EXPERIENCEXCHANGE - TIME-BASED ACCESS PASSES FOR UNIQUE EXPERIENCES

A MINI PROJECT REPORT

for

JAVA - OBJECT ORIENTED PROGRAMMING LAB

Submitted by

DIVYA HIREN SAVLA Roll No. 49

DHARMIK VYAS Roll No. 62



DEPARTMENT OF COMPUTER ENGINEERING

SHAH & ANCHOR KUTCHHI ENGINEERING COLLEGE

(An Autonomous Institute Affilated to University of Mumbai)

MUMBAI - 400 088, MAHARASHTRA (INDIA)

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EXPERIENCEXCHANGE - TIME-BASED ACCESS PASSES FOR UNIQUE EXPERIENCES

Introduction

The modern experience economy has created a demand for unique, curated, and local experiences that go beyond conventional ticketed events. This report presents **ExperienceXchange**, a platform designed to facilitate the buying, selling, and booking of **time-based access passes** for non-ticketed experiences such as workshops, guided tours, classes, and personal coaching sessions. The focus of the platform is on fair pricing, verified hosts, and a transparent booking process.

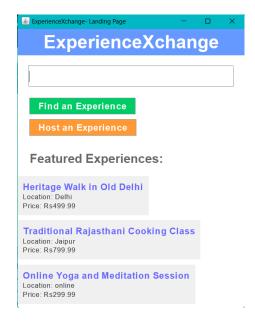
Objectives

The primary objective of **ExperienceXchange** is to provide a user-friendly, secure, and dynamic platform where hosts can offer, and users can discover and book, both local and online experiences. The key goals include:

- Offering a seamless discovery and booking system for unique experiences.
- Providing a robust host verification and management system.
- Ensuring secure payment processing and transparency for users and hosts.

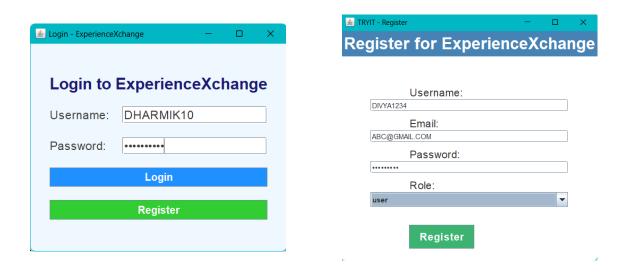
Features and Pages

Landing Page



The landing page serves as the primary gateway, featuring the top experiences and offering easy access to both users and hosts via intuitive buttons like *Find an Experience* and *Host an Experience*.

User Authentication

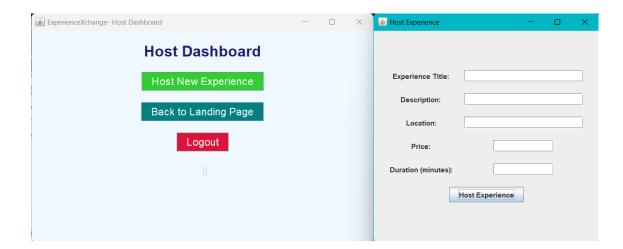


• Login/Signup Pages: Users and hosts can sign up using email(Google, Facebook).

• User Profiles: Profiles for both user and hosts to manage bookings, listings, and schedules.

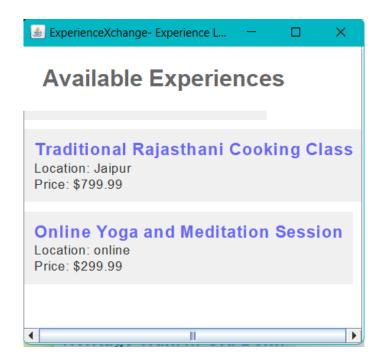
Dashboard





- User Dashboard: Displays booked experiences and upcoming schedules.
- Host Dashboard: Allows hosts to manage their listed experiences, update availability, and track bookings.

Experience Listing Page



Hosts can list new experiences by adding details like type, location, price, and date/time, along with images or videos.

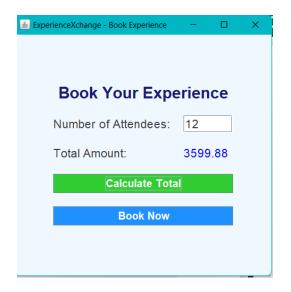
Search and Browse Experiences

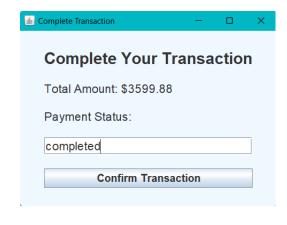
Users can explore experiences based on location, type, or date using filters and a dynamic search bar.

Host an Experience Page

Each experience has a dedicated page detailing the activity, date, time, price, location (or virtual link if online), and host information.

Booking and Transaction





A seamless booking process allows users to select the number of attendees and customize the experience (if applicable) before proceeding to a secure checkout.

Transaction History

Both users and hosts can access their transaction history to view past bookings, completed sessions, and payment details.

Database Structure

The platform's database is structured to store user information, experience listings, bookings, and transactions, ensuring an organized and efficient retrieval process.

Users Table

Field	Type	Description
id	INT	Primary key
username	VARCHAR(50)	Unique username
email	VARCHAR(100)	User email
password	VARCHAR(255)	Hashed password
role	ENUM('user', 'host')	Role of the user
date_created	TIMESTAMP	Account creation date

Experiences Table

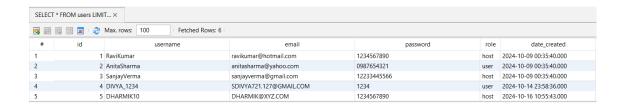
Field	Type	Description
id	INT	Primary key
title	VARCHAR(100)	Experience name
description	TEXT	Detailed description
location	VARCHAR(100)	Location (or "online" if virtual)
host_id	INT	Foreign key referencing Users.id
price	DECIMAL(10,2)	Price per session
duration	INT	Duration in minutes
date_listed	TIMESTAMP	Date experience was listed

Bookings Table

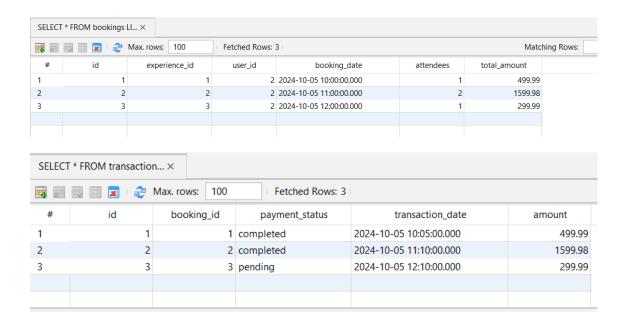
Field	Type	Description
id	INT	Primary key
experience_id	INT	Foreign key referencing Experiences.id
user_id	INT	Foreign key referencing Users.id
booking_date	TIMESTAMP	Date and time of booking
attendees	INT	Number of attendees
total_amount	DECIMAL(10,2)	Total amount paid

Transactions Table

Field	Type	Description
id	INT	Primary key
booking_id	INT	Foreign key referencing Bookings.id
payment_status	ENUM('pending', 'completed')	Payment status
transaction_date	TIMESTAMP	Date of transaction
amount	DECIMAL(10,2)	Total price







Implementation code

LoginPage

```
package UI;
2
   import javax.swing.*;
   import java.awt.*;
   import java.awt.event.ActionEvent;
   import java.awt.event.ActionListener;
   import java.sql.Connection;
   import java.sql.PreparedStatement;
   import java.sql.ResultSet;
10
   public class LoginPage extends JFrame {
11
12
       public LoginPage() {
13
           initComponents();
15
16
       private void initComponents() {
17
           setTitle("Login - ExperienceXchange");
18
           setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
19
20
           // Main Panel
21
           JPanel mainPanel = new JPanel();
22
           mainPanel.setBackground(new Color(240, 248, 255)); // Light
23
               Blue Background
           mainPanel.setLayout(new GridBagLayout());
24
           GridBagConstraints gbc = new GridBagConstraints();
           gbc.insets = new Insets(10, 10, 10, 10);
26
           gbc.fill = GridBagConstraints.HORIZONTAL;
2.7
           // Title
29
           JLabel titleLabel = new JLabel("Login to ExperienceXchange"
30
               , JLabel.CENTER);
           titleLabel.setFont(new Font("Arial", Font.BOLD, 24));
31
```

```
titleLabel.setForeground(new Color(25, 25, 112)); //
32
               Midnight blue
           gbc.gridx = 0;
34
           gbc.gridy = 0;
           gbc.gridwidth = 2;
           mainPanel.add(titleLabel, gbc);
37
38
           // Username Label & Field
39
           JLabel usernameLabel = new JLabel("Username:");
40
           usernameLabel.setFont(new Font("Arial", Font.PLAIN, 18));
41
           usernameLabel.setForeground(Color.DARK_GRAY);
42
           JTextField usernameField = new JTextField(15);
44
           usernameField.setFont(new Font("Arial", Font.PLAIN, 18));
45
46
           gbc.gridy = 1;
47
           gbc.gridwidth = 1;
48
           mainPanel.add(usernameLabel, gbc);
49
50
           gbc.gridx = 1;
51
           mainPanel.add(usernameField, gbc);
53
           // Password Label & Field
54
           JLabel passwordLabel = new JLabel("Password:");
55
           passwordLabel.setFont(new Font("Arial", Font.PLAIN, 18));
56
           passwordLabel.setForeground(Color.DARK_GRAY);
57
           JPasswordField passwordField = new JPasswordField(15);
           passwordField.setFont(new Font("Arial", Font.PLAIN, 18));
60
61
           gbc.gridx = 0;
62
           gbc.gridy = 2;
63
           mainPanel.add(passwordLabel, gbc);
64
65
           gbc.gridx = 1;
66
           mainPanel.add(passwordField, gbc);
67
68
           // Login Button
69
           JButton loginButton = new JButton("Login");
70
           loginButton.setFont(new Font("Arial", Font.BOLD, 16));
71
           loginButton.setBackground(new Color(30, 144, 255)); //
               Dodger Blue
           loginButton.setForeground(Color.WHITE);
           loginButton.addActionListener(new ActionListener() {
74
                @Override
75
                public void actionPerformed(ActionEvent e) {
76
                    login(usernameField.getText(), new String(
77
                       passwordField.getPassword()));
                }
78
           });
80
           gbc.gridx = 0;
81
           gbc.gridy = 3;
82
           gbc.gridwidth = 2;
83
84
           mainPanel.add(loginButton, gbc);
85
           // Register Button
86
```

```
JButton registerButton = new JButton("Register");
87
            registerButton.setFont(new Font("Arial", Font.BOLD, 16));
            registerButton.setBackground(new Color(50, 205, 50)); //
89
               Lime Green
            registerButton.setForeground(Color.WHITE);
            registerButton.addActionListener(e -> openRegisterPage());
92
            gbc.gridy = 4; // Positioning the Register button below the
93
                Login button
            mainPanel.add(registerButton, gbc);
94
95
            add(mainPanel);
96
            setSize(400, 350);
            setLocationRelativeTo(null); // Center the frame
98
            setVisible(true);
99
100
        private void login(String username, String password) {
            try (Connection conn = DatabaseConnection.getConnection())
                String sql = "SELECT id, role FROM Users WHERE username
                    = ? AND password = ?";
                PreparedStatement stmt = conn.prepareStatement(sql);
                stmt.setString(1, username);
106
                stmt.setString(2, password); // You should hash
                   passwords for security
                ResultSet rs = stmt.executeQuery();
108
109
                if (rs.next()) {
                    int userId = rs.getInt("id");
111
                    String role = rs.getString("role");
112
113
114
                    JOptionPane.showMessageDialog(this, "Login
                        Successful!");
115
                    // Open the appropriate dashboard based on the user
116
                    if ("user".equalsIgnoreCase(role)) {
                        new UserDashboard(userId).setVisible(true);
118
                    } else if ("host".equalsIgnoreCase(role)) {
119
                        new HostDashboard(userId).setVisible(true); //
120
                            Ensure you have a HostDashboard class
                    }
121
                    this.dispose(); // Close the login window
123
                } else {
124
                    JOptionPane.showMessageDialog(this, "Invalid
125
                        username or password.", "Login Error",
                        JOptionPane.ERROR_MESSAGE);
126
            } catch (Exception e) {
127
                JOptionPane.showMessageDialog(this, "Error during login
128
                    : " + e.getMessage(), "Error", JOptionPane.
                   ERROR_MESSAGE);
            }
129
130
131
       private void openRegisterPage() {
```

RegisterPage

```
package UI;
   import UI.DatabaseConnection;
   import java.sql.Connection;
   import java.sql.PreparedStatement;
   import javax.swing.*;
   import java.awt.*;
6
   public class RegisterPage extends JFrame {
       private JTextField usernameField, emailField;
       private JPasswordField passwordField;
       private JComboBox < String > roleComboBox;
11
12
       public RegisterPage() {
13
           initComponents();
14
15
16
       private void initComponents() {
17
           setTitle("TRYIT - Register");
18
           setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
19
           setSize(500, 600);
20
           setLocationRelativeTo(null);
           setLayout(new BorderLayout());
22
23
           JPanel topPanel = new JPanel();
24
           topPanel.setBackground(new Color(70, 130, 180));
25
           JLabel titleLabel = new JLabel("Register for
26
               ExperienceXchange");
           titleLabel.setFont(new Font("Arial", Font.BOLD, 28));
           titleLabel.setForeground(Color.WHITE);
28
           topPanel.add(titleLabel);
29
           add(topPanel, BorderLayout.NORTH);
30
31
           JPanel formPanel = new JPanel();
32
           formPanel.setLayout(new BoxLayout(formPanel, BoxLayout.
33
              Y_AXIS));
           formPanel.setBackground(Color.WHITE);
           formPanel.setBorder(BorderFactory.createEmptyBorder(20, 50,
35
                20, 50));
36
           JLabel usernameLabel = new JLabel("Username:");
37
           usernameLabel.setFont(new Font("Arial", Font.PLAIN, 18));
38
           usernameField = new JTextField(20);
39
           usernameField.setMaximumSize(new Dimension(Integer.
40
              MAX_VALUE, 40));
```

```
41
           JLabel emailLabel = new JLabel("Email:");
           emailLabel.setFont(new Font("Arial", Font.PLAIN, 18));
43
           emailField = new JTextField(20);
44
           emailField.setMaximumSize(new Dimension(Integer.MAX_VALUE,
              40));
46
           JLabel passwordLabel = new JLabel("Password:");
47
           passwordLabel.setFont(new Font("Arial", Font.PLAIN, 18));
48
           passwordField = new JPasswordField(20);
49
           passwordField.setMaximumSize(new Dimension(Integer.
50
              MAX_VALUE, 40));
           JLabel roleLabel = new JLabel("Role:");
52
           roleLabel.setFont(new Font("Arial", Font.PLAIN, 18));
53
           roleComboBox = new JComboBox <> (new String[] { "user", "host"
54
              }):
           roleComboBox.setMaximumSize(new Dimension(Integer.MAX_VALUE
55
               , 40));
56
           JButton registerButton = new JButton("Register");
           registerButton.setFont(new Font("Arial", Font.BOLD, 18));
58
           registerButton.setBackground(new Color(60, 179, 113));
59
           registerButton.setForeground(Color.WHITE);
60
           registerButton.setPreferredSize(new Dimension(120, 40));
61
           registerButton.addActionListener(e -> register());
62
63
           formPanel.add(Box.createVerticalStrut(30));
64
           formPanel.add(usernameLabel);
           formPanel.add(usernameField);
           formPanel.add(Box.createVerticalStrut(10));
67
           formPanel.add(emailLabel);
68
           formPanel.add(emailField);
69
           formPanel.add(Box.createVerticalStrut(10));
70
           formPanel.add(passwordLabel);
71
           formPanel.add(passwordField);
72
           formPanel.add(Box.createVerticalStrut(10));
73
           formPanel.add(roleLabel);
74
           formPanel.add(roleComboBox);
75
           formPanel.add(Box.createVerticalStrut(30));
76
           formPanel.add(registerButton);
77
78
           add(formPanel, BorderLayout.CENTER);
           pack();
81
82
       private void register() {
83
           String username = usernameField.getText();
           String email = emailField.getText();
85
           String password = new String(passwordField.getPassword());
86
           String role = (String) roleComboBox.getSelectedItem();
           if (username.isEmpty() || email.isEmpty() || password.
               isEmpty()) {
               JOptionPane.showMessageDialog(this, "All fields are
89
                   required", "Error", JOptionPane.ERROR_MESSAGE);
               return;
           }
91
```

```
try (Connection conn = DatabaseConnection.getConnection())
92
                String sql = "INSERT INTO Users (username, email,
93
                   password, role) VALUES (?, ?, ?, ?)";
                PreparedStatement stmt = conn.prepareStatement(sql);
                stmt.setString(1, username);
                stmt.setString(2, email);
96
                stmt.setString(3, password);
97
                stmt.setString(4, role);
98
                stmt.executeUpdate();
                JOptionPane.showMessageDialog(this, "Registration
                   successful!");
                new LoginPage().setVisible(true);
                this.dispose();
            } catch (Exception e) {
103
                JOptionPane.showMessageDialog(this, "Error: " + e.
104
                   getMessage(), "Error", JOptionPane.ERROR_MESSAGE);
            }
106
107
        public static void main(String[] args) {
            SwingUtilities.invokeLater(() -> new RegisterPage().
109
               setVisible(true));
       }
110
   }
```

LandingPage

```
package UI;
   // LandingPage.javapackage UI;
   import UI.DatabaseConnection;
   import java.sql.Connection;
   import java.sql.PreparedStatement;
   import java.sql.ResultSet;
   import javax.swing.*;
   import java.awt.*;
   public class LandingPage extends JFrame {
11
       private int userId;
12
       public LandingPage(int userId) {
13
           this.userId = userId;
14
           initComponents();
           fetchFeaturedExperiences();
16
17
18
       private void initComponents() {
19
           setTitle("ExperienceXchange - Landing Page");
20
           setDefaultCloseOperation(EXIT_ON_CLOSE);
21
           setSize(600, 600);
22
           setLocationRelativeTo(null);
           setLayout(new BorderLayout());
24
25
           // Header Panel
26
           JPanel headerPanel = new JPanel();
27
           headerPanel.setBackground(new Color(102, 153, 255));
```

```
JLabel logoLabel = new JLabel("ExperienceXchange");
29
           logoLabel.setFont(new Font("Arial", Font.BOLD, 36));
           logoLabel.setForeground(Color.WHITE);
31
           headerPanel.add(logoLabel);
32
           add(headerPanel, BorderLayout.NORTH);
           // Main Content Panel
35
           JPanel mainPanel = new JPanel();
36
           mainPanel.setLayout(new BoxLayout(mainPanel, BoxLayout.
37
               Y_AXIS));
           mainPanel.setBackground(Color.WHITE);
38
           mainPanel.setBorder(BorderFactory.createEmptyBorder(20, 20,
39
                20, 20));
40
           // Search Field
41
           JTextField searchField = new JTextField(20);
42
           searchField.setFont(new Font("Arial", Font.PLAIN, 18));
43
           searchField.setMaximumSize(new Dimension(Integer.MAX_VALUE,
44
                50));
45
           // Buttons
           JButton findExperienceButton = new JButton("Find an
47
               Experience");
           findExperienceButton.setFont(new Font("Arial", Font.BOLD,
               18));
           findExperienceButton.setBackground(new Color(0, 204, 102));
49
           findExperienceButton.setForeground(Color.WHITE);
50
           findExperienceButton.addActionListener(e -> new
               ExperienceListingPage(userId).setVisible(true));
           JButton hostExperienceButton = new JButton("Host an
53
              Experience");
           hostExperienceButton.setFont(new Font("Arial", Font.BOLD,
54
           hostExperienceButton.setBackground(new Color(255, 153, 51))
55
           hostExperienceButton.setForeground(Color.WHITE);
           hostExperienceButton.addActionListener(e -> new
              RegisterPage().setVisible(true));
           // Featured Experiences Label
59
           JLabel featuredLabel = new JLabel("Featured Experiences:");
60
           featuredLabel.setFont(new Font("Arial", Font.BOLD, 24));
61
           featuredLabel.setForeground(new Color(102, 102, 102));
63
           // Adding Components to Main Panel
64
           mainPanel.add(searchField);
65
           mainPanel.add(Box.createVerticalStrut(20));
           mainPanel.add(findExperienceButton);
67
           mainPanel.add(Box.createVerticalStrut(10));
68
           mainPanel.add(hostExperienceButton);
69
           mainPanel.add(Box.createVerticalStrut(30));
70
           mainPanel.add(featuredLabel);
71
72
           add(mainPanel, BorderLayout.CENTER);
73
74
           pack();
       }
75
76
```

```
private void fetchFeaturedExperiences() {
77
            try (Connection conn = DatabaseConnection.getConnection())
                String sql = "SELECT title, location, price FROM
79
                   Experiences ORDER BY date_listed DESC LIMIT 5";
                PreparedStatement stmt = conn.prepareStatement(sql);
                ResultSet rs = stmt.executeQuery();
81
82
                // Panel to hold featured experiences
83
                JPanel featuredPanel = new JPanel();
84
                featuredPanel.setLayout(new BoxLayout(featuredPanel,
85
                   BoxLayout.Y_AXIS));
                featuredPanel.setBackground(Color.WHITE);
87
                while (rs.next()) {
88
                    String title = rs.getString("title");
89
                    String location = rs.getString("location");
90
                    double price = rs.getDouble("price");
91
92
                    // Experience panel
93
                    JPanel experiencePanel = new JPanel();
                    experiencePanel.setBackground(new Color(240, 240,
95
                        240));
                    experiencePanel.setLayout(new BoxLayout(
96
                        experiencePanel, BoxLayout.Y_AXIS));
                    experiencePanel.setBorder(BorderFactory.
97
                        createEmptyBorder(10, 10, 10, 10));
0.8
                    JLabel titleLabel = new JLabel(title);
                    titleLabel.setFont(new Font("Arial", Font.BOLD, 18)
                    titleLabel.setForeground(new Color(102, 102, 255));
                    JLabel locationLabel = new JLabel("Location: " +
103
                        location);
                    locationLabel.setFont(new Font("Arial", Font.PLAIN,
104
                         14));
                    JLabel priceLabel = new JLabel("Price: Rs" + price)
106
                    priceLabel.setFont(new Font("Arial", Font.PLAIN,
107
                        14));
108
                    experiencePanel.add(titleLabel);
109
                    experiencePanel.add(locationLabel);
110
                    experiencePanel.add(priceLabel);
111
                    \verb"experiencePanel.setAlignmentX" (Component.
112
                        LEFT_ALIGNMENT);
113
                    experiencePanel.addMouseListener(new java.awt.event
114
                        .MouseAdapter() {
                         public void mouseClicked(java.awt.event.
                            MouseEvent evt) {
                             new ExperienceListingPage(userId).
116
                                setVisible(true);
117
                         }
                    });
118
119
```

```
featuredPanel.add(experiencePanel);
120
                     featuredPanel.add(Box.createVerticalStrut(10));
121
                }
                // Adding featured experiences to main panel
124
                add(featuredPanel, BorderLayout.SOUTH);
                revalidate();
126
            } catch (Exception e) {
127
                JOptionPane.showMessageDialog(this, "Error fetching
128
                    experiences: " + e.getMessage(), "Error",
                    JOptionPane.ERROR_MESSAGE);
            }
129
        }
130
        public static void main(String[] args) {
            SwingUtilities.invokeLater(() -> {
133
                try (Connection conn = DatabaseConnection.getConnection
134
                    ()) {
                     String sql = "SELECT id FROM Users WHERE username =
                         'your_username'"; // Replace 'your_username'
                        with the actual username
                     PreparedStatement stmt = conn.prepareStatement(sql)
136
                     ResultSet rs = stmt.executeQuery();
137
                     if (rs.next()) {
138
                         int userId = rs.getInt("id");
139
                         new LandingPage(userId).setVisible(true);
140
                    }
141
                } catch (Exception e) {
                     e.printStackTrace();
143
144
            });
145
146
        }
   }
147
```

HostDashboard

```
package UI;
2
   import javax.swing.*;
   import java.awt.*;
4
   import java.sql.*;
   public class HostDashboard extends JFrame {
       private int hostId;
8
       private JPanel experiencePanel; // Declare experiencePanel as
9
          an instance variable
       public HostDashboard(int hostId) {
11
           this.hostId = hostId;
12
           initComponents();
13
           fetchHostedExperiences();
14
15
16
       private void initComponents() {
17
           setTitle("ExperienceXchange - Host Dashboard");
18
```

```
19
           setSize(600, 600);
           setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
20
           setLocationRelativeTo(null);
21
22
           JPanel panel = new JPanel();
23
           panel.setLayout(new BoxLayout(panel, BoxLayout.Y_AXIS));
           panel.setBackground(new Color(240, 248, 255));
25
26
           JLabel dashboardLabel = new JLabel("Host Dashboard");
27
           dashboardLabel.setFont(new Font("Arial", Font.BOLD, 26));
28
           dashboardLabel.setAlignmentX(Component.CENTER_ALIGNMENT);
29
           dashboardLabel.setForeground(new Color(25, 25, 112));
30
           JButton hostExperienceButton = new JButton("Host New
32
              Experience");
           hostExperienceButton.setFont(new Font("Arial", Font.PLAIN,
33
              18));
           hostExperienceButton.setBackground(new Color(50, 205, 50));
34
           hostExperienceButton.setForeground(Color.WHITE);
35
           hostExperienceButton.setFocusPainted(false);
36
           hostExperienceButton.setAlignmentX(Component.
              CENTER_ALIGNMENT);
           hostExperienceButton.setPreferredSize(new Dimension(200,
38
              50));
           hostExperienceButton.addActionListener(e -> new
              HostExperiencePage(hostId).setVisible(true));
40
           JButton logOutButton = new JButton("Logout");
41
           logOutButton.setFont(new Font("Arial", Font.PLAIN, 18));
           logOutButton.setBackground(new Color(220, 20, 60));
43
           logOutButton.setForeground(Color.WHITE);
44
           logOutButton.setFocusPainted(false);
45
           logOutButton.setAlignmentX(Component.CENTER_ALIGNMENT);
46
           logOutButton.setPreferredSize(new Dimension(200, 50));
47
           logOutButton.addActionListener(e -> {
48
               new LoginPage().setVisible(true);
49
               this.dispose();
           });
51
52
           JButton backButton = new JButton("Back to Landing Page");
53
           backButton.setFont(new Font("Arial", Font.PLAIN, 18));
54
           backButton.setBackground(new Color(0, 128, 128));
           backButton.setForeground(Color.WHITE);
56
           backButton.setFocusPainted(false);
           backButton.setAlignmentX(Component.CENTER_ALIGNMENT);
58
           backButton.setPreferredSize(new Dimension(200, 50));
59
           backButton.addActionListener(e -> {
60
               new LandingPage(hostId).setVisible(true);
               this.dispose();
62
           });
63
64
           // Initialize experiencePanel here
65
           experiencePanel = new JPanel();
66
           experiencePanel.setLayout(new BoxLayout(experiencePanel,
67
              BoxLayout.Y_AXIS));
68
           experiencePanel.setBackground(new Color(245, 245, 245));
           experiencePanel.setBorder(BorderFactory.createTitledBorder(
69
              "Your Hosted Experiences"));
```

```
70
            panel.add(Box.createRigidArea(new Dimension(0, 20)));
71
            panel.add(dashboardLabel);
72
            panel.add(Box.createRigidArea(new Dimension(0, 20)));
73
            panel.add(hostExperienceButton);
74
            panel.add(Box.createRigidArea(new Dimension(0, 20)));
            panel.add(backButton);
76
            panel.add(Box.createRigidArea(new Dimension(0, 20)));
77
            panel.add(logOutButton);
78
            panel.add(Box.createRigidArea(new Dimension(0, 20)));
79
            panel.add(experiencePanel); // Add experiencePanel to the
80
               main panel
            add(panel);
82
83
84
        private void fetchHostedExperiences() {
            try (Connection conn = DatabaseConnection.getConnection())
86
                String sql = "SELECT title, date_listed, price FROM
                   Experiences WHERE host_id = ?";
                PreparedStatement stmt = conn.prepareStatement(sql);
88
                stmt.setInt(1, hostId);
89
                ResultSet rs = stmt.executeQuery();
90
91
                // Clear previous experiences
92
                experiencePanel.removeAll();
93
94
                while (rs.next()) {
                    String title = rs.getString("title");
96
                    String dateListed = rs.getString("date_listed");
97
                    double price = rs.getDouble("price");
98
99
                    JLabel experienceLabel = new JLabel("Experience: "
100
                        + title + " | Listed on: " + dateListed + " |
                        Price: $" + price);
                    experienceLabel.setFont(new Font("Arial", Font.
                        PLAIN, 16));
                    experienceLabel.setForeground(new Color(25, 25,
                        112));
                    experiencePanel.add(experienceLabel);
103
                }
104
                // Revalidate and repaint to update the UI
                experiencePanel.revalidate();
107
                experiencePanel.repaint();
108
109
            } catch (Exception e) {
110
                JOptionPane.showMessageDialog(this, "Error fetching
111
                   hosted experiences: " + e.getMessage(), "Error",
                   JOptionPane.ERROR_MESSAGE);
            }
113
114
        public static void main(String[] args) {
115
116
            // Replace with actual host ID after login
            SwingUtilities.invokeLater(() -> {
117
```

UserDashboard

```
package UI;
   import UI.DatabaseConnection;
   import java.awt.*;
   import java.sql.Connection;
   import java.sql.PreparedStatement;
   import java.sql.ResultSet;
   import javax.swing.*;
   public class UserDashboard extends JFrame {
       private int userId;
11
       public UserDashboard(int userId) {
12
           this.userId = userId;
13
           initComponents();
14
           fetchUserBookings();
15
       }
16
       private void initComponents() {
18
           setTitle("TRYIT - User Dashboard");
19
           getContentPane().setBackground(new Color(255, 250, 240));
20
21
           JLabel dashboardLabel = new JLabel("User Dashboard");
22
           dashboardLabel.setFont(new Font("Arial", Font.BOLD, 30));
23
           dashboardLabel.setForeground(new Color(0, 102, 204));
24
           JButton logOutButton = new JButton("Logout");
26
           logOutButton.setFont(new Font("Arial", Font.BOLD, 16));
27
           logOutButton.setBackground(new Color(255, 51, 51));
28
           logOutButton.setForeground(Color.WHITE);
29
           logOutButton.setFocusPainted(false);
30
           logOutButton.setPreferredSize(new Dimension(120, 40));
31
           logOutButton.addActionListener(e -> {
32
               new LoginPage().setVisible(true);
33
               this.dispose();
34
           });
35
36
           JButton backButton = new JButton("Back to Landing Page");
37
           backButton.setFont(new Font("Arial", Font.BOLD, 16));
38
           backButton.setBackground(new Color(0, 128, 128));
39
           backButton.setForeground(Color.WHITE);
           backButton.setFocusPainted(false);
41
           backButton.setPreferredSize(new Dimension(200, 40));
42
           backButton.addActionListener(e -> new LandingPage(userId).
43
              setVisible(true));
44
           // Assuming this is in a button click event or similar
45
   JButton viewTransactionsButton = new JButton("View Transaction
      History");
```

```
47
           viewTransactionsButton.setFont(new Font("Arial", Font.BOLD,
49
                16));
           viewTransactionsButton.setBackground(new Color(100, 149,
               237));
           viewTransactionsButton.setForeground(Color.WHITE);
           viewTransactionsButton.setFocusPainted(false);
52
           viewTransactionsButton.setPreferredSize(new Dimension(160,
53
               40));
           viewTransactionsButton.addActionListener(e -> new
54
              TransactionHistoryPage(userId).setVisible(true));
           JPanel bookingsPanel = new JPanel();
56
           bookingsPanel.setBackground(new Color(255, 255, 204));
           bookingsPanel.setLayout(new BoxLayout(bookingsPanel,
58
              BoxLayout.Y_AXIS));
           bookingsPanel.setBorder(BorderFactory.createTitledBorder("
59
              Your Bookings"));
60
           setLayout(new BorderLayout());
           JPanel headerPanel = new JPanel();
62
           headerPanel.setBackground(new Color(0, 153, 153));
63
           headerPanel.setLayout(new FlowLayout(FlowLayout.CENTER, 20,
64
                10)):
           headerPanel.add(dashboardLabel);
65
           headerPanel.add(backButton):
66
           headerPanel.add(viewTransactionsButton);
           headerPanel.add(logOutButton);
69
           JScrollPane scrollPane = new JScrollPane(bookingsPanel);
70
           scrollPane.setPreferredSize(new Dimension(600, 300));
71
72
           scrollPane.setBorder(BorderFactory.createLineBorder(Color.
              GRAY, 2));
73
           add(headerPanel, BorderLayout.NORTH);
           add(scrollPane, BorderLayout.CENTER);
75
           pack();
           setLocationRelativeTo(null);
77
           setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
78
           setVisible(true);
79
       }
80
81
83
   // In the UserDashboard class, add:
84
   private void fetchUserBookings() {
85
       try (Connection conn = DatabaseConnection.getConnection()) {
           String sql = "SELECT Experiences.title, Bookings.attendees,
87
                Bookings.total_amount FROM Bookings " +
                         "JOIN Experiences ON Bookings.experience_id =
                            Experiences.id " +
                         "WHERE Bookings.user_id = ?";
89
           PreparedStatement stmt = conn.prepareStatement(sql);
90
           stmt.setInt(1, userId);
91
92
           ResultSet rs = stmt.executeQuery();
93
           while (rs.next()) {
94
```

```
String experienceTitle = rs.getString("title");
95
                int attendees = rs.getInt("attendees");
96
                double totalAmount = rs.getDouble("total_amount");
97
98
                // Add booking details to the dashboard
            }
        } catch (Exception e) {
            JOptionPane.showMessageDialog(this, "Error fetching
               bookings: " + e.getMessage());
        }
   }
104
        public static void main(String[] args) {
107
            SwingUtilities.invokeLater(() -> {
108
                try (Connection conn = DatabaseConnection.getConnection
109
                    ()) {
                    String sql = "SELECT id FROM Users WHERE username =
                         ''"; // Replace 'your_username' with the actual
                         username
                     PreparedStatement stmt = conn.prepareStatement(sql)
                    ResultSet rs = stmt.executeQuery();
112
113
                    if (rs.next()) {
                         int userId = rs.getInt("id");
114
                         new UserDashboard(userId).setVisible(true);
115
                    }
116
                } catch (Exception e) {
117
118
                    e.printStackTrace();
119
            });
        }}
121
```

ExperienceListingPage

```
package UI;
   import UI.DatabaseConnection;
   import java.sql.Connection;
   import java.sql.PreparedStatement;
   import java.sql.ResultSet;
   import javax.swing.*;
   import java.awt.*;
   public class ExperienceListingPage extends JFrame {
       private int userId;
11
       public ExperienceListingPage(int userId) {
12
           this.userId = userId;
13
           initComponents();
14
           fetchExperiences();
15
16
17
       private void initComponents() {
18
           setTitle("ExperienceXchange - Experience Listing");
19
           setSize(500, 600);
20
           setDefaultCloseOperation(JFrame.DISPOSE_ON_CLOSE);
21
```

```
setLocationRelativeTo(null);
22
           setLayout(new BorderLayout());
24
           // Main Content Panel
25
           JPanel mainPanel = new JPanel();
           mainPanel.setLayout(new BoxLayout(mainPanel, BoxLayout.
               Y_AXIS));
           mainPanel.setBackground(Color.WHITE);
2.8
           mainPanel.setBorder(BorderFactory.createEmptyBorder(20, 20,
29
                20, 20));
30
           // Title Label
31
           JLabel titleLabel = new JLabel("Available Experiences");
           titleLabel.setFont(new Font("Arial", Font.BOLD, 24));
33
           titleLabel.setForeground(new Color(102, 102, 102));
34
           mainPanel.add(titleLabel);
35
36
           add(mainPanel, BorderLayout.CENTER);
37
           pack();
38
       }
39
       private void fetchExperiences() {
41
       try (Connection conn = DatabaseConnection.getConnection()) {
42
           String sql = "SELECT id, title, location, price FROM
43
              Experiences ORDER BY date_listed DESC";
           PreparedStatement stmt = conn.prepareStatement(sql);
44
           ResultSet rs = stmt.executeQuery();
45
46
47
           // Panel to hold experience listings
           JPanel experiencePanel = new JPanel();
48
           experiencePanel.setLayout(new BoxLayout(experiencePanel,
49
              BoxLayout.Y_AXIS));
           experiencePanel.setBackground(Color.WHITE);
50
51
           while (rs.next()) {
52
               int experienceId = rs.getInt("id");
53
               String title = rs.getString("title");
54
               String location = rs.getString("location");
55
               double price = rs.getDouble("price");
56
57
               // Individual experience panel
58
               JPanel singleExperiencePanel = new JPanel();
59
               singleExperiencePanel.setBackground(new Color(240, 240,
60
                    240));
               singleExperiencePanel.setLayout(new BoxLayout(
61
                   singleExperiencePanel, BoxLayout.Y_AXIS));
               singleExperiencePanel.setBorder(BorderFactory.
62
                   createEmptyBorder(10, 10, 10, 10));
63
               JLabel experienceTitle = new JLabel(title);
64
               experienceTitle.setFont(new Font("Arial", Font.BOLD,
               experienceTitle.setForeground(new Color(102, 102, 255))
66
67
68
               JLabel experienceLocation = new JLabel("Location: " +
                   location);
```

```
experienceLocation.setFont(new Font("Arial", Font.PLAIN
69
                   , 14));
70
               JLabel experiencePrice = new JLabel("Price: $" + price)
               experiencePrice.setFont(new Font("Arial", Font.PLAIN,
                   14));
73
               singleExperiencePanel.add(experienceTitle);
74
               singleExperiencePanel.add(experienceLocation);
75
               singleExperiencePanel.add(experiencePrice);
76
               \verb|singleExperiencePanel.setAlignmentX| (Component.
                   LEFT_ALIGNMENT);
78
               singleExperiencePanel.addMouseListener(new java.awt.
79
                   event.MouseAdapter() {
                    public void mouseClicked(java.awt.event.MouseEvent
                       evt) {
                        new BookingPage(userId, experienceId, price).
81
                           setVisible(true);
                    }
               });
83
84
85
               experiencePanel.add(singleExperiencePanel);
               experiencePanel.add(Box.createVerticalStrut(10));
86
           }
87
88
           add(new JScrollPane(experiencePanel), BorderLayout.CENTER);
89
           revalidate();
       } catch (Exception e) {
91
           JOptionPane.showMessageDialog(this, "Error fetching
92
               experiences: " + e.getMessage(), "Error", JOptionPane.
              ERROR_MESSAGE);
93
   }
94
95
96
       public static void main(String[] args) {
97
           SwingUtilities.invokeLater(() -> {
98
               new ExperienceListingPage(1).setVisible(true);
                   Example usage with a dummy user ID
           });
       }
```

HostExperiencePage

```
10
       private int hostId;
11
       public HostExperiencePage(int hostId) {
12
           this.hostId = hostId;
13
           initComponents();
14
15
16
       private void initComponents() {
17
           setTitle("Host Experience");
18
19
           // Create the main panel
20
           JPanel mainPanel = new JPanel(new GridBagLayout());
21
           GridBagConstraints gbc = new GridBagConstraints();
22
           gbc.insets = new Insets(10, 10, 10, 10);
23
24
           // Title field
25
           JLabel titleLabel = new JLabel("Experience Title:");
26
           titleField = new JTextField(20);
27
           gbc.gridx = 0;
28
           gbc.gridy = 0;
29
           mainPanel.add(titleLabel, gbc);
           gbc.gridx = 1;
31
           mainPanel.add(titleField, gbc);
32
33
           // Description field
34
           JLabel descriptionLabel = new JLabel("Description:");
35
           descriptionField = new JTextField(20);
36
           gbc.gridx = 0;
37
           gbc.gridy = 1;
           mainPanel.add(descriptionLabel, gbc);
39
           gbc.gridx = 1;
40
           mainPanel.add(descriptionField, gbc);
41
42
           // Location field
43
           JLabel locationLabel = new JLabel("Location:");
44
           locationField = new JTextField(20);
45
           gbc.gridx = 0;
46
           gbc.gridy = 2;
47
           mainPanel.add(locationLabel, gbc);
48
           gbc.gridx = 1;
49
           mainPanel.add(locationField, gbc);
50
           // Price field
           JLabel priceLabel = new JLabel("Price:");
           priceField = new JTextField(10);
54
           gbc.gridx = 0;
           gbc.gridy = 3;
56
           mainPanel.add(priceLabel, gbc);
           gbc.gridx = 1;
58
           mainPanel.add(priceField, gbc);
59
60
           // Duration field
61
           JLabel durationLabel = new JLabel("Duration (minutes):");
62
           durationField = new JTextField(10);
63
           gbc.gridx = 0;
64
65
           gbc.gridy = 4;
           mainPanel.add(durationLabel, gbc);
66
           gbc.gridx = 1;
67
```

```
mainPanel.add(durationField, gbc);
68
            // Submit button
70
            JButton submitButton = new JButton("Host Experience");
71
            submitButton.addActionListener(e -> createExperience());
72
            gbc.gridx = 0;
            gbc.gridy = 5;
74
            gbc.gridwidth = 2;
75
            mainPanel.add(submitButton, gbc);
76
77
            add(mainPanel);
78
            setSize(400, 400);
            setDefaultCloseOperation(JFrame.DISPOSE_ON_CLOSE);
            setLocationRelativeTo(null);
81
82
83
        private void createExperience() {
85
            try {
                String title = titleField.getText();
86
                String description = descriptionField.getText();
                String location = locationField.getText();
                BigDecimal price = new BigDecimal(priceField.getText())
89
                int duration = Integer.parseInt(durationField.getText()
90
                   );
91
                try (Connection conn = DatabaseConnection.getConnection
92
                   ()) {
                    String sql = "INSERT INTO Experiences (title,
                        description, location, host_id, price, duration)
                         VALUES (?, ?, ?, ?, ?)";
                    PreparedStatement stmt = conn.prepareStatement(sql)
94
                    stmt.setString(1, title);
95
                    stmt.setString(2, description);
96
                    stmt.setString(3, location);
                    stmt.setInt(4, hostId);
                    stmt.setBigDecimal(5, price);
99
                    stmt.setInt(6, duration);
100
                    stmt.executeUpdate();
                    JOptionPane.showMessageDialog(this, "Experience
                        hosted successfully!");
                    this.dispose();
103
                }
            } catch (Exception e) {
                JOptionPane.showMessageDialog(this, "Error: " + e.
106
                   getMessage(), "Error", JOptionPane.ERROR_MESSAGE);
            }
107
        }
108
   }
```

${\bf Transaction Confirmation Page}$

```
package UI;
import javax.swing.*;
```

```
4 | import java.awt.*;
   import java.sql.Connection;
   import java.sql.PreparedStatement;
   public class TransactionConfirmationPage extends JFrame {
       private int bookingId; // To link the transaction to the
10
          booking
       private double total Amount; // The total amount for the
11
          transaction
12
       public TransactionConfirmationPage(int bookingId, double
13
          totalAmount) {
           this.bookingId = bookingId;
14
           this.totalAmount = totalAmount;
           initComponents();
16
       }
17
18
       private void initComponents() {
19
           setTitle("Complete Transaction");
20
           setDefaultCloseOperation(JFrame.DISPOSE_ON_CLOSE);
21
           setSize(400, 300);
22
           setLocationRelativeTo(null); // Center the frame
23
24
           JPanel mainPanel = new JPanel();
25
           mainPanel.setLayout(new GridBagLayout());
26
           mainPanel.setBackground(new Color(240, 248, 255)); // Light
27
                Blue Background
           GridBagConstraints gbc = new GridBagConstraints();
           gbc.insets = new Insets(10, 10, 10, 10);
29
           gbc.fill = GridBagConstraints.HORIZONTAL;
30
31
32
           // Title
           JLabel titleLabel = new JLabel("Complete Your Transaction",
33
                JLabel.CENTER);
           titleLabel.setFont(new Font("Arial", Font.BOLD, 24));
34
           mainPanel.add(titleLabel, gbc);
35
36
           // Total Amount Label
37
           JLabel amountLabel = new JLabel("Total Amount: $" + String.
              format("%.2f", totalAmount));
           amountLabel.setFont(new Font("Arial", Font.PLAIN, 18));
39
           gbc.gridy = 1;
40
           mainPanel.add(amountLabel, gbc);
41
42
           // Payment Status Label
43
           JLabel paymentStatusLabel = new JLabel("Payment Status:");
44
           paymentStatusLabel.setFont(new Font("Arial", Font.PLAIN,
              18));
           gbc.gridy = 2;
46
           mainPanel.add(paymentStatusLabel, gbc);
47
48
           // Payment Status (Placeholder for now)
49
           JTextField paymentStatusField = new JTextField("completed",
50
                15);
51
           paymentStatusField.setFont(new Font("Arial", Font.PLAIN,
              18));
           gbc.gridy = 3;
52
```

```
mainPanel.add(paymentStatusField, gbc);
53
           // Confirm Button
55
           JButton confirmButton = new JButton("Confirm Transaction");
56
           confirmButton.setFont(new Font("Arial", Font.BOLD, 16));
           confirmButton.addActionListener(e -> completeTransaction())
           gbc.gridy = 4;
59
           mainPanel.add(confirmButton, gbc);
60
61
           add(mainPanel);
62
           setVisible(true);
63
65
       private void completeTransaction() {
66
       try (Connection conn = DatabaseConnection.getConnection()) {
67
           String sql = "INSERT INTO Transactions (booking_id,
              payment_status, amount) VALUES (?, 'completed', ?)";
           PreparedStatement stmt = conn.prepareStatement(sql);
69
           stmt.setInt(1, bookingId);
70
           stmt.setDouble(2, totalAmount);
           stmt.executeUpdate();
72
73
           JOptionPane.showMessageDialog(this, "Transaction Completed
74
              Successfully!");
           dispose(); // Close the transaction confirmation window
75
       } catch (Exception e) {
76
           JOptionPane.showMessageDialog(this, "Error completing
               transaction: " + e.getMessage(), "Error", JOptionPane.
              ERROR_MESSAGE);
       }
78
   }
79
80
   }
81
```

TransactionHistoryPage

```
package UI;
2
   import java.awt.*;
   import java.sql.*;
   import javax.swing.*;
   public class TransactionHistoryPage extends JFrame {
       private int userId; // Actual user ID
8
9
       public TransactionHistoryPage(int userId) {
           this.userId = userId; // Store the user ID
11
           initComponents();
           fetchTransactionHistory(); // Fetch transaction history for
13
               the user
14
15
       private void initComponents() {
16
           setTitle("TRYIT - Transaction History");
17
           setDefaultCloseOperation(JFrame.DISPOSE_ON_CLOSE);
18
```

```
setSize(600, 500);
19
           setLocationRelativeTo(null);
21
           JPanel mainPanel = new JPanel(new BorderLayout());
22
           JLabel historyLabel = new JLabel("Your Transaction History:
              ");
           historyLabel.setFont(new Font("Arial", Font.BOLD, 24));
24
           historyLabel.setHorizontalAlignment(SwingConstants.CENTER);
25
           historyLabel.setForeground(new Color(25, 25, 112));
26
27
           mainPanel.add(historyLabel, BorderLayout.NORTH);
2.8
29
           JPanel transactionPanel = new JPanel();
           transactionPanel.setLayout(new BoxLayout(transactionPanel,
31
              BoxLayout.Y_AXIS));
           JScrollPane scrollPane = new JScrollPane(transactionPanel);
32
           mainPanel.add(scrollPane, BorderLayout.CENTER);
33
34
           add(mainPanel);
35
       }
36
       private void fetchTransactionHistory() {
38
           try (Connection conn = DatabaseConnection.getConnection())
39
               String sql = "SELECT Experiences.title, Transactions.
40
                   transaction_date, Transactions.amount, Transactions.
                   payment_status " +
                             "FROM Transactions " +
41
                             "JOIN Bookings ON Transactions.booking_id
                             "JOIN Experiences ON Bookings.
43
                                experience_id
                                               " +
                             "WHERE Bookings.user_id = ?";
44
               PreparedStatement stmt = conn.prepareStatement(sql);
45
               stmt.setInt(1, userId); // Set the actual user ID
46
               ResultSet rs = stmt.executeQuery();
47
48
               JPanel transactionPanel = (JPanel) ((JScrollPane)
49
                   getContentPane().getComponent(1)).getViewport().
                   getView();
               transactionPanel.removeAll(); // Clear previous entries
50
               if (!rs.next()) {
                   JLabel noTransactionsLabel = new JLabel("No
                       transactions found.");
                   noTransactionsLabel.setFont(new Font("Arial", Font.
54
                       ITALIC, 16));
                   noTransactionsLabel.setForeground(new Color(255, 0,
                   transactionPanel.add(noTransactionsLabel);
56
               } else {
                   do {
58
                        String title = rs.getString("title");
59
                        String date = rs.getString("transaction_date");
60
                        double amount = rs.getDouble("amount");
61
62
                        String status = rs.getString("payment_status");
63
```

```
JPanel itemPanel = new JPanel(new BorderLayout
64
                           ());
                        itemPanel.setBorder(BorderFactory.
65
                           createMatteBorder(0, 0, 1, 0, Color.
                           LIGHT_GRAY));
                        itemPanel.setBackground(new Color(245, 245,
                           245));
67
                        JLabel titleLabel = new JLabel("Experience: " +
68
                            title);
                        titleLabel.setFont(new Font("Arial", Font.BOLD,
69
                            16));
                        titleLabel.setForeground(new Color(0, 100, 0));
71
                        JLabel detailsLabel = new JLabel("Date: " +
72
                           date + " | Amount: $" + amount + " | Status:
                             " + status);
                        detailsLabel.setFont(new Font("Arial", Font.
73
                           PLAIN, 14));
                        detailsLabel.setForeground(new Color(105, 105,
                           105));
75
                        itemPanel.add(titleLabel, BorderLayout.NORTH);
76
                        itemPanel.add(detailsLabel, BorderLayout.CENTER
77
                           );
                        transactionPanel.add(itemPanel);
78
                   } while (rs.next()):
79
               }
80
               transactionPanel.revalidate(); // Refresh the panel
82
               transactionPanel.repaint(); // Update the UI
83
           } catch (Exception e) {
84
               JOptionPane.showMessageDialog(this, "Error fetching
85
                   transaction history: " + e.getMessage(), "Error",
                   JOptionPane.ERROR_MESSAGE);
           }
86
       }
87
   }
88
```

BookingPage

```
package UI;
   import UI.DatabaseConnection;
   import java.awt.*;
4
  import java.sql.Connection;
   import java.sql.PreparedStatement;
   import java.sql.ResultSet;
   import javax.swing.*;
   public class BookingPage extends JFrame {
11
       private int userId;
12
       private int experienceId;
13
       private JTextField attendeesField;
14
       private JLabel totalAmountLabel;
```

```
16
       private double experiencePrice;
17
       public BookingPage(int userId, int experienceId, double
18
          experiencePrice) {
           this.userId = userId;
19
           this.experienceId = experienceId;
           this.experiencePrice = experiencePrice;
21
           initComponents();
22
23
24
       private void initComponents() {
25
           setTitle("ExperienceXchange - Book Experience");
26
           // Set main panel layout and background color
28
           JPanel mainPanel = new JPanel();
29
           mainPanel.setBackground(new Color(240, 248, 255)); // Light
30
                blue background
           mainPanel.setLayout(new GridBagLayout());
31
           GridBagConstraints gbc = new GridBagConstraints();
32
           gbc.insets = new Insets(10, 10, 10, 10);
           gbc.fill = GridBagConstraints.HORIZONTAL;
35
           // Heading
36
           JLabel headerLabel = new JLabel("Book Your Experience",
37
               JLabel.CENTER);
           headerLabel.setFont(new Font("Arial", Font.BOLD, 24));
38
           headerLabel.setForeground(new Color(25, 25, 112)); //
39
              Midnight blue color
           gbc.gridx = 0;
           gbc.gridy = 0;
41
           gbc.gridwidth = 2;
42
           mainPanel.add(headerLabel, gbc);
43
44
           // Attendees label and field
45
           JLabel attendeesLabel = new JLabel("Number of Attendees:");
46
           attendeesLabel.setFont(new Font("Arial", Font.PLAIN, 18));
47
           attendeesLabel.setForeground(Color.DARK_GRAY);
48
           gbc.gridy = 1;
49
           gbc.gridwidth = 1;
50
           mainPanel.add(attendeesLabel, gbc);
51
52
           attendeesField = new JTextField(5);
53
           attendeesField.setFont(new Font("Arial", Font.PLAIN, 18));
54
           gbc.gridx = 1;
           mainPanel.add(attendeesField, gbc);
56
57
           // Total amount label
58
           JLabel amountLabel = new JLabel("Total Amount:");
           amountLabel.setFont(new Font("Arial", Font.PLAIN, 18));
60
           amountLabel.setForeground(Color.DARK_GRAY);
61
           gbc.gridx = 0;
62
           gbc.gridy = 2;
63
           mainPanel.add(amountLabel, gbc);
64
65
           totalAmountLabel = new JLabel("0.00");
66
67
           totalAmountLabel.setFont(new Font("Arial", Font.PLAIN, 18))
           totalAmountLabel.setForeground(Color.BLUE);
68
```

```
69
            gbc.gridx = 1;
            mainPanel.add(totalAmountLabel, gbc);
71
            // Calculate button
72
            JButton calculateButton = new JButton("Calculate Total");
            calculateButton.setFont(new Font("Arial", Font.BOLD, 16));
            calculateButton.setBackground(new Color(50, 205, 50)); //
               Lime green background
            calculateButton.setForeground(Color.WHITE);
76
            calculateButton.addActionListener(e -> calculateTotal());
77
            gbc.gridx = 0;
78
            gbc.gridy = 3;
            gbc.gridwidth = 2;
            mainPanel.add(calculateButton, gbc);
81
82
            // Book button
83
            JButton bookButton = new JButton("Book Now");
            bookButton.setFont(new Font("Arial", Font.BOLD, 16));
85
            bookButton.setBackground(new Color(30, 144, 255)); //
86
               Dodger blue background
            bookButton.setForeground(Color.WHITE);
            bookButton.addActionListener(e -> bookExperience());
88
            gbc.gridy = 4;
89
            mainPanel.add(bookButton, gbc);
90
91
            // Add padding around the content
92
            mainPanel.setBorder(BorderFactory.createEmptyBorder(20, 20,
93
                20, 20));
            // Set layout and window properties
95
            add(mainPanel);
96
            setSize(400, 400);
97
            setDefaultCloseOperation(JFrame.DISPOSE_ON_CLOSE);
98
            setLocationRelativeTo(null); // Center on screen
99
            setVisible(true);
100
        }
101
        private void calculateTotal() {
103
104
            try {
                int attendees = Integer.parseInt(attendeesField.getText
                double totalAmount = attendees * experiencePrice;
106
                totalAmountLabel.setText(String.format("%.2f",
107
                   totalAmount));
            } catch (NumberFormatException e) {
108
                JOptionPane.showMessageDialog(this, "Please enter a
                   valid number of attendees.", "Input Error",
                   JOptionPane.ERROR_MESSAGE);
            }
110
111
112
        private void bookExperience() {
113
        try {
114
            int attendees = Integer.parseInt(attendeesField.getText());
            double totalAmount = attendees * experiencePrice;
116
117
            try (Connection conn = DatabaseConnection.getConnection())
118
               {
```

```
String sql = "INSERT INTO Bookings (experience_id,
119
                   user_id, attendees, total_amount) VALUES (?, ?, ?,
                   ?)":
                PreparedStatement stmt = conn.prepareStatement(sql,
120
                   PreparedStatement.RETURN_GENERATED_KEYS);
                stmt.setInt(1, experienceId);
                stmt.setInt(2, userId);
122
                stmt.setInt(3, attendees);
123
                stmt.setDouble(4, totalAmount);
124
                stmt.executeUpdate();
                // Get the generated booking ID
127
                ResultSet generatedKeys = stmt.getGeneratedKeys();
                if (generatedKeys.next()) {
129
                    int bookingId = generatedKeys.getInt(1);
130
                    // Open transaction confirmation page
131
                    new TransactionConfirmationPage(bookingId,
                        totalAmount).setVisible(true);
                    JOptionPane.showMessageDialog(this, "Booking
                        Successful! Please confirm the transaction.");
                    this.dispose(); // Close the booking page
135
            } catch (Exception e) {
136
                JOptionPane.showMessageDialog(this, "Error booking
137
                   experience: " + e.getMessage(), "Error", JOptionPane
                    .ERROR_MESSAGE);
            }
138
       } catch (NumberFormatException e) {
139
            JOptionPane.showMessageDialog(this, "Please enter a valid
               number of attendees.", "Input Error", JOptionPane.
               ERROR_MESSAGE);
       }
141
142
   }
143
   }
144
```

DatabaseConnection

```
package UI;
  import java.sql.Connection;
  import java.sql.DriverManager;
  import java.sql.SQLException;
5
6
    * @author sdivy
   public class DatabaseConnection {
       private static final String URL = "jdbc:mysql://localhost:3306/
          test":
       private static final String USERNAME = "root"; // Replace with
11
          your MySQL username
       private static final String PASSWORD = ""; // Replace with your
           MySQL password
13
       public static Connection getConnection() throws SQLException {
14
           Connection connection = null;
15
```

```
try {
16
                connection = DriverManager.getConnection(URL, USERNAME,
17
                    PASSWORD);
                System.out.println("Database connected!");
18
           } catch (SQLException e) {
                System.err.println("Database connection failed: " + e.
20
                   getMessage());
                throw e;
21
22
           return connection;
23
       }
24
   }
```

Conclusion

ExperienceXchange offers a comprehensive platform that connects users with unique experiences, both online and in-person. By focusing on an intuitive user interface, seamless booking and payment processes, and a robust database structure, the platform provides a complete solution for experience seekers and hosts alike.

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