

# Student Management System

## Phase 6: User Interface Development

### Overview

Phase 6 focuses on making your Salesforce app user-friendly through Lightning App Builder, custom layouts, and Visualforce pages. A well-designed UI improves adoption, reduces errors, and enhances user satisfaction.

### 6.1 Lightning App: Student Management App

**Purpose:** Organize navigation and tabs for specific user workflows

#### Your App Configuration:

- **App Name:** Student Management App
- **Tabs:** Students, Courses, Payments, Reports
- **Theme:** Default Salesforce Lightning theme

#### Setup Process:

1. Go to Setup → App Manager → New Lightning App
2. Name: Student Management App
3. Add Tabs:
  - Students (List of Student\_\_c)
  - Courses (List of Course\_\_c)
  - Payments (List of Payment\_\_c)
  - Reports (Reports & Dashboards)
4. Set Logo & Colors (optional branding)
5. Save & Activate

#### User Experience:

- Clean, organized navigation
- Only relevant tabs visible (vs. cluttered default app)
- Faster access to frequently used objects

### 6.2 Lightning Record Pages

**Purpose:** Customize how records display (fields, related lists, charts)

### **Your Implementation: Student Record Page**

#### **Components Added:**

1. **Record Detail:** Shows student fields (Name, Email, Phone, Enrollment Status)
2. **Related Lists:**
  - Payments (all payments linked to student)
  - Enrollments (all courses student is enrolled in)
3. **Summary Panel:** Key metrics like total fees, enrollment count

#### **Setup Process:**

1. Go to Setup → Object Manager → Student\_\_c → Lightning Record Pages → New
2. Choose Template: "Header and Two-Column"
3. Name: Student\_Record\_Page
4. Add Components:
  - Drag "Record Detail" to main area
  - Drag "Related Lists" and select Payments, Enrollments
5. Save & Activate as Org Default

#### **Benefits:**

- Complete student view on one page
- No need to navigate to related records
- Improves user efficiency

### **6.3 Visualforce Pages: Payment Receipt**

**Purpose:** Custom-formatted view of payment details (e.g., for printing or email)

#### **Your Implementation:**

#### **Visualforce Code:**

xml

```

<apex:page standardController="Payment__c">
    <div style="font-family: Arial; width: 600px; margin: 20px auto;">
        <h1>Payment Receipt</h1>
        <hr/>

        <div style="margin: 15px 0;">
            <strong>Receipt Number:</strong> {!Payment__c.Name}<br/>
            <strong>Date:</strong> {!Payment__c.Payment_Date__c}<br/>
        </div>

        <h3>Student Information</h3>
        <p>
            <strong>Name:</strong> {!Payment__c.Student__r.Name}<br/>
            <strong>Email:</strong> {!Payment__c.Student__r.Email}<br/>
            <strong>Phone:</strong> {!Payment__c.Student__r.Phone}<br/>
        </p>

        <h3>Payment Details</h3>
        <table style="width: 100%; border-collapse: collapse;">
            <tr style="border-bottom: 1px solid #ddd;">
                <td><strong>Amount Paid:</strong></td>
                <td>{!Payment__c.Amount_Paid__c}</td>
            </tr>
            <tr style="border-bottom: 1px solid #ddd;">
                <td><strong>Payment Mode:</strong></td>
                <td>{!Payment__c.Payment_Mode__c}</td>
            </tr>
        </table>
    </div>
</apex:page>

```

```

</tr>
<tr>
  <td><strong>Status:</strong></td>
  <td>{!Payment__c.Status__c}</td>
</tr>
</table>

```

```

<p style="margin-top: 20px; color: #666; font-size: 12px;">

```

This is an automated receipt. Please contact support for inquiries.

```

</p>

```

```

</div>

```

```

</apex:page>

```

### Setup Process:

1. Go to Setup → Visualforce Pages → New
2. Label: Payment Receipt
3. Name: PaymentReceipt
4. Check "Available for Lightning Experience, Lightning Communities, and Mobile Apps"
5. Paste code above
6. Save

### Add Button to Access Page:

1. Go to Object Manager → Payment\_\_c → Buttons, Links, and Actions → New
2. Label: View Receipt
3. Name: View\_Receipt
4. Display Type: Detail Page Button
5. Behavior: Display in new window

6. Content Source: URL
7. URL: /apex/PaymentReceipt?id={!Payment\_\_c.Id}
8. Save

**Add to Page Layout:**

1. Go to Page Layouts → Payment Layout
2. Click "Mobile & Lightning Actions"
3. Drag "View Receipt" button into the actions area
4. Save

**Result:** Users can click "View Receipt" to open a formatted payment receipt, suitable for printing or emailing.

#### **6.4 Best Practices for UI Development**

1. **Keep It Simple:** Avoid cluttering pages with too many components
2. **Mobile-First:** Ensure all pages work well on phones and tablets
3. **Consistent Design:** Use standard Salesforce components and styling
4. **Performance:** Avoid heavy components that slow page load
5. **Accessibility:** Use proper contrast, readable fonts, and alt text
6. **User Testing:** Validate UI with actual users before rollout