


## Phase 6:


# User Interface Development

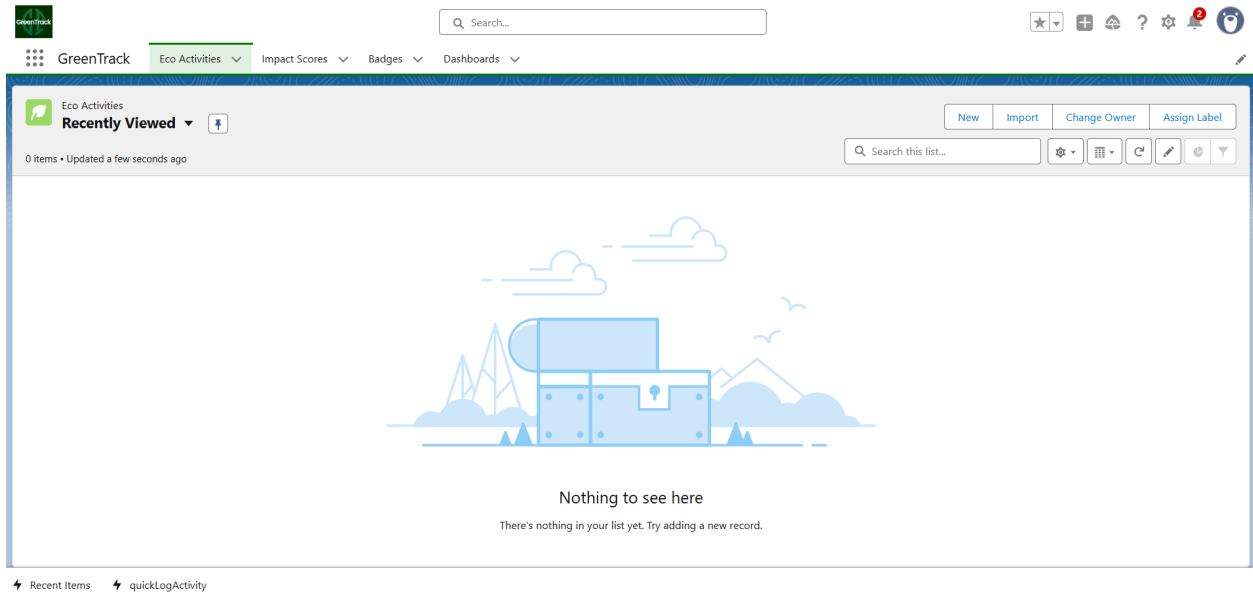
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### 1) Create a Lightning App for GreenTrack

 **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.



## 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:

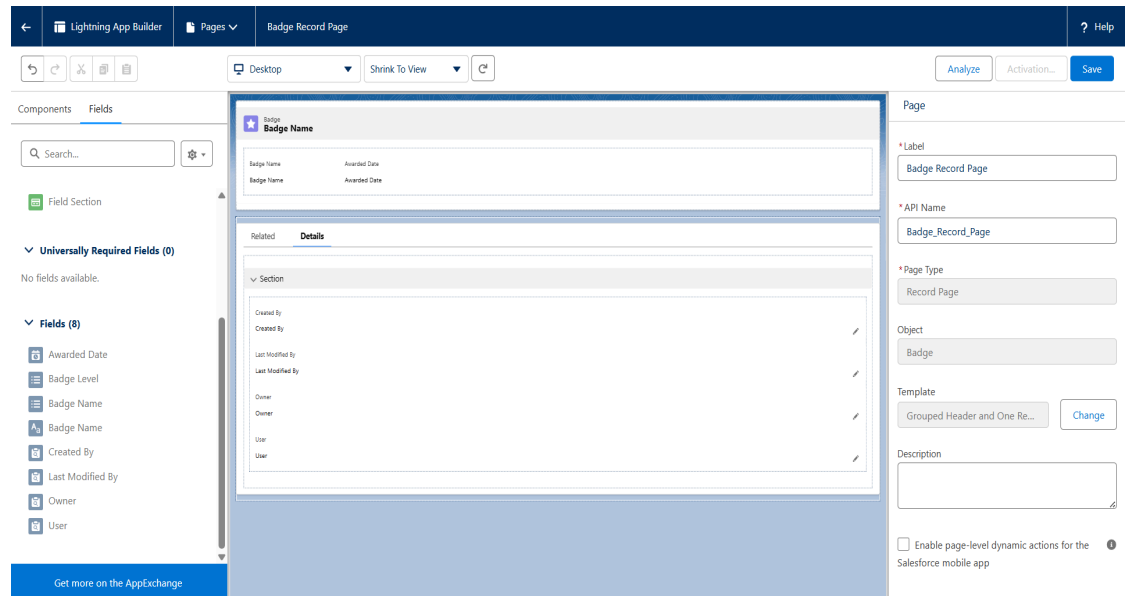
○ **Activity Details section (Type, Date, Location)**

The screenshot shows the Lightning App Builder interface for the 'Eco Activity Record Page'. The top navigation bar includes 'Lightning App Builder', 'Pages', and 'Eco Activity Record Page'. Below the navigation bar, there are tabs for 'Components' and 'Fields'. The 'Components' tab is active, showing a list of standard components on the left, including 'Accordion', 'Action Launcher', 'Actions & Recommendations', 'Activities', 'Approval Trace', 'Assessment List', 'CRM Analytics Collection', 'CRM Analytics Dashboard', 'Dynamic Related List - Single', 'Einstein Next Best Action', 'Flow', 'Flow Orchestration Work Guide', 'Highlights Panel', 'Invoice Preview', and 'Launchpad'. The main canvas displays a preview of the 'Eco Activity' record page. It features a header section with 'Activity Name' and a table with columns for 'Activity Type', 'Date', 'Location', 'Trees Planted', and 'Waste Recycled'. Below the header, there is a 'Related Records' section with tabs for 'Related' and 'Details'. The 'Related' tab is active, showing a list of related records. The right sidebar contains the 'Page' configuration panel, which includes fields for 'Label' (Eco Activity Record Page), 'API Name' (Eco\_Activity\_Record\_Page), 'Page Type' (Record Page), 'Object' (Eco Activity), 'Template' (Grouped Header and One Re...), and 'Description'. There is also a checkbox for 'Enable page-level dynamic actions for the Salesforce mobile app'.

○ **Impact Score (related list)**

The screenshot shows the Lightning App Builder interface for the 'Impact Score Record Page'. The top navigation bar includes 'Lightning App Builder', 'Pages', and 'Impact Score Record Page'. Below the navigation bar, there are tabs for 'Components' and 'Fields'. The 'Fields' tab is active, showing a list of fields on the left, including 'Impact Score > Eco Activity', 'Blank Space', 'Dynamic Highlights Panel', and 'Field Section'. The main canvas displays a preview of the 'Impact Score' record page. It features a header section with 'Impact Score Number' and a table with columns for 'Total CO2 Saved', 'Level', 'Created By', 'Last Modified By', 'User', and 'User'. Below the header, there is a 'Related' section with tabs for 'Related' and 'Details'. The 'Related' tab is active, showing a list of related records. The right sidebar contains the 'Page' configuration panel, which includes fields for 'Label' (Impact Score Record Page), 'API Name' (Impact\_Score\_Record\_Page), 'Page Type' (Record Page), 'Object' (Impact Score), 'Template' (Grouped Header and One Re...), and 'Description'. There is also a checkbox for 'Enable page-level dynamic actions for the Salesforce mobile app'.

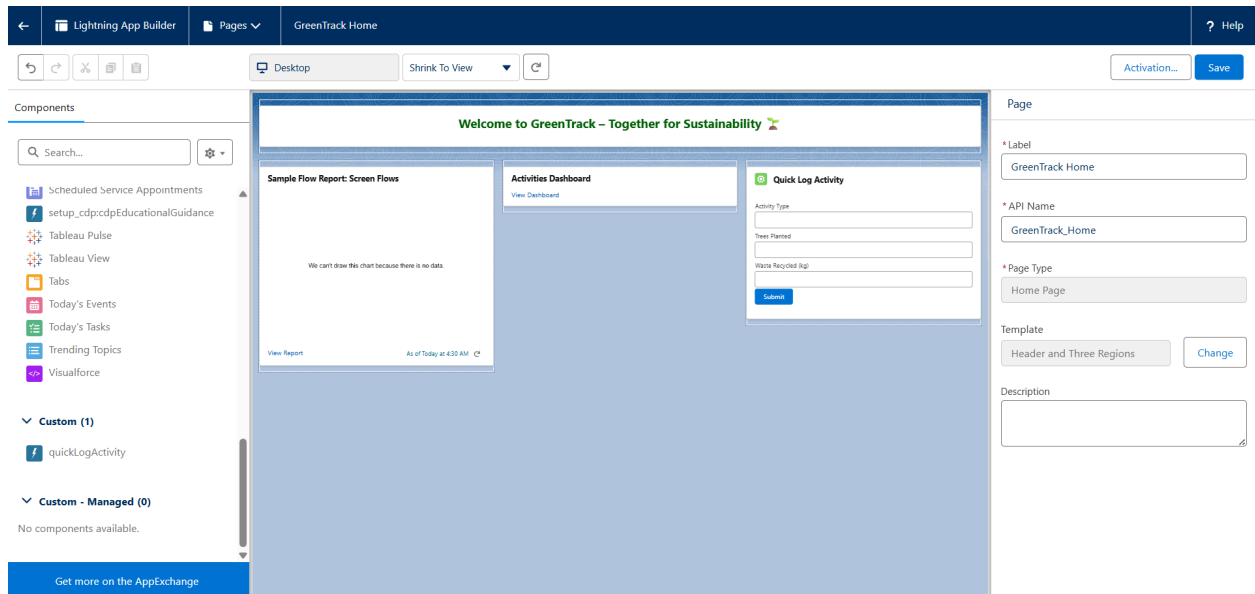
- **Badges (related list)**



## 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<sub>2</sub> Saved*
  - Dashboard Component: *Top 5 Contributors*



## 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).

## 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>

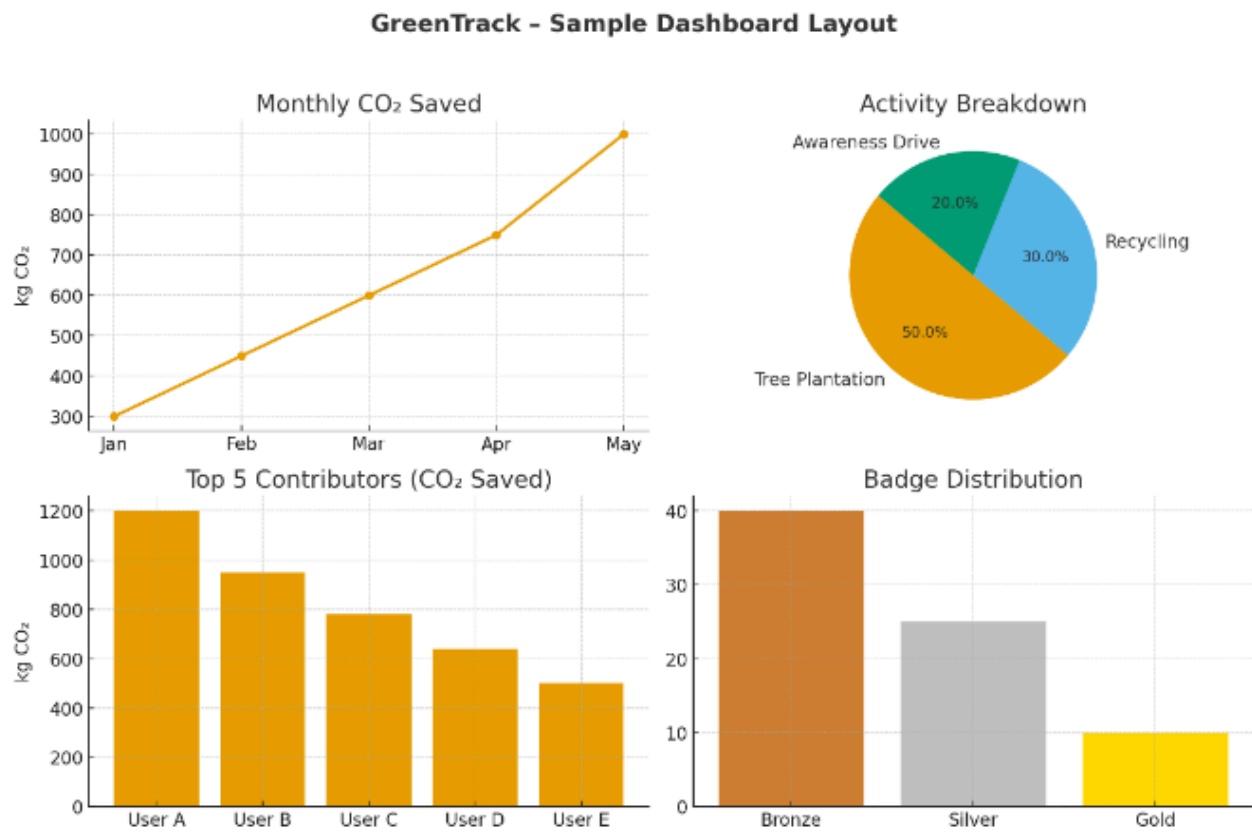
```

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



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## 7) Chart Pattern Example Structure:



## 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.