

Salesforce Apex Hours



5 Things Developers Should Know About Lightning Web Components

Speakers

Christopher Ramm & Sebastiano Schwarz

Venue/Link

Bit.ly/ApexHours



#SalesforceApexHours



www.apexhours.com



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Our Speakers



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He/Him



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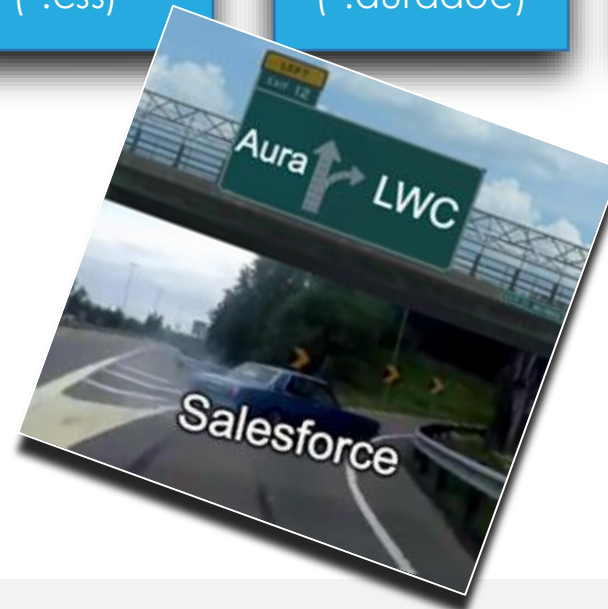
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DevOps Ninja
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SALESFORCE INTRODUCED LWCS IN 2019 TO LEVERAGE MODERN WEB STANDARDS AND IMPROVE PERFORMANCE AND SECURITY





LWCS ARE
COMPLICATED AS I
ALWAYS NEED **APEX** TO
CREATE A
COMPONENT.

LWCS WORK ALSO WITHOUT APEX WITH THE AID OF
STANDARD UI APIS



EXAMPLE OF UI RECORD API



✗ WITH APEX

```
JS accountDetails.js U X
force-app > main > default > lwc > accountDetails > JS accountDetails.js > ...
1  import getAccountData from '@salesforce/apex/AccountDetailsController.getAccountData';
2  import { LightningElement, api } from 'lwc';
3
4  export default class AccountDetails extends LightningElement {
5      @api recordId;
6      account;
7
8      connectedCallback() {
9          getAccountData({ recordId: this.recordId }).then((result) => {
10             this.account = result;
11          });
12      }
13  }
14
```

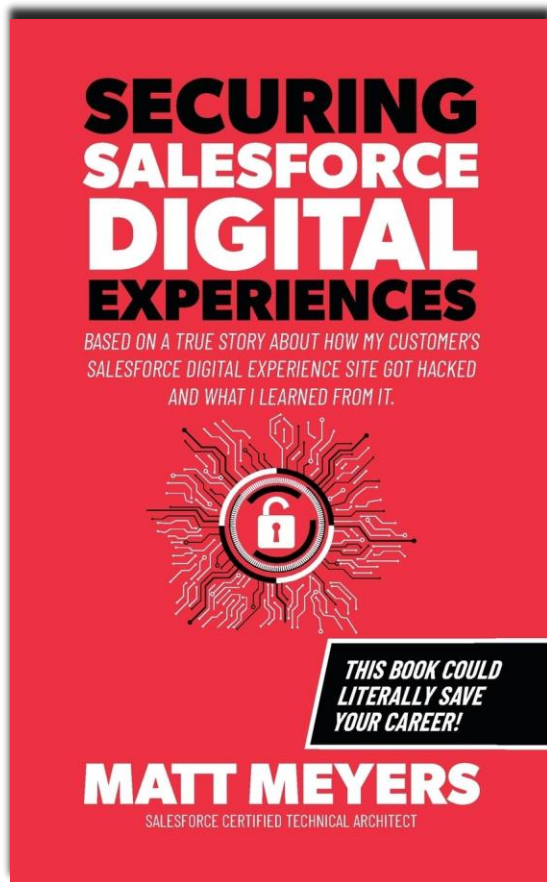
```
AccountDetailsController.cls U X
force-app > main > default > classes > AccountDetailsController.cls > ...
1  public with sharing class AccountDetailsController {
2      @AuraEnabled
3      public static Account getAccountData(Id recordId) {
4          return [SELECT Id, Name FROM Account WHERE Id = :recordId];
5      }
6  }
7
```

✓ WITHOUT APEX

```
JS accountDetails.js U X
force-app > main > default > lwc > accountDetails > JS accountDetails.js > ...
1  import ACCOUNT_NAME_FIELD from '@salesforce/schema/Account.Name';
2  import { getRecord } from 'lightning/uiRecordApi';
3  import { LightningElement, api, wire } from 'lwc';
4
5  export default class AccountDetails extends LightningElement {
6      @api recordId;
7      @wire(getRecord, { recordId: '$recordId', fields: [ACCOUNT_NAME_FIELD] })
8      account;
9  }
10
```



EXCURSE: IF APEX IS NEEDED – SECURITY IS CRUCIAL TO ENSURE THE INTEGRITY AND RESILIENCE OF APPLICATIONS DEVELOPED



WITH APEX

@AuraEnabled Annotation: When calling Apex methods from LWC, ensure they are properly secured with the **@AuraEnabled** annotation and enforce sharing rules and object-level security

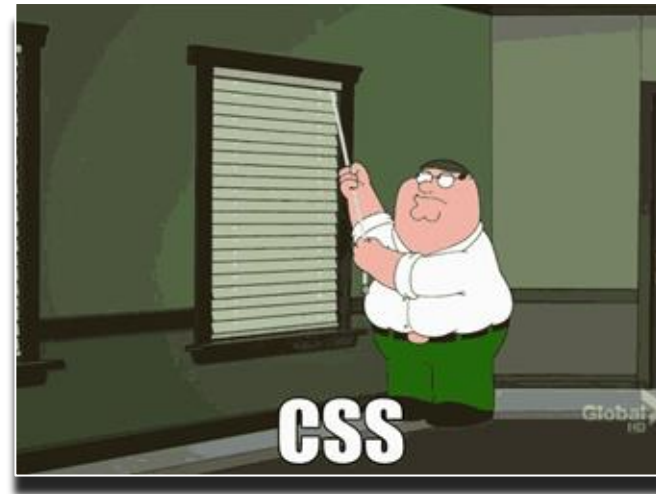
WITHOUT APEX

- Use **Lightning Data Service** to load, create, edit, or delete a record in your component without requiring Apex code
- At the simplest level, you can think of **Lightning Data Service** as the Lightning components version of the Visualforce standard controller

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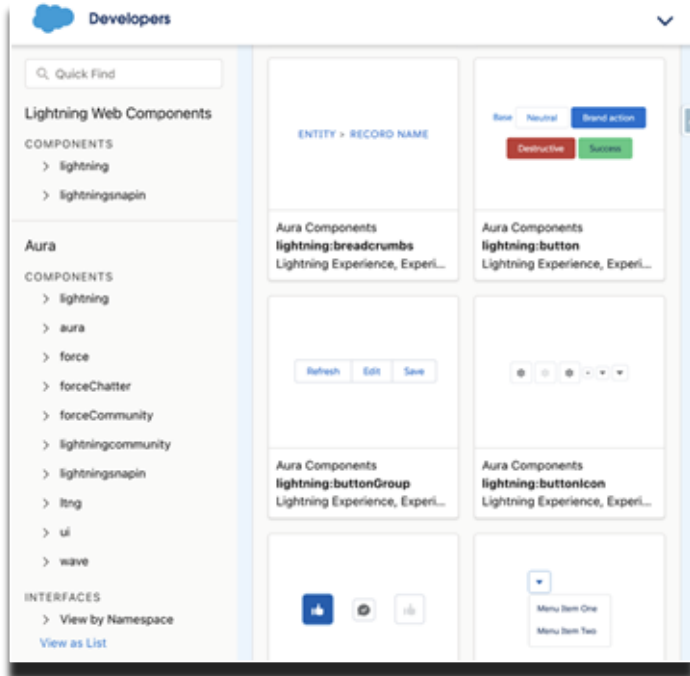
STYLING

STYLING OF UI IS ALWAYS
COMPLICATED.

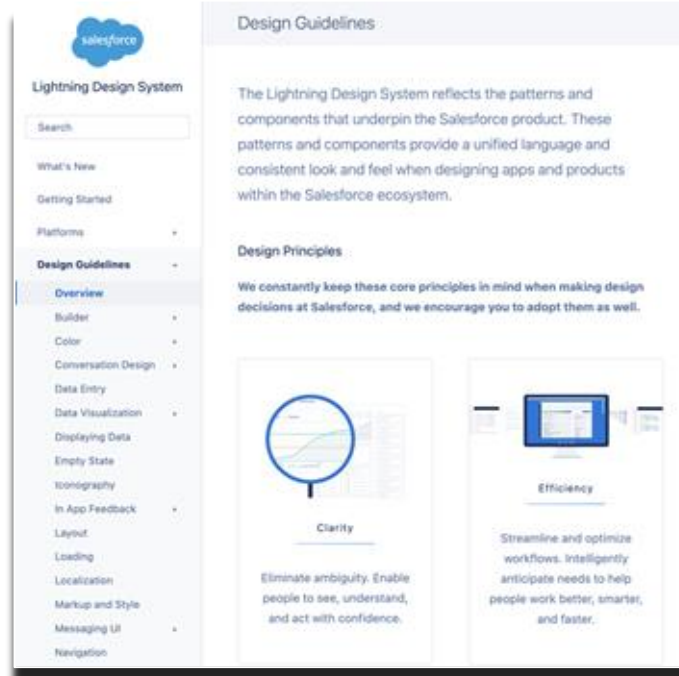


STYLING OF LWCS SHOULD BE DESIGNED BASED ON A THREE-STEP APPROACH – LEVERAGING SF FRAMEWORKS

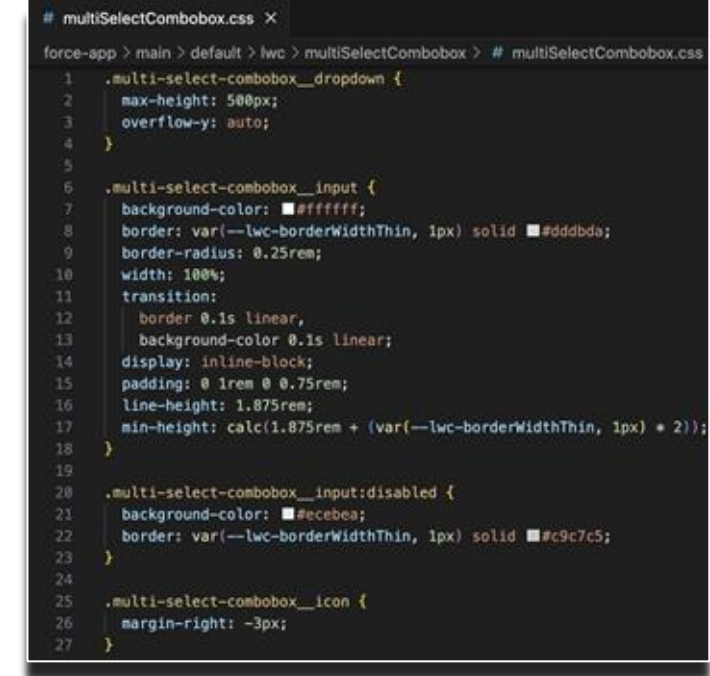
LWC COMPONENT LIBRARY



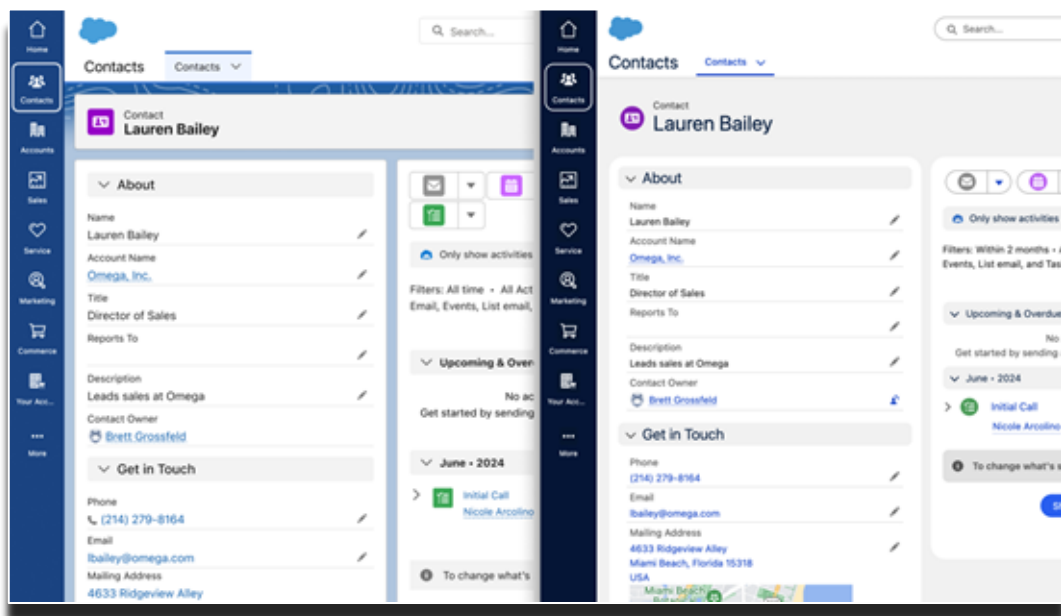
SLDS BLUEPRINTS



CUSTOM CSS



EXCURSE: WHAT DEVELOPERS NEED TO KNOW ABOUT THE LIGHTNING UI ENHANCEMENTS IN THE SUMMER '24 RELEASE



INTERNAL -lwc CSS custom properties

```
1  .myComponent {  
2    background-color: var(--lwc-cardColorBackground);  
3  }
```

Refactor to: -slds styling hooks

```
1  .myComponent {  
2    background-color: var(--slds-g-color-surface-container-1);  
3  }
```



- Salesforce updated the **CSS in SLDS** to enable tiered styling changes **using styling hooks**
- **Styling hooks** for colors, typos, spacing, borders, ... **have new values**

3

UI STANDARDS

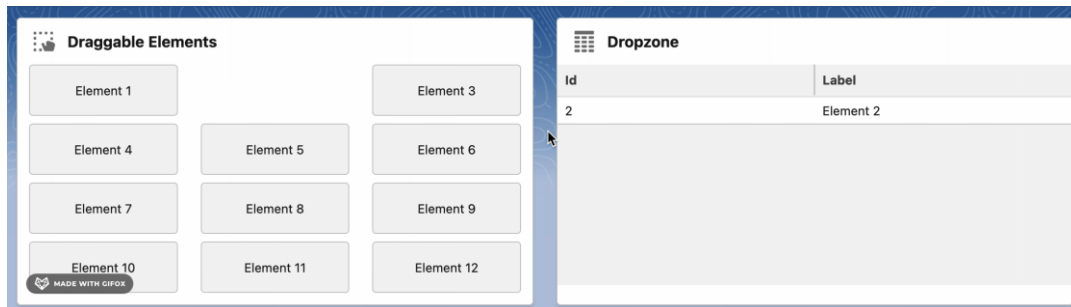
WITHIN THE LWC
DOCUMENTATION, I
DIDN'T FIND A SOLUTION
FOR MY PROBLEM

SALESFORCE IS NOT THE END OF THE WORLD – THERE ARE EXISTING UI STANDARDS OUTSIDE OF SALESFORCE



EXAMPLE FOR LEVERAGING OF WEB UI'S TO CREATE A VALUE STREAM WITHIN SALESFORCE

1 HTML DRAG & DROP API



2 WebGL 3D ANIMATIONS

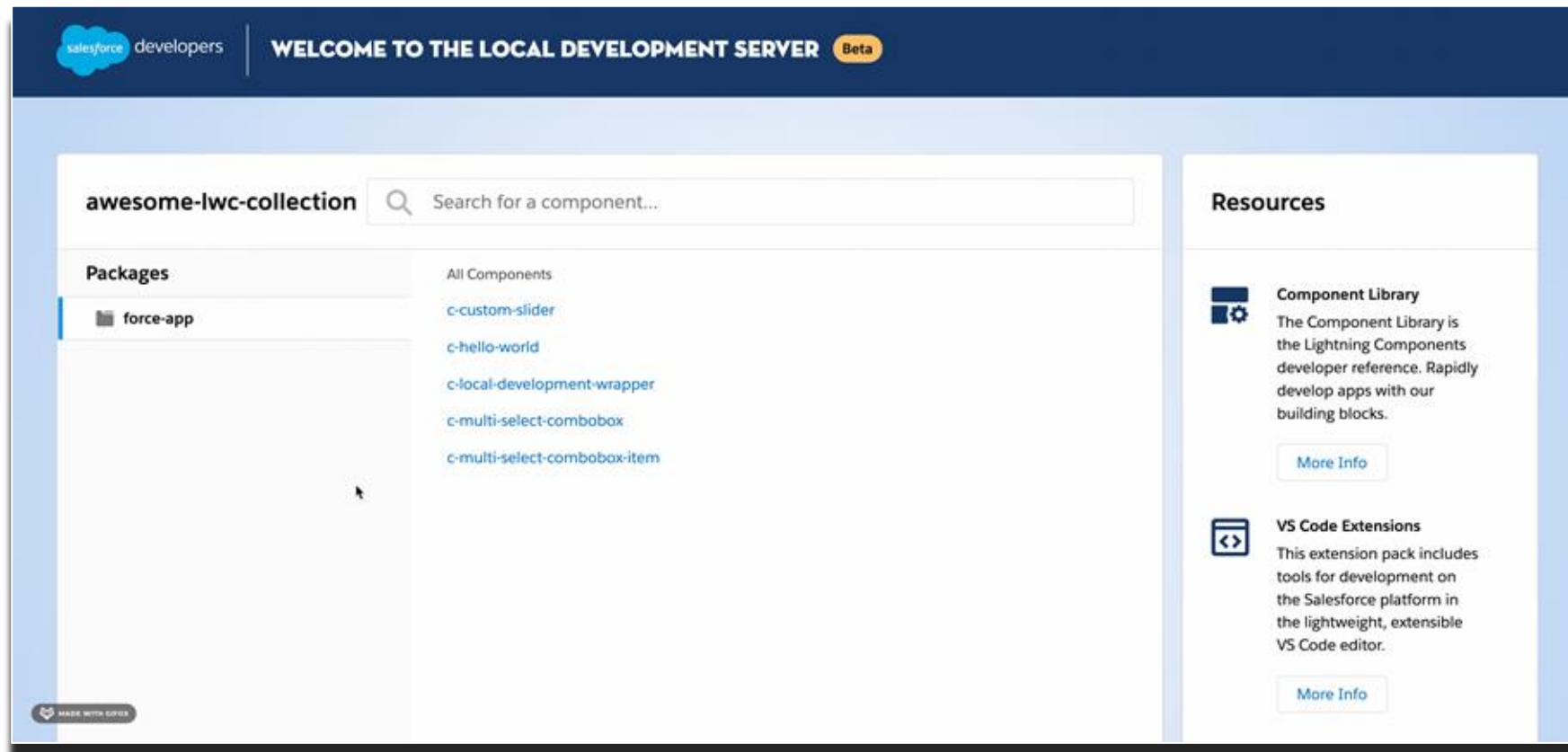


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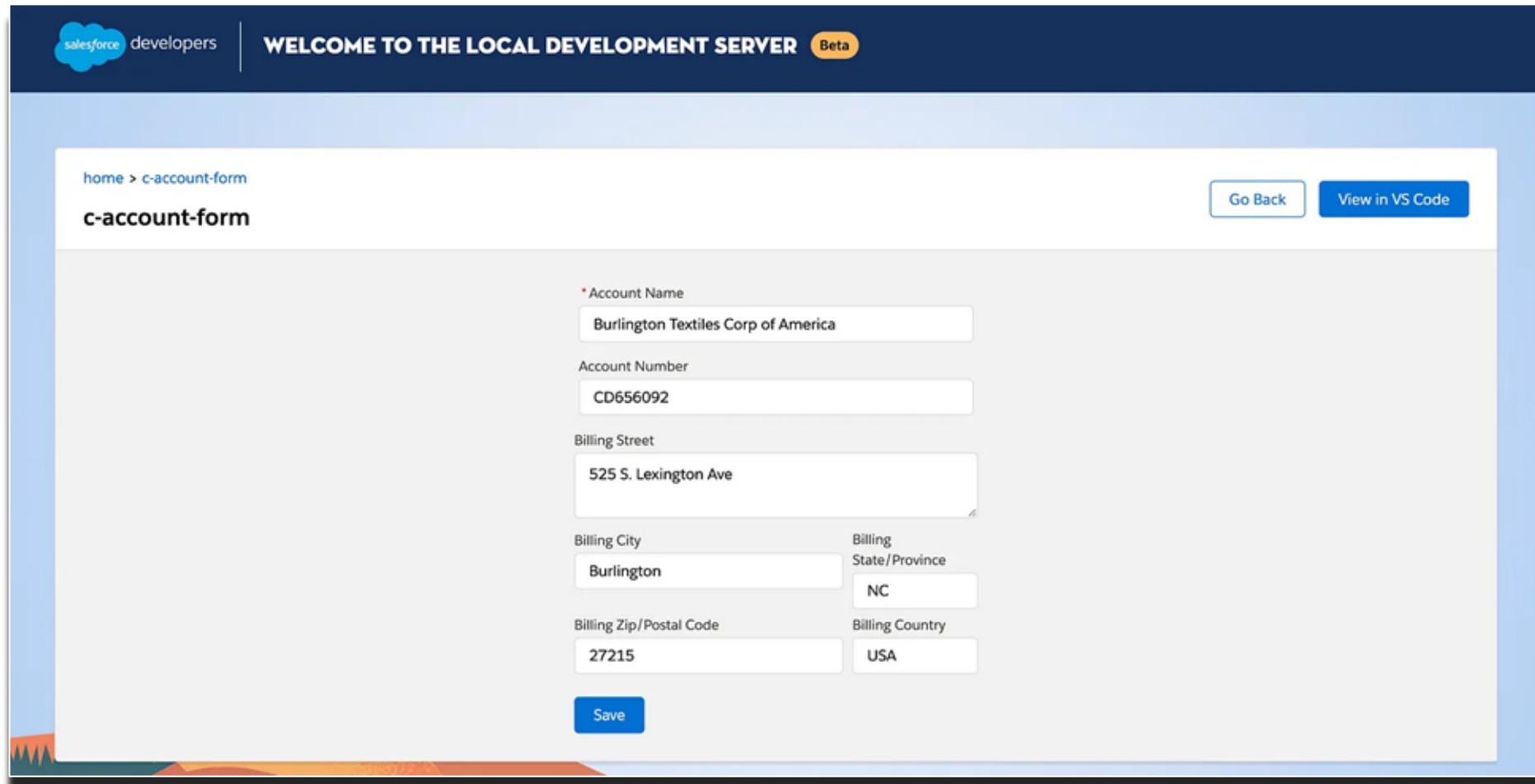
LOCAL
DEVELOPMENT

IT TAKES SOOO MUCH
TIME TO PUSH CODE
ON A SALESFORCE
INSTANCE.

DEVELOPING ON A LOCAL DEVELOPMENT SERVER CAN PROVIDE REAL-TIME FEEDBACK WITHOUT PUSHING CODE TO AN ORG



EXAMPLE FOR LWC WITH AN ACCOUNT RECORD FORM

A screenshot of the Salesforce Local Development Server interface. The header bar is dark blue with the Salesforce Developers logo and the text "WELCOME TO THE LOCAL DEVELOPMENT SERVER" followed by a "Beta" badge. The main content area has a light blue background. At the top left of the content area, there is a breadcrumb "home > c-account-form" and the title "c-account-form". At the top right, there are two buttons: "Go Back" and "View in VS Code". The form itself is centered and contains several input fields. The "Account Name" field is required (indicated by an asterisk) and contains "Burlington Textiles Corp of America". The "Account Number" field contains "CD656092". The "Billing Street" field contains "525 S. Lexington Ave". The "Billing City" field contains "Burlington". The "Billing State/Province" field contains "NC". The "Billing Zip/Postal Code" field contains "27215". The "Billing Country" field contains "USA". A "Save" button is located at the bottom left of the form.

home > c-account-form

c-account-form

Go Back View in VS Code

* Account Name
Burlington Textiles Corp of America

Account Number
CD656092

Billing Street
525 S. Lexington Ave

Billing City
Burlington

Billing State/Province
NC

Billing Zip/Postal Code
27215

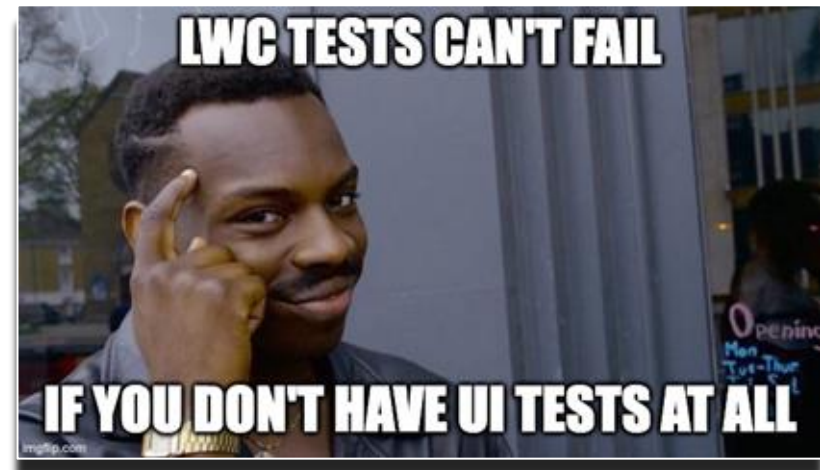
Billing Country
USA

Save

Demo

5 TESTING

WHY SHOULD I SPEND
TIME ON WRITING TESTS
FOR THE UI LAYER?



FOCUS ON JAVASCRIPT BASICS – SALESFORCE OFFERS A GREAT CERTIFICATION



Q&A

**THANK
YOU!**



HAPPY CODING

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