# Phase 6 – User Interface Development (Admin & Developer)

# 1. Lightning App Builder

Use Case: Create a custom app for shipment tracking with tabs, record pages, and utilities for logistics and customer teams.

Explanation: Lightning App Builder allows you to combine standard components, custom components, and flows into a unified interface.

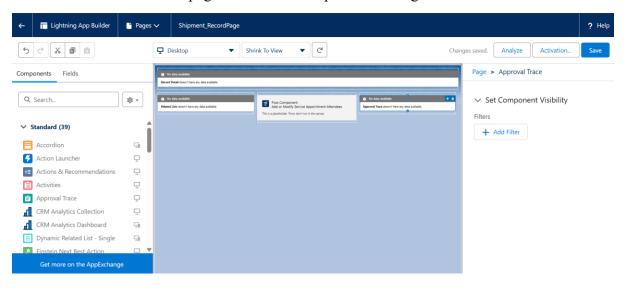
Steps:

- 1. Setup  $\rightarrow$  App Builder  $\rightarrow$  New Lightning App
- 2. Name: ShipmentTrack
- 3. Include standard navigation items (Shipments, Inventory, Customers)
- 4. Assign to profiles (Logistics Manager, Customer Service)
  Screenshot: Lightning App Builder canvas with ShipmentTrack app layout.

## 2. Record Pages

Use Case: Customize Shipment record layout for clarity and efficiency. Explanation: Create separate layouts for different profiles, including shipment details, customer info, feedback flows, and approval history. Steps:

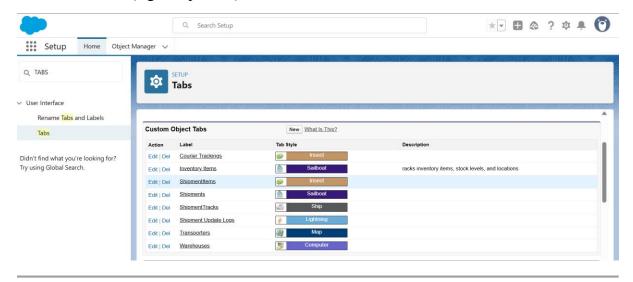
- 1. Setup → Object Manager → Shipment → Lightning Record Pages → New
- 2. Add components: Details, Related Lists, Flows, Approval History
- 3. Activate → Assign to profiles
  Screenshot: Record page editor with components arranged.



#### 3. Tabs

Use Case: Easy access to key objects like Shipments, Inventory, Customers, Warehouses. Steps:

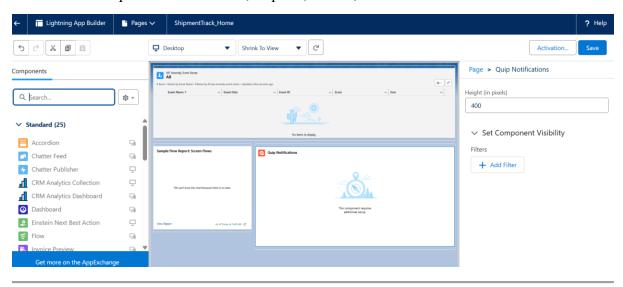
- 1. Setup  $\rightarrow$  Tabs  $\rightarrow$  New Tab  $\rightarrow$  Select Object  $\rightarrow$  Add to App
- 2. Name tab (e.g., Shipments)



# 4. Home Page Layouts

Use Case: Dashboard for users to see shipment status, pending approvals, and alerts. Steps:

- 1. Setup → Home Pages → New Lightning Home Page
- 2. Add components: List Views, Reports, Charts, Custom Notifications



### 5. Utility Bar

Use Case: Quick access to common actions like creating shipments, searching customers, or checking inventory.

Steps:

1. Setup → App Builder → Open App → Utility Bar → Add Utilities (e.g., "Create Shipment", "Search Shipment")

### 6. LWC (Lightning Web Components)

Use Case: Custom interactive components for shipment tracking and feedback. Example: shipmentFeedback component to capture rating and comments. Steps:

- 1. Create LWC: VS Code or Developer Console → lwc create shipmentFeedback
- 2. HTML + JS + CSS for UI
- 3. Deploy → Add to Lightning Record Page

### 7. Apex with LWC

```
Use Case: Fetch or update shipment records using server-side logic.
```

Example: Retrieve shipment details for LWC dynamically.

```
@AuraEnabled(cacheable=true)
public static Shipment__c getShipmentDetails(Id shipmentId){
   return [SELECT Id, Name, Status__c, Customer__c FROM Shipment__c WHERE Id = :shipmentId];
}
```

#### 8. Events in LWC

Use Case: Communication between parent and child components.

Example: Emit a custom event when feedback is submitted:

const feedbackEvent = new CustomEvent('submitted', {detail: this.feedback});

this.dispatchEvent(feedbackEvent);

# 9. Wire Adapters

```
Use Case: Automatically fetch Salesforce data in a reactive way.
```

Example:

```
import { LightningElement, wire } from 'lwc';
```

import getShipmentDetails from '@salesforce/apex/ShipmentController.getShipmentDetails';

```
export default class ShipmentDetails extends LightningElement {
    @wire(getShipmentDetails, { shipmentId: '$recordId' }) shipment;
}
```

## 10. Imperative Apex Calls

```
Use Case: Call Apex methods on button click or specific action.

import { LightningElement } from 'lwc';

import updateShipmentStatus from
'@salesforce/apex/ShipmentController.updateShipmentStatus';

handleClick() {

updateShipmentStatus({ shipmentId: this.recordId, status: 'Delivered' })

.then(result => console.log('Status updated'))

.catch(error => console.error(error));
}
```

### 11. Navigation Service

```
});
}
}
```