

Phase 6: User Interface Development

Project: Customer Success & Support Management CRM

Industry: SaaS / Technology Companies

Lightning App Builder

- Used Lightning App Builder to design **Customer Success Dashboard** for the **Account object**.
 - Added LWCs (Health Score, Support Queue, Onboarding Tasks) on the record page.
 - Created an optional **App Page** for managers with reports, dashboards, and LWCs.
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Record Pages

- Created **Customer Success Dashboard Record Page** under Account.
 - Components added:
 - **HealthScoreDashboard LWC** → Top section (account health overview).
 - **SupportCasesQueue LWC** → Middle section (open support cases).
 - **OnboardingTasks LWC** → Bottom section (pending onboarding tasks).
 - Activated page as **Org Default** for Account records.
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Tabs

- Organized record page with Tabs for clarity:
 - **Overview Tab** → Health Score.
 - **Support Tab** → Support Cases.
 - **Onboarding Tab** → Onboarding Tasks.
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Home Page Layouts

- Created optional **Customer Success Dashboard App Page**.
- Displayed reports (churn prediction, support response times, onboarding progress).
- Added LWCs for health score, cases, and tasks.
- Provided consolidated view for Customer Success managers.

Utility Bar

- Added Utility Bar to the **Customer Success CRM App**.
 - Included:
 - **Recent Records**
 - **Notes**
 - **Quick Actions** (“Create Case”, “Log Usage Metric”)
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LWC (Lightning Web Components)

- Developed 3 LWCs for the project:
 - **HealthScoreDashboard** → Fetches & displays Account Health Score.
 - **SupportCasesQueue** → Lists support cases with navigation to records.
 - **OnboardingTasks** → Shows pending onboarding tasks with Complete action.
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Apex with LWC

- Built Apex controllers for data handling:
 - **HealthScoreController** → Returns health score for an account.
 - **SupportCasesController** → Fetches support cases for the account.
 - **OnboardingTasksController** → Fetches onboarding tasks & updates task completion.
 - Used Apex with LWCs for **real-time dynamic data updates**.
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Events in LWC

- Implemented event communication between LWCs:
 - Completing a task in **OnboardingTasks** → Refreshes **HealthScoreDashboard**.
 - Ensures **real-time updates** without page reload.
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Wire Adapters

- Used @wire adapters for automatic data refresh:
 - Fetch Account Health Score.
 - Fetch Support Cases.
 - Fetch Onboarding Tasks.
-

Imperative Apex Calls

- Used where user interaction required backend updates:
 - Marking onboarding tasks as completed.
 - Updating Account health score.
 - Escalating support cases.
-

Navigation Service

- Implemented **NavigationMixin** in LWCs:
 - From task or case list → Navigate to related Account or Case record.
 - Provides seamless navigation across Salesforce records.
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Outcome

- Built a **Customer Success Dashboard** directly on the Account record page.
 - Dashboard shows **Health Score, Active Cases, Pending Onboarding Tasks**.
 - Utility Bar, Tabs, and Navigation improve usability for success teams.
 - Managers get both **record-level dashboards** and **App Page summaries**.
 - Final result: An integrated, interactive interface for **Customer Success management**.
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Screenshots what I have done

The screenshot displays the Lightning App Builder interface, which is used for building custom applications within the Salesforce ecosystem. The top navigation bar includes links for 'App Settings', 'App Details & Branding', 'Page', and 'Customer Success CRM'. The main workspace is divided into several sections:

- App Details & Branding:** Shows app details like name ('Customer Success CRM'), developer name ('Customer Success CRM'), and a preview of the app's branding.
- App Details:** Allows setting the app's name, icon, and description.
- App Launcher Preview:** Shows how the app will appear in the Salesforce app launcher.
- Account Record Page:** A large central area displaying a complex dashboard with various components such as 'Recently Completed Tasks', 'Health Score' (with a progress ring), 'Customer Health Score', and 'Onboarding Status'.
- Code Editor:** Two tabs are visible:
 - healthscore.html:** Displays the Lightning Web Component (LWC) code for the health score card, including template, styles, and script sections.
 - healthscore.js-meta.xml:** Displays the metadata XML for the component, defining its version, encoding, and target objects.
- File Explorer:** On the left, it shows the project structure with files like 'healthscore.html', 'healthscore.js', 'healthscore.js-meta.xml', 'healthScoreDashboard', 'onboardingTasks', and 'supportCasesQueue'.

Lightning App Builder - Customer Success CRM

Navigation Items

Available Items

Selected Items

Customer Success Dashboard Page

Components - Fields

Standard (51)

Lightning Web Component

Lightning Web Component > healthscore > healthscore.js

```

1 import { LightningElement, wire, api } from 'lwc';
2 import getHealthScore from '@salesforce/apex/accountController.getHealthScore';
3
4 export default class HealthScore extends LightningElement {
5     @api recordId;
6     healthScore;
7
8     @wire(getHealthScore, { accountId: '$recordId' })
9     wiredScore({ error, data }) {
10         if (data) {
11             this.healthScore = data;
12         } else if (error) {
13             console.error(error);
14         }
15     }
16 }

```

Lightning Web Component > healthScoreDashboard > healthScoreDashboard.html

```

1 <template>
2     <lightning-card title="Customer Health Score">
3         <div class="slds-p-around_medium">
4             <template if:true={healthScore}>
5                 <p>Health Score: {healthScore}</p>
6             </template>
7             <template if:false={healthScore}>
8                 <p>Loading...</p>
9             </template>
10            </div>
11        </lightning-card>
12    </template>

```

Lightning Web Component

```

1 import { LightningElement, api, wire } from 'lwc';
2 import getHealthScore from '@salesforce/apex/healthScoreController/getHealthScore';
3
4 export default class healthScoreDashboard extends LightningElement {
5     @api records;
6     healthScore;
7
8     @wire(getHealthScore, { accountId: 'SearchedID' })
9     void(wireError(error, data)) {
10         if(data) this.healthScore = data;
11         else console.error(error);
12     }
13 }

```

Lightning Web Component

```

1 <!DOCTYPE html>
2 <html>
3     <head>
4         <meta charset="UTF-8" />
5         <title>Health Score Dashboard</title>
6     </head>
7     <body>
8         <h1>Health Score Dashboard</h1>
9         <div>
10             <lightning-card title="Pending Onboarding Tasks">
11                 <div class="slds-p-around--medium">
12                     <template if:true={tasks}>
13                         <template for:each={tasks} for:item="task">
14                             <div key={task.Id} class="slds-box slds-m-bottom_small slds-grid slds-align-spread">
15                                 <div>
16                                     <p>{task.Name}</p>
17                                     <p>Status: {task.Status__c}</p>
18                                     <p>Due: {task.Due__c}</p>
19                                     <lightning-button label="Complete" data-id={task.Id} onclick={handleComplete}></lightning-button>
20                             </div>
21                         </template>
22                     </template>
23                     <template if:false={tasks}>
24                         <p>No pending onboarding tasks.</p>
25                     </template>
26                 </div>
27             </lightning-card>
28         </div>
29     </body>
30 </html>

```

Lightning Web Component > onboardingTasks > onboardingTasks.js

```

1 <!DOCTYPE html>
2 <html>
3     <head>
4         <meta charset="UTF-8" />
5         <title>Pending Onboarding Tasks</title>
6     </head>
7     <body>
8         <lightning-card title="Pending Onboarding Tasks">
9             <div class="slds-p-around--medium">
10                 <template if:true={tasks}>
11                     <template for:each={tasks} for:item="task">
12                         <div key={task.Id} class="slds-box slds-m-bottom_small slds-grid slds-align-spread">
13                             <div>
14                                 <p>{task.Name}</p>
15                                 <p>Status: {task.Status__c}</p>
16                                 <p>Due: {task.Due__c}</p>
17                                 <lightning-button label="Complete" data-id={task.Id} onclick={handleComplete}></lightning-button>
18                             </div>
19                         </template>
20                     </template>
21                     <template if:false={tasks}>
22                         <p>No pending onboarding tasks.</p>
23                     </template>
24                 </div>
25             </lightning-card>
26         </div>
27     </body>
28 </html>

```

Screenshot showing four code editors side-by-side, each displaying a different component or controller file from a Lightning Web Component project.

- Component 1:** A Lightning Web Component named "onboardingTasks". The code defines a class "onboardingTasks" extending "lightningElement". It imports "LightningElement", "api", "wire", "ShowToastEvent", and "LightningPlatformShowToastController". The component has a template with a table having 3 columns: "task Name", "Status", and "Due Date". It includes logic to handle "onboardTask" events, retrieve tasks from the "onboardingTasksController", and update the UI based on the result. It also handles "completeTask" events and shows toast messages for success or error.
- Component 2:** A Lightning Web Component named "supportCasesQueue". The code defines a class "supportCasesQueue" extending "lightningElement". It imports "LightningElement", "api", "wire", and "ShowToastEvent". The component has a template with a lightning-datatable showing cases. If no cases are found, it displays a message "No open cases found.". It also handles "getSupportCases" events and shows toast messages for success or error.
- Component 3:** A Lightning Web Component named "onboardingTask". The code defines a class "onboardingTask" extending "lightningElement". It imports "LightningElement", "api", "wire", and "ShowToastEvent". The component has a template with a lightning-card titled "Open Support Cases". It shows a lightning-datatable of cases if there are any, or a message "No open cases found." if none. It also handles "getSupportCases" events and shows toast messages for success or error.
- Component 4:** A Lightning Web Component named "supportCasesQueue.js-meta.xml". This is a metadata XML file defining the component's target and API version.

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE LightningComponentBundle [ 
3   <!-- API Version -->
4   <!-- Exposed -->
5   <!-- Targets -->
6   <!-- Target Types -->
7   <!-- Target Names -->
8 ]>
9 <LightningComponentBundle xmlns="http://soap.sforce.com/2006/04/metadata">
10   <apiVersion>59.0</apiVersion>
11   <isExposed>true</isExposed>
12   <targets>
13     <target>lightning__RecordPage</target>
14     <target>lightning__AppPage</target>
15   </targets>
16 </LightningComponentBundle>

```

```
lancerQuery.x | Version:CloudQuartz-metdata | PageLength:1 | usageFindx | usageFindx-metdata | x | HealthScoreController.apex | UsageMetricsController.apex | SupportController.apex
Apex Class: UsageMetricsController
Apex-meta.xml
with sharing class UsageMetricsController {
    @AuraEnabled(cacheable=true)
    public static List<Case> getSupportCases(Id accountId) {
        return [SELECT Id, CaseNumber, Subject, Status, Owner.Name
               FROM Case
               WHERE AccountId = :accountId AND Status != 'Closed'
               ORDER BY CreatedDate DESC];
    }
}
```

```
Lightning Web Component > usageTrend > usageTrend.html
```

```
1 <template>
2   <lightning-card title="Usage Trend">
3     <template if:true={chartData}>
4       <canvas class="chart"></canvas>
5     </template>
6     <template if:false={chartData}>
7       <p class="slds-p-around_medium">No usage data available.</p>
8     </template>
9   </lightning-card>
10 </template>
```

```
* onboardingTasks.js-meta.xml x JS onboardingTasks.js x supportCasesQueue.html x JS supportCasesQueue.js x * supportCase
```

Lightning Web Component > usageTrend > usageTrend.js-meta.xml

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <LightningComponentBundle xmlns="http://soap.force.com/2006/04/metadata">
3   <apiVersion>63.0</apiVersion>
4   <i18nExcluded>true</i18nExcluded>
5   <targets>
6     <target>lightning__RecordPage</target>
7   </targets>
8 </LightningComponentBundle>
```

Developer Edition

Arsh Ahuja

File Tools Themes

eCaseQueue.xsd supportCaseQueue.xsd supportCaseQueue.js-meta.xml usageTrend.html usageTrend.js * usageTrend.js-meta.xml HealthScoreController.apex UsageMetricController.apex

```
Apex Class > UsageMetricController.apex
1   @RestResource(method = 'GET', path = 'usageMetrics')
2   @HttpResource(method = 'GET', urlMapping = '/*')
3   @Generalizable(cacheable=true)
4   public static List<Usage_Metric__c> getUsageMetrics(Id accountId) {
5       return Database.query(
6           'SELECT Id, Metric_Date__c, Usage_Value__c
7           FROM Usage_Metric__c
8           WHERE Account__c = :accountId
9           ORDER BY Metric_Date__c ASC
10      );
11 }
```

```
Developer Edition

Apex Class | ChorboardingTasksController.apx
1 public with sharing class ChorboardingTasksController {
2     @AuraEnabled(cacheable=true)
3     public static List<Onboarding_Task__c> getboardingTasks(Id accountId) {
4         return [SELECT Id, Name, Status__c, Due_Date__c
5                 FROM Onboarding_Task__c
6                 WHERE Account__c = :accountId AND Status__c != 'Completed'
7                 ORDER BY Due_Date__c ASC];
8     }
9
10    @AuraEnabled
11    public static void completeTask(Id taskId) {
12        Onboarding_Task__c task = [SELECT Id, Status__c FROM Onboarding_Task__c WHERE Id = :taskId LIMIT 1];
13        task.Status__c = 'Completed';
14        update task;
15    }
16 }
```