Hotels and Places Information
    JPanel hotelsPanel = new JPanel(new GridLayout(3, 1, 10, 10));
    hotelsPanel.setBackground(StyleUtils.BACKGROUND COLOR);
    String[] hotels = {"The Ritz, Paris", "Swiss Alps", "Taj Mahal"};
    String[] details = {"5 Stars - Paris", "Scenic Beauty - Switzerland", "7 Wonders -
India"};
    for (int i = 0; i < hotels.length; i++) {
      JPanel hotelPanel = new JPanel(new BorderLayout());
      hotelPanel.setBackground(Color.WHITE);
hotelPanel.setBorder(BorderFactory.createLineBorder(StyleUtils.SECONDARY COLOR));
      JLabel hotelLabel = new JLabel("<html><center>" + hotels[i] + "<br>" + details[i] +
"</center></html>", JLabel.CENTER);
      hotelLabel.setFont(StyleUtils.SUBTITLE FONT);
      hotelLabel.setForeground(StyleUtils.TEXT COLOR);
      JButton btnView = StyleUtils.createStyledButton("View Details",
StyleUtils.SECONDARY COLOR);
      btnView.setActionCommand("Hotel" + i);
      btnView.addActionListener(navigationListener);
      hotelPanel.add(hotelLabel, BorderLayout.CENTER);
      hotelPanel.add(btnView, BorderLayout.SOUTH);
      hotelsPanel.add(hotelPanel);
    }
    add(hotelsPanel, 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);
}
```

BookingFormPage.java(Used to get info from the people who used to travel with like of their package)

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

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

        // Title
        JLabel title = StyleUtils.createTitleLabel("<html><h1>Booking
Form</h1>Complete your booking details below.</html>");
        add(title, BorderLayout.NORTH);
```

```
JPanel formPanel = new JPanel(new GridLayout(6, 2, 10, 10));
    formPanel.setBorder(BorderFactory.createEmptyBorder(20, 50, 20, 50));
    formPanel.setBackground(Color.WHITE);
    formPanel.add(new JLabel("Full Name:", JLabel.RIGHT));
    JTextField nameField = new JTextField();
    formPanel.add(nameField);
    formPanel.add(new JLabel("Email:", JLabel.RIGHT));
    JTextField emailField = new JTextField();
    formPanel.add(emailField);
    formPanel.add(new JLabel("Phone:", JLabel.RIGHT));
    JTextField phoneField = new JTextField();
    formPanel.add(phoneField);
    formPanel.add(new JLabel("Travel Package:", JLabel.RIGHT));
    JComboBox<String> packageBox = new JComboBox<>(new String[]{"Paris Getaway",
"Swiss Alps", "Goa Retreat"});
    formPanel.add(packageBox);
    formPanel.add(new JLabel("Booking Date (YYYY-MM-DD):", JLabel.RIGHT));
    JTextField dateField = new JTextField();
    formPanel.add(dateField);
    JButton btnSubmit = StyleUtils.createStyledButton("Submit Booking",
StyleUtils.SECONDARY COLOR);
    btnSubmit.addActionListener(e -> JOptionPane.showMessageDialog(this, "Booking
Confirmed!"));
    JButton btnBack = StyleUtils.createStyledButton("Back to Home",
StyleUtils.PRIMARY COLOR);
    btnBack.setActionCommand("Home");
    btnBack.addActionListener(navigationListener);
    formPanel.add(btnBack);
    formPanel.add(btnSubmit);
    add(formPanel, BorderLayout.CENTER);
}
```

// Form Panel

AboutUs.java(used to display the details of the us)

```
enjoyable for everyone.\n\n" +
              "Our Mission:\n" +
             "To inspire and empower people to explore the world.\n\n" +
             "Our Vision:\n" +
             "To be the go-to platform for travelers seeking authentic experiences.\n\n" +
             "Our Core Values:\n" +
             "- Customer Focus\n" +
             "- Innovation\n" +
             "- Integrity\n" +
             "- Passion for Travel\n\" +
             "Meet Our Team:\n" +
             "We are a team of travel enthusiasts dedicated to making your journey
memorable."
    );
    aboutUsInfo.setEditable(false);
    aboutUsInfo.setBackground(Color.WHITE);
    aboutUsInfo.setFont(StyleUtils.SUBTITLE FONT);
    aboutUsInfo.setForeground(StyleUtils.TEXT COLOR);
    aboutUsInfo.setBorder(BorderFactory.createEmptyBorder(20, 20, 20, 20));
    add(new JScrollPane(aboutUsInfo), 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);
}
```

StyleUtils.java(used to add the styles to page)

```
import javax.swing.*;
import java.awt.*;
public class StyleUtils {
  // Common colors
  public static final Color PRIMARY_COLOR = new Color(33, 150, 243);
  public static final Color SECONDARY COLOR = new Color(76, 175, 80);
  public static final Color BACKGROUND COLOR = new Color(240, 240, 240);
  public static final Color TEXT COLOR = Color.DARK GRAY;
  // Common fonts
  public static final Font TITLE FONT = new Font("Arial", Font.BOLD, 24);
  public static final Font SUBTITLE FONT = new Font("Arial", Font.PLAIN, 18);
  public static final Font BUTTON FONT = new Font("Arial", Font.BOLD, 16);
  // Styled label
  public static JLabel createTitleLabel(String text) {
    JLabel label = new JLabel(text, JLabel.CENTER);
    label.setFont(TITLE FONT);
    label.setForeground(TEXT_COLOR);
    return label;
  }
  // Styled button
```

```
public static JButton createStyledButton(String text, Color color) {
    JButton button = new JButton(text);
    button.setFont(BUTTON_FONT);
    button.setBackground(color);
    button.setForeground(Color.WHITE);
    button.setFocusPainted(false);
    return button;
}
```

JournifyApp.java(Used to bind all other files and run as a main file)

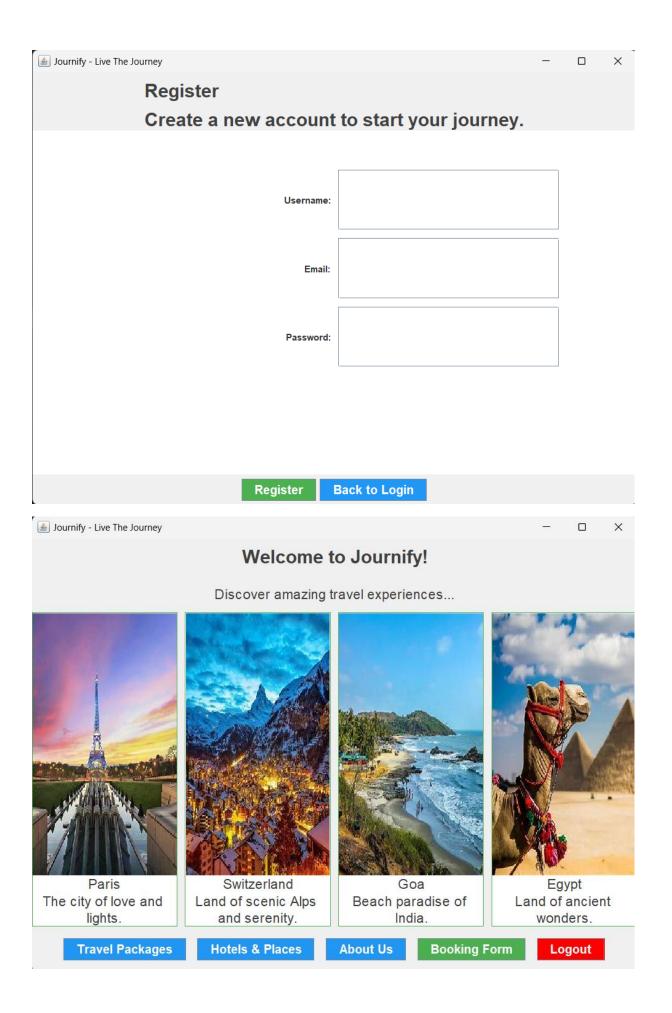
```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
public class JournifyApp extends JFrame implements ActionListener {
  private CardLayout cardLayout;
  private JPanel mainPanel;
  public JournifyApp() {
    setTitle("Journify - Live The Journey");
    setSize(800, 600);
    setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    setLocationRelativeTo(null);
    // Initialize CardLayout for switching pages
    cardLayout = new CardLayout();
    mainPanel = new JPanel(cardLayout);
    // Create and add pages to the CardLayout
    mainPanel.add(new LoginPage(this), "Login");
    mainPanel.add(new RegisterPage(this), "Register");
    mainPanel.add(new HomePage(this), "Home");
    mainPanel.add(new TravelPackagesPage(this), "TravelPackages");
    mainPanel.add(new HotelsPlacesPage(this), "HotelsPlaces");
```

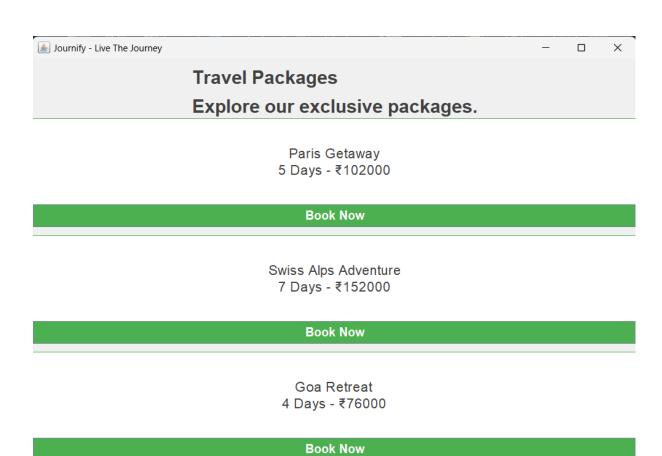
```
mainPanel.add(new AboutUsPage(this), "AboutUs");
    mainPanel.add(new BookingFormPage(this), "BookingForm");
    // Show the login page first
    cardLayout.show(mainPanel, "Login");
    add(mainPanel);
    setVisible(true);
  }
  @Override
  public void actionPerformed(ActionEvent e) {
    String command = e.getActionCommand();
    if (command.equals("Login")) {
       cardLayout.show(mainPanel, "Home");
    } else if (command.equals("Register")) {
       cardLayout.show(mainPanel, "Register");
     } else if (command.equals("Home")) {
       cardLayout.show(mainPanel, "Home");
     } else if (command.equals("TravelPackages")) {
       cardLayout.show(mainPanel, "TravelPackages");
     } else if (command.equals("HotelsPlaces")) {
       cardLayout.show(mainPanel, "HotelsPlaces");
     } else if (command.equals("AboutUs")) {
       cardLayout.show(mainPanel, "AboutUs");
     } else if (command.equals("BookingForm")) {
       cardLayout.show(mainPanel, "BookingForm"); // Show Booking Form when "Book
Now" is clicked
    } else if (command.equals("Logout")) {
       cardLayout.show(mainPanel, "Login");
  }
  public static void main(String[] args) {
    SwingUtilities.invokeLater(JournifyApp::new);
  }
```

}

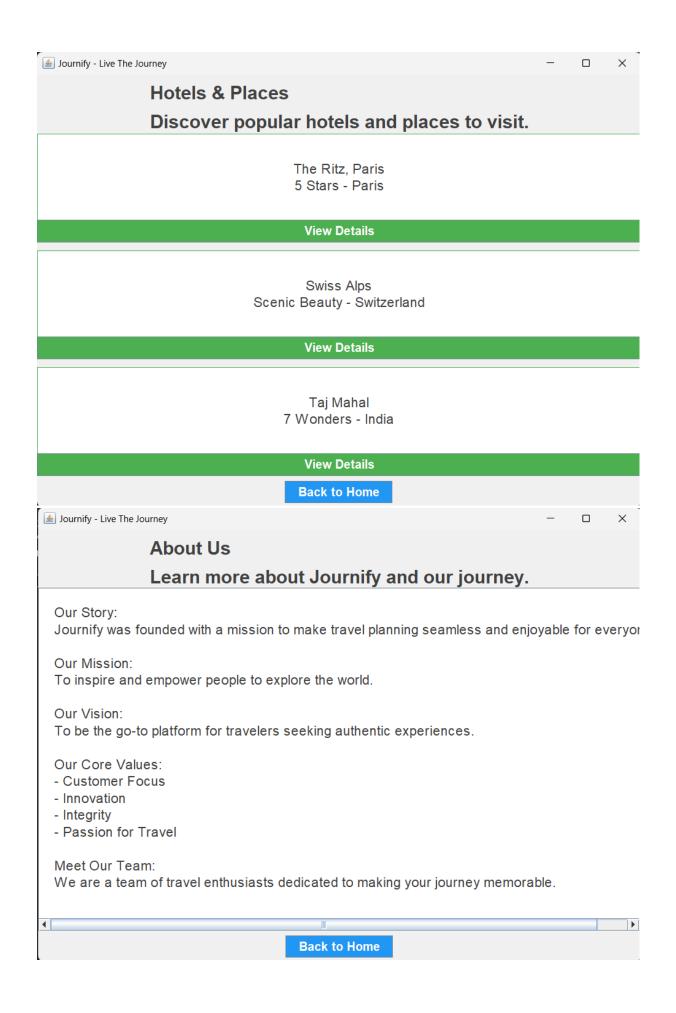
OUTPUT:

≦ Journify - Live The Journey	_	×
Login		
Welcome back! Please log in to conti	nue.	
Username:		
Password:		
Close		
Login Register		





Back to Home



			-		×
E	Booking Form				
	Complete your boo	king details below.			
	Full Name:				
	Email:				
	Phone:				
	Travel Package:	Paris Getaway		•	
	Booking Date (YYYY-MM-DD):				
Ва	ck to Home	Submit Booking			