Phase 6: User Interface Development

Introduction

Phase 6 focused on enhancing the UI/UX layer of the Pet Adoption Tracker using Salesforce Lightning Experience.

The objective was to create intuitive, dynamic, and visually rich interfaces so that Adoption Managers, Shelter Staff, Support Volunteers, and Adopters can easily interact with pets, adoption requests, donations, volunteer shifts, and related records.

Lightning App Builder

Built custom pages using App Builder: App Page, Record Pages, and Home Page.

In Pet Adoption Tracker:

- **Pet Record Page → shows pet details (age, breed, species, cost, availability) + adoption status + adoption requests.**

- **Adoption Request Record Page → shows adopter details, pet requested, status, fee, and follow-up date.**

- **Donation Record Page → displays donor info, donation amount, date, and status.**

- **Home Page → displays KPIs (adoptions, donations, volunteer hours), quick actions, recent adoption requests, and reports.**

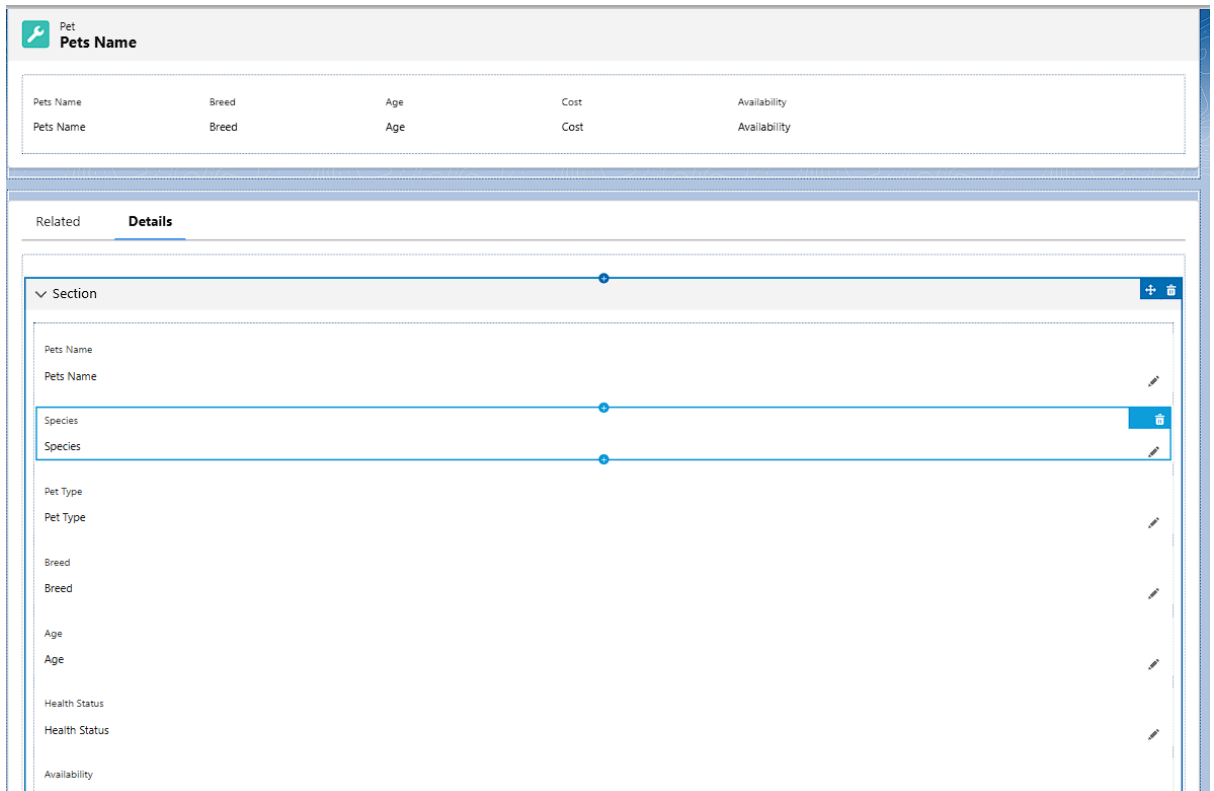**Outcome: Flexible and role-based layouts that provide a complete view of pets and adoptions.**
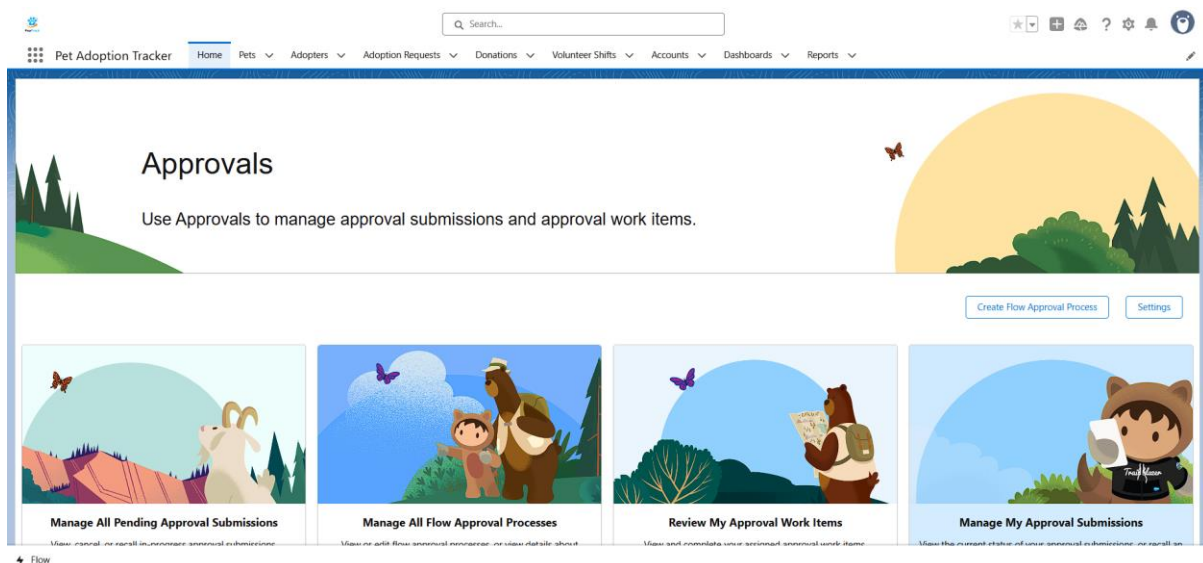
Custom record pages created for:

- Pet → details, adoption status, health, vaccination, and shelter info.

- Adoption Request → adopter details, pet requested, adoption fee, request date, status.

- Donation → donor details, donation amount, status.

- Volunteer Shifts → volunteer, shift date, hours logged.

  Outcome: Each record page optimized for quick viewing, easy updates, and better adoption tracking.

3.Tabs

Added Pet Adoption Tracker navigation tabs:

- Pets

- Adoption Requests

- Donations

- Volunteer Shifts

- Dashboards & Reports

  Outcome: Users can switch quickly between objects and access critical data efficiently.

SETUP
Tabs

Custom Tabs

Help for this Page

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external web applications and content within the Salesforce window. Visualforce tabs allow you to embed Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.

Custom Object Tabs — New | What Is This?

Action	Label	Tab Style		Description
Edit | Del	Adopters		Heart	
Edit | Del	Adoption Requests		Star	
Edit | Del	Donations		Bell	
Edit | Del	Pets		Wrench	
Edit | Del	Volunteer Shifts		Alarm clock	

Web Tabs — New | What Is This?

No Web Tabs have been defined

Visualforce Tabs — New | What Is This?

No Visualforce Tabs have been defined

Lightning Component Tabs — New | What Is This?

Home Page Layouts

Created a Home Page using Lightning App Builder with components:

- **KPI Cards** → Total Adoptions, Pending Requests, Donations This Month, Volunteer Hours.

- **List Views** → Recent Adoption Requests, Pets Available.

- **Reports/Charts** → Adoptions by Species, Pending Adoption Requests.

- **Quick Actions** → Create Adoption Request, Add Donation, Log Volunteer Shift.

  Outcome: Centralized dashboard that provides real-time insights and quick access to actions.
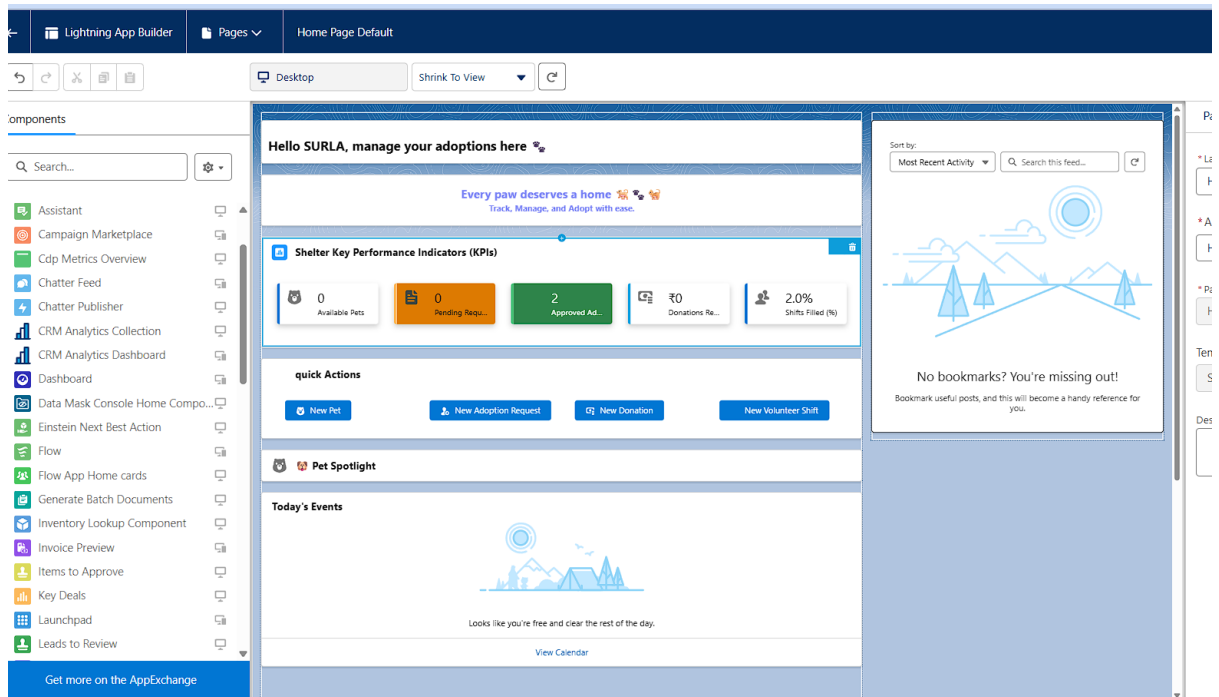
Utility Bar

- **Utility Bar**

- Added Utility Bar to the app:

- **Items:** Notes, Recent Items, Quick Links to Add New Pet or Adoption Request.

- **Outcome:** Quick actions and reference tools accessible throughout the app.

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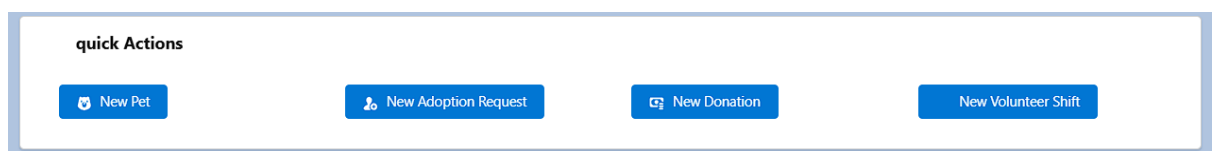
LWC (Lightning Web Components)

Developed LWCs for the tracker:

- **petSpotlight → highlights featured pets with images and key info.**

- **adoptionStoriesCarousel → displays stories and photos of successful adoptions.**

- **kpiCards → dynamically shows key metrics (adoptions, donations, volunteer hours).**
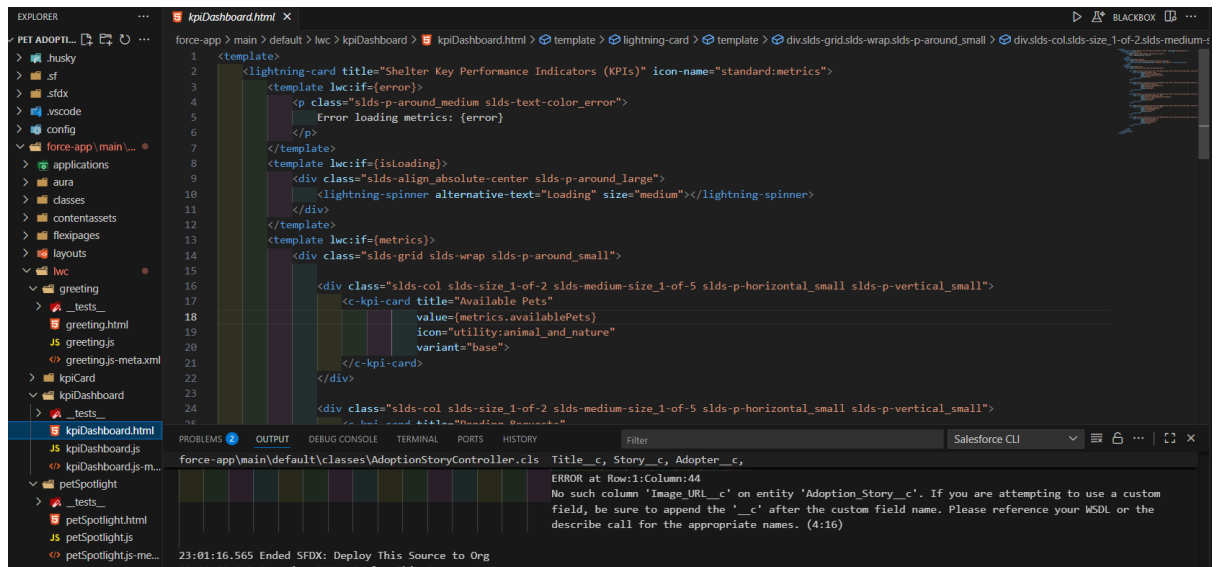
Apex with LWC

Integrated Apex methods with LWCs:

- **PetUtility.cls → fetch available pets, mark as adopted.**

- **AdoptionRequestTriggerHandler.cls → handle adoption status updates.**

- **DonationService.cls → approve/reject donations.**

- **VolunteerService.cls → calculate volunteer hours.**

  Usage in LWC:

- **@wire to fetch available pets, adoption stats.**

- **Imperative Apex calls to mark pet as adopted, refresh KPIs.**
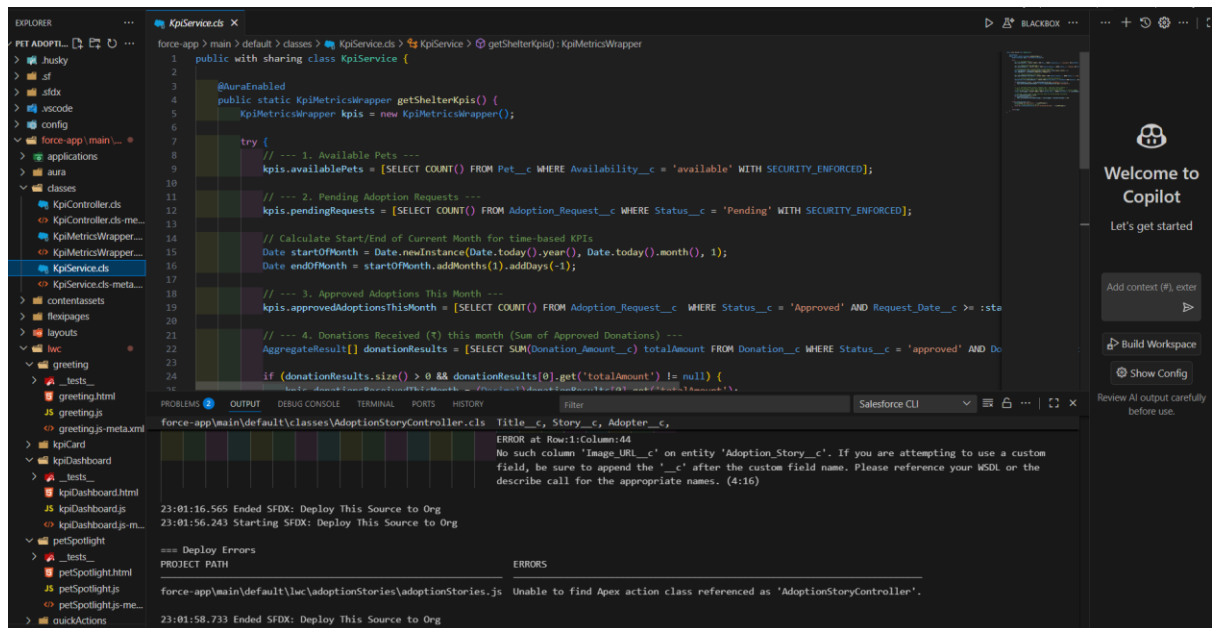
Events in LWC

- **Click events on Adopt Pet button update status and refresh the dashboard.**

- **Custom events propagate between components (e.g., KPI cards update when adoption occurs).**

  Outcome: Interactive and responsive UI.

Wire Adapters & Imperative Apex

- **@wire adapters → automatically fetch and display latest pets, adoption requests, and KPIs.**

- **Imperative Apex → manual refresh buttons to update pet status or adoption metrics on demand.**

Navigation Service

- **Added record navigation inside LWCs.**

- **Example: From Pet Spotlight → open Pet record page → navigate back to Adoption Requests.**

Outcomes

- **Built modular Lightning Pages for Pets, Adoptions, Donations, and Volunteers.**

- **Created custom LWCs integrated with Apex for dynamic interactions.**

- **Enhanced usability with Home Page + Utility Bar + KPI cards.**

- **Implemented live updates (wire) and manual refresh (imperative Apex).**

- **Navigation and events allow smooth transitions across objects and pages.**

Conclusion

Phase 6 delivered a modern Lightning Experience UI for the Pet Adoption Tracker.
Users can now efficiently manage pets, adoption requests, donations, and volunteer activities in a single consolidated workspace.
The interface is interactive, scalable, and user-friendly, with key metrics and insights always accessible.