Phase 6: User Interface Development

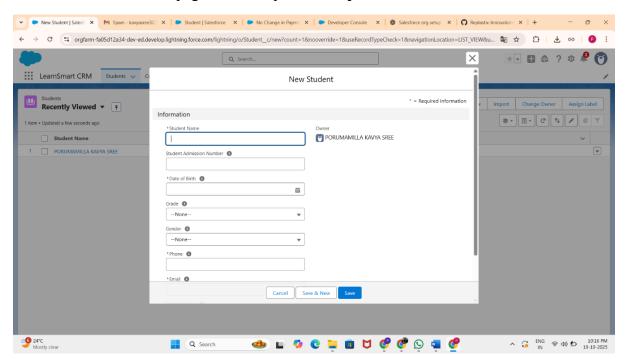
The goal of this phase is to create an intuitive and functional UI for LearnSmart CRM using Salesforce Lightning features.

1. Lightning App Builder

Objective: Create custom Lightning apps and pages tailored for LearnSmart CRM.

Steps:

- 1. Go to Setup \rightarrow App Builder \rightarrow Lightning App Builder.
- 2. Click New → select App Page, Record Page, or Home Page depending on the requirement.
- 3. Name the app/page as per your module (e.g., "Student Management Dashboard").
- 4. Drag and drop components (standard or custom) onto the page layout.
- 5. Save and activate the page for the required user profiles.



2. Record Pages

Objective: Customize the layout for individual records (Accounts, Leads, Contacts, or custom objects).

Steps:

1. Go to Setup \rightarrow Object Manager \rightarrow [Object Name] \rightarrow Lightning Record Pages.

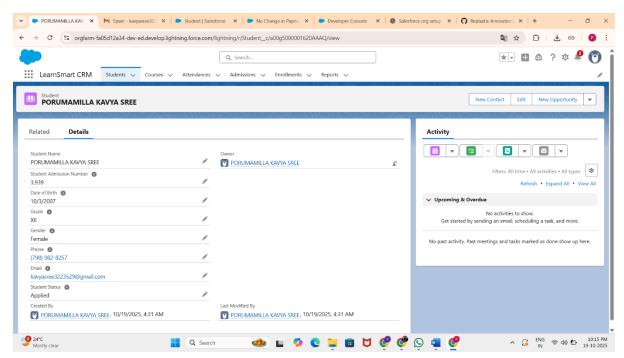
- 2. Click New \rightarrow Record Page.
- 3. Add relevant sections: details, related lists, custom LWC components.
- 4. Assign this page to specific apps, profiles, or as org default.

3. Tabs

Objective: Create tabs to organize objects, Visualforce pages, or Lightning Components in your app.

Steps:

- 1. Setup \rightarrow Tabs \rightarrow Click New.
- 2. Choose type: Custom Object Tab, Lightning Page Tab, Web Tab.
- 3. Assign a tab label and icon.
- 4. Add tab to your app via App Manager \rightarrow Edit Lightning App \rightarrow Navigation Items.



4. Home Page Layouts

Objective: Customize home pages for users to provide dashboards, reports, or key components.

Steps:

1. Go to Setup \rightarrow Lightning App Builder \rightarrow Home Page.

- 2. Create a **New Home Page** and name it (e.g., "Sales Team Dashboard").
- 3. Drag components such as **Reports**, **Lists**, or **Custom LWC components**.
- 4. Activate the home page for specific profiles or the org default.

5. Utility Bar

Objective: Provide easy access to frequently used tools.

Steps:

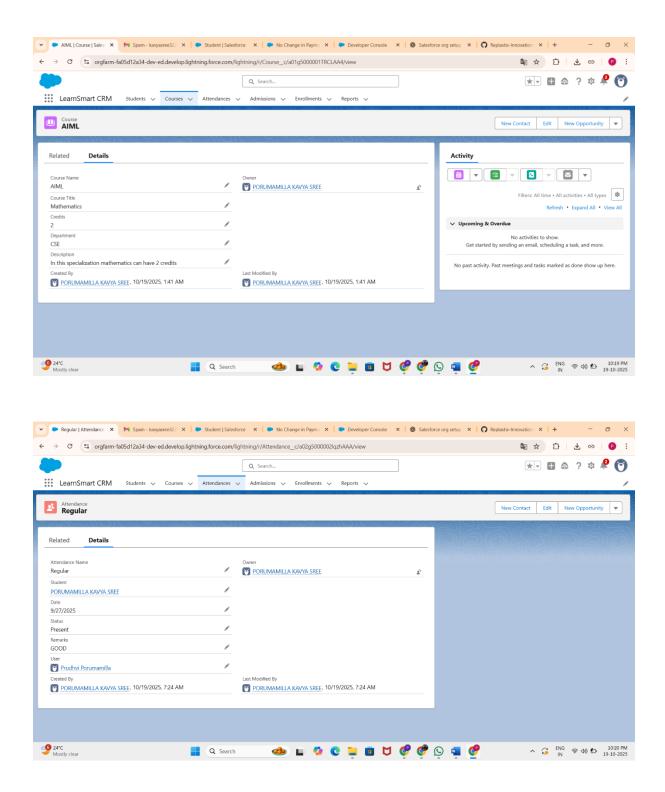
- 1. Go to Setup \rightarrow App Manager \rightarrow Edit App \rightarrow Utility Bar.
- 2. Click Add Utility Item (e.g., Notes, Recent Records, Omni-Channel).
- 3. Set visibility and labels for each item.
- 4. Save and activate the app.

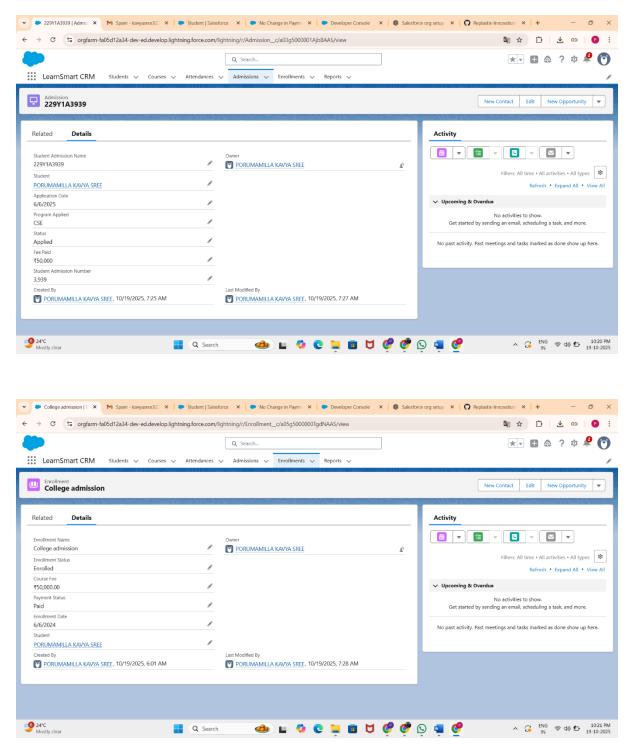
6. Lightning Web Components (LWC)

Objective: Create reusable, dynamic UI components for LearnSmart CRM.

Instructions:

- 1. Set up VS Code with Salesforce Extension Pack.
- 2. Create a new Lightning Web Component (LWC) for each module, e.g., Students, Courses, Enrollments.
- 3. Design the component layout using HTML and CSS for UI elements.
- 4. Implement component logic in JavaScript.
- 5. Deploy the LWC to Salesforce.
- 6. Add the deployed LWC to Lightning pages via Lightning App Builder.





7. Apex with LWC

Objective: Connect UI components with backend Salesforce logic.

Instructions:

- 1. Create Apex classes to handle backend operations like fetching, updating, or deleting records.
- 2. Connect the Apex classes to your LWC to display and manipulate data dynamically.

3. Ensure that data is displayed correctly in the LWC interface.

8. Events in LWC

Objective: Enable communication between parent and child components.

Instructions:

- 1. Define events in child components to notify parent components when an action occurs.
- 2. Configure parent components to listen and respond to these events.
- 3. Use events to update UI or trigger further actions within the CRM.

9. Wire Adapters

Objective: Fetch Salesforce data reactively.

Instructions:

- 1. Connect LWCs to Salesforce data sources using reactive data fetching.
- 2. Ensure the component automatically updates when the underlying data changes.
- 3. Display the retrieved data in a structured and user-friendly manner.

10. Imperative Apex Calls

Objective: Call Apex methods on demand (e.g., when a button is clicked).

Instructions:

- 1. Configure LWCs to call Apex methods only when required by user action.
- 2. Handle the data returned from Apex and update the UI dynamically.
- 3. Manage errors or exceptions gracefully to ensure a smooth user experience.

11. Navigation Service

Objective: Navigate between pages, records, or URLs.

Instructions:

- 1. Set up navigation in LWCs to allow users to move between different CRM pages.
- 2. Configure navigation for records, objects, or external URLs.

3.	Ensure navigation actions are intuitive and consistent with the CRM workflow.