Phase 6:

User Interface Development

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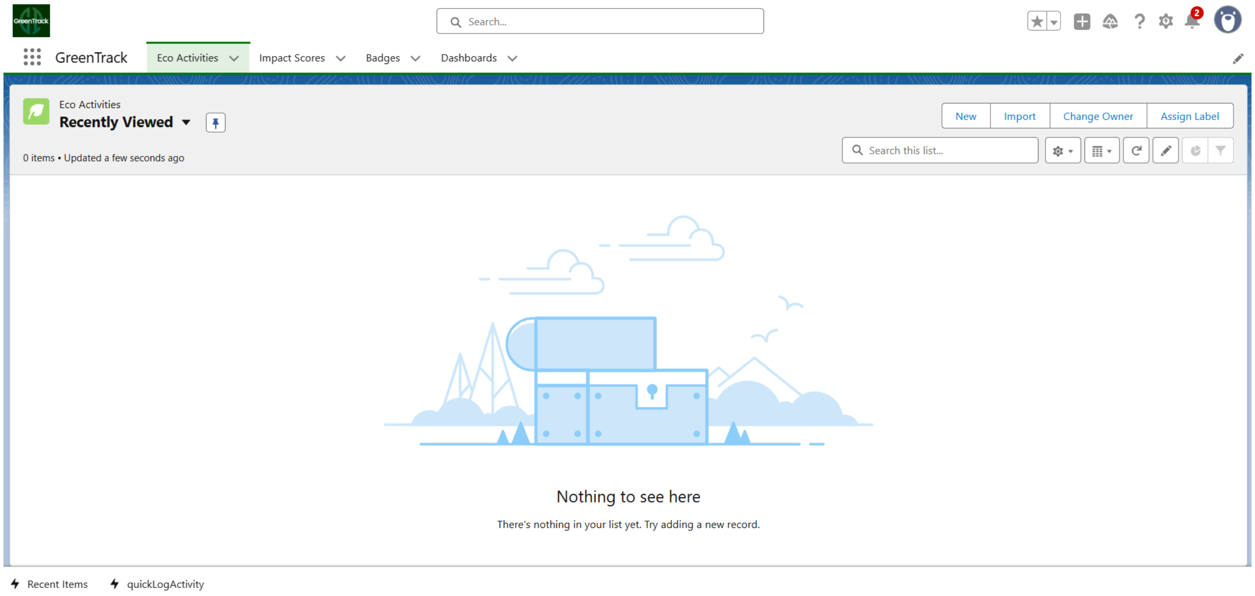
1) Create a Lightning App for GreenTrack

Purpose: A dedicated workspace where users see only project-related tabs.

- Go to: **Setup → App Manager → New Lightning App**
- Name: GreenTrack
- Branding: Add green/eco-friendly color theme.
- Navigation Items (Tabs):
  - Eco Activities
  - Impact Scores
  - Badges
  - Dashboards
- Assign Profiles: Admin, NGO Manager, Participant

This ensures everyone uses the same branded app.



Nothing to see here

There's nothing in your list yet. Try adding a new record.

2) Create Tabs

Purpose: Give users direct access to custom objects.

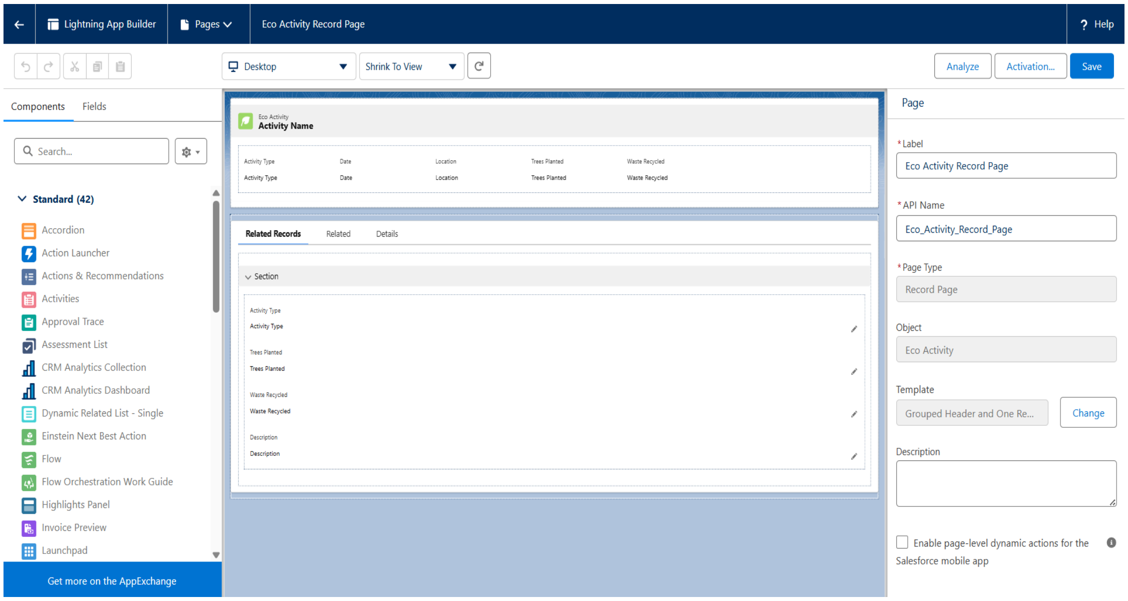
- Setup → Tabs → New → Choose Object → Eco Activity, Impact Score, Badge
- Add to GreenTrack App

3) Record Pages (Lightning App Builder)

Purpose: Customize how object records look.

- Setup → Object Manager → Eco Activity → Lightning Record Pages → New
- Add components:

- **Activity Details** section (Type, Date, Location)



Page

*Label: Eco Activity Record Page

*API Name: Eco_Activity_Record_Page

*Page Type: Record Page

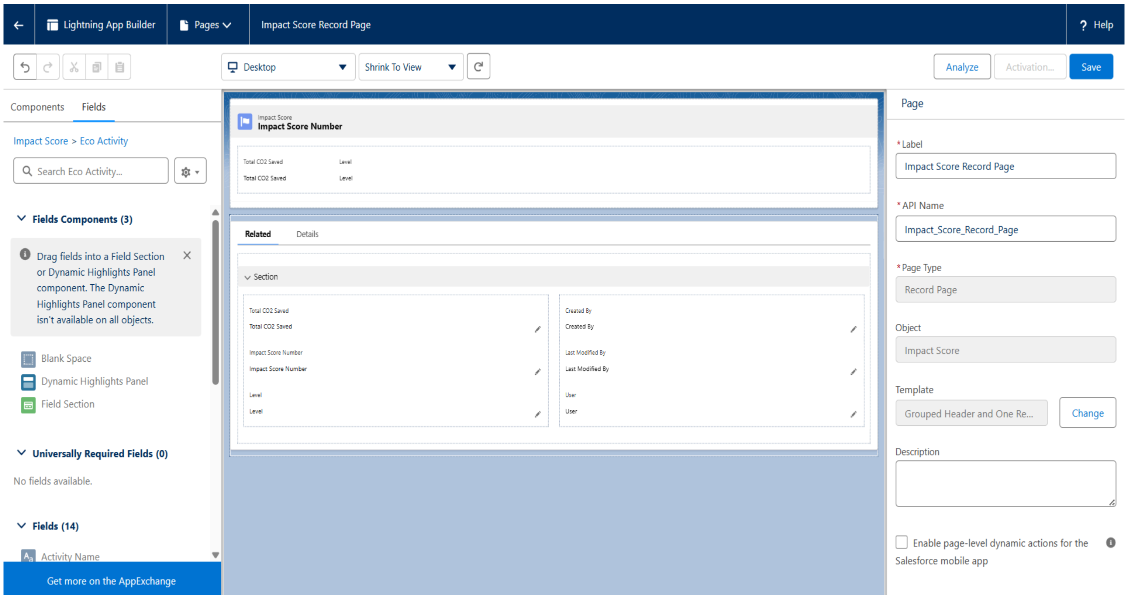
Object: Eco Activity

Template: Grouped Header and One Re...

Description:

☐ Enable page-level dynamic actions for the Salesforce mobile app

- **Impact Score (related list)**



Drag fields into a Field Section or Dynamic Highlights Panel component. The Dynamic Highlights Panel component isn't available on all objects.

Page

*Label: Impact Score Record Page

*API Name: Impact_Score_Record_Page

*Page Type: Record Page

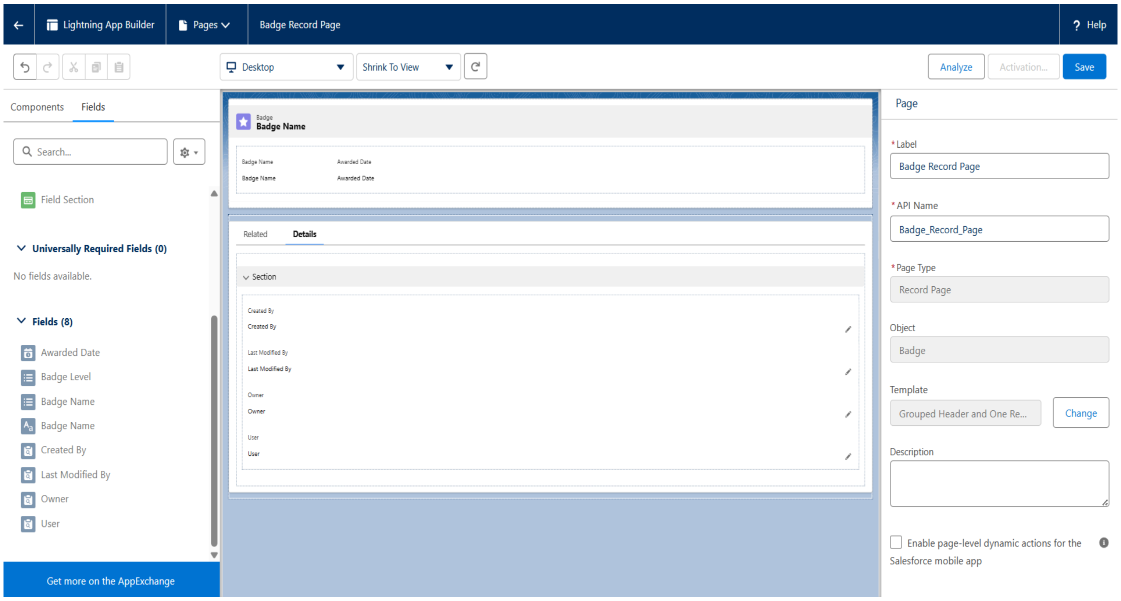
Object: Impact Score

Template: Grouped Header and One Re...

Description:

☐ Enable page-level dynamic actions for the Salesforce mobile app

- ○ **Badges (related list)**



* Label: Badge Record Page

* API Name: Badge_Record_Page

* Page Type: Record Page

Object: Badge

Template: Grouped Header and One Re...

□ Enable page-level dynamic actions for the Salesforce mobile app

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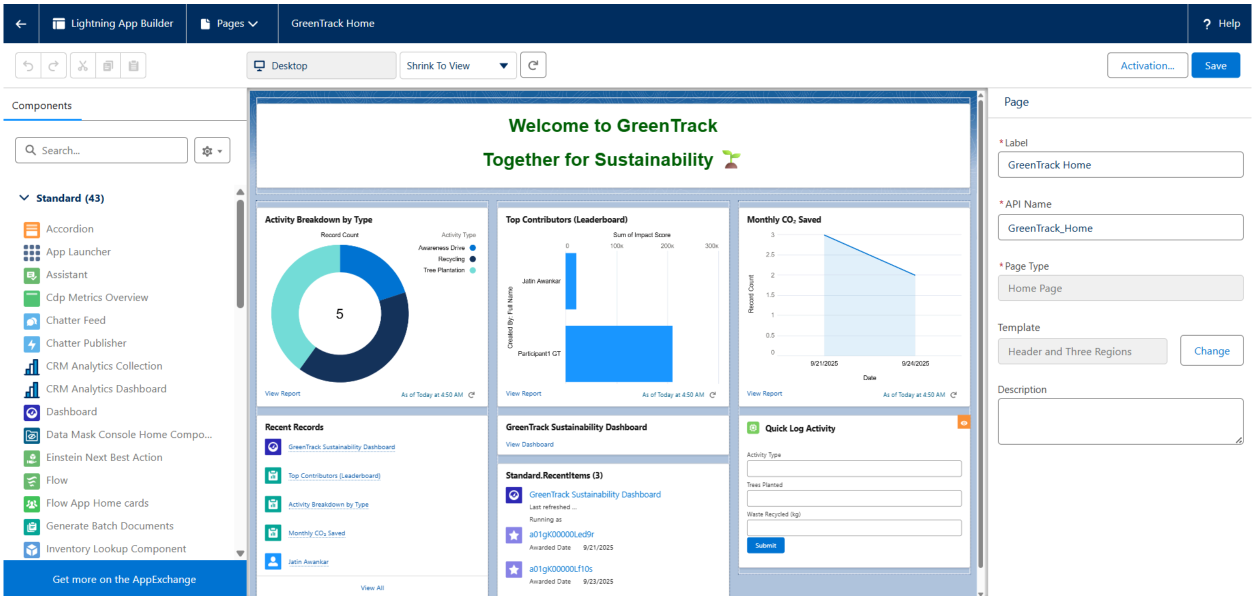
4) Home Page Layout

Purpose: Give users an engaging landing page.

- Setup → Lightning App Builder → New Home Page
- Add:
  - ○ Welcome Text (*"Welcome to GreenTrack – Together for Sustainability 🌱"*)
  - ○ Report Chart: *Monthly CO_2 Saved*
  - ○ Dashboard Component: *Top 5 Contributors*



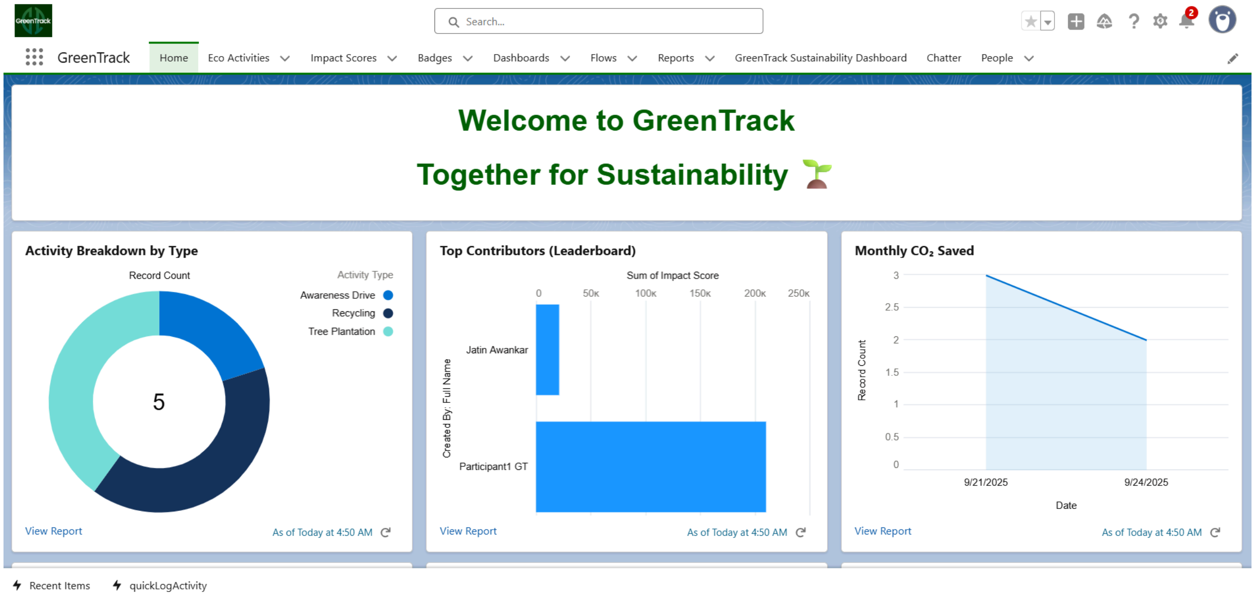
*Label: GreenTrack Home

*API Name: GreenTrack_Home

*Page Type: Home Page

Template: Header and Three Regions

Description:



5) Utility Bar (Optional but adds flair)

Purpose: Quick access to features at the bottom bar.

- Setup → App Manager → GreenTrack → Edit → Utility Bar

- Add:
  - Notes (quick meeting notes)
  - Recent Items (Eco Activities)
  - Custom LWC (Quick Log Activity form – explained below).

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6) Lightning Web Component (LWC) – Quick Log Activity

Purpose: Coding + Usability.

File Structure:

```
lwc/
 |-- quickLogActivity/
          |-- quickLogActivity.html
          |-- quickLogActivity.js
          |__ quickLogActivity.js-meta.xml
```

quickLogActivity.html:

```
<template>
  <lightning-card title="Quick Log Activity" icon-name="custom:custom63">
    <div class="slds-p-around_medium">
      <lightning-input label="Activity Type" type="text" value={activityType}
onchange={handleChange}></lightning-input>
      <lightning-input label="Trees Planted" type="number" value={treesPlanted}
onchange={handleChange}></lightning-input>
      <lightning-input label="Waste Recycled (kg)" type="number" value={wasteRecycled}
onchange={handleChange}></lightning-input>
      <lightning-button label="Submit" onclick={handleSubmit}
variant="brand"></lightning-button>
    </div>
  </lightning-card>
</template>
```

quickLogActivity.js:

```
import { LightningElement, track } from 'lwc';
import { ShowToastEvent } from 'lightning/platformShowToastEvent';
import ECO_OBJECT from '@salesforce/schema/Eco_Activity__c';
import ACTIVITY_TYPE from '@salesforce/schema/Eco_Activity__c.Activity_Type__c';
import TREES_PLANTED from
'@salesforce/schema/Eco_Activity__c.Trees_Planted__c';
import WASTE_RECYCLED from
'@salesforce/schema/Eco_Activity__c.Waste_Recycled__c';
import { createRecord } from 'lightning/uiRecordApi';

export default class QuickLogActivity extends LightningElement {
    @track activityType;
    @track treesPlanted;
    @track wasteRecycled;

    handleChange(event) {
        const field = event.target.label;
        if (field === 'Activity Type') this.activityType = event.target.value;
        if (field === 'Trees Planted') this.treesPlanted = event.target.value;
        if (field === 'Waste Recycled (kg)') this.wasteRecycled = event.target.value;
    }

    handleSubmit() {
        const fields = {};
        fields[ACTIVITY_TYPE.fieldApiName] = this.activityType;
        fields[TREES_PLANTED.fieldApiName] = this.treesPlanted;
        fields[WASTE_RECYCLED.fieldApiName] = this.wasteRecycled;

        const recordInput = { apiName: ECO_OBJECT.objectApiName, fields };

        createRecord(recordInput)
            .then(() => {
                this.dispatchEvent(
                    new ShowToastEvent({
                        title: 'Success',
                        message: 'Eco Activity logged successfully!',
                        variant: 'success'
                    })
                );
```

```
      })
      .catch(error => {
        this.dispatchEvent(
          new ShowToastEvent({
            title: 'Error',
            message: error.body.message,
            variant: 'error'
          })
        );
      });
  }
}
```

quickLogActivity.js-meta.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<LightningComponentBundle
xmlns="http://soap.sforce.com/2006/04/metadata">
    <apiVersion>58.0</apiVersion>
    <isExposed>true</isExposed>
    <targets>
        <target>lightning__AppPage</target>
        <target>lightning__RecordPage</target>
        <target>lightning__HomePage</target>
        <target>lightning__UtilityBar</target>
    </targets>
</LightningComponentBundle>
```

This lets users quickly log an activity from anywhere in the app.

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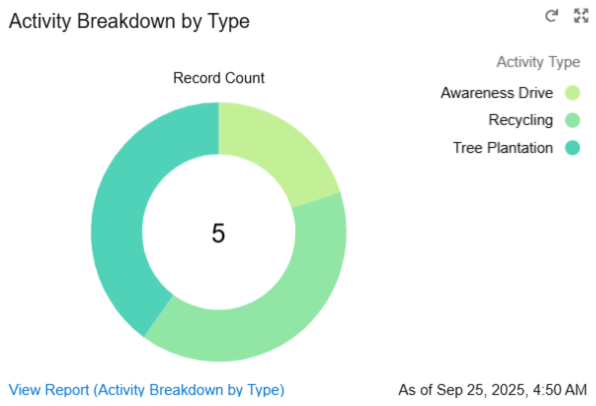
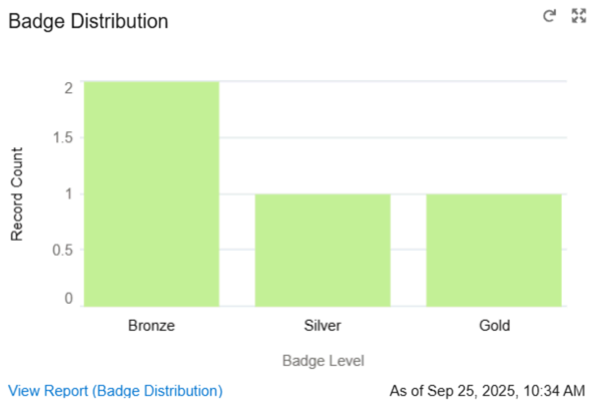
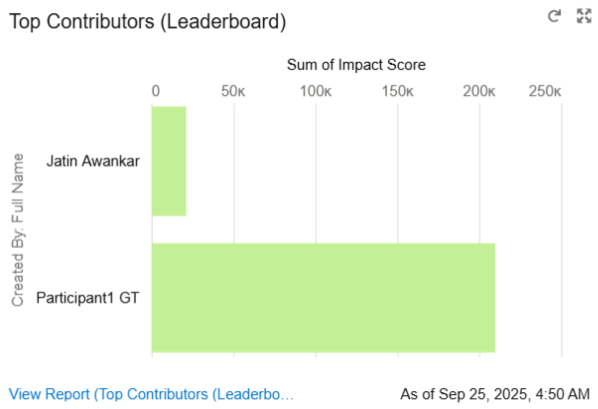
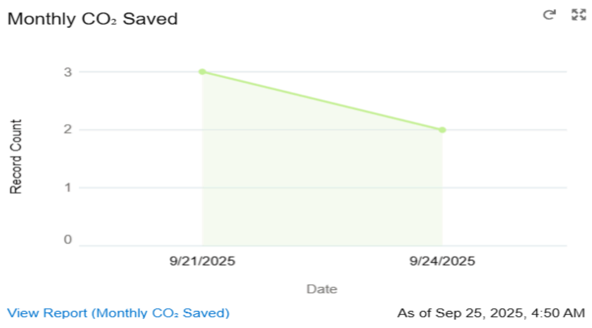
7) Chart Patterns:









8) Testing Checklist

- Log in as a Participant → Open `GreenTrack` app → See tabs & navigation.
- Create Eco Activity → Verify related Impact Score is visible.
- Home Page → Dashboard chart visible.
- Quick Log Activity LWC → Record should save successfully.
- Dashboard screenshots