

Contact List Lightning Web Component Documentation

Project Overview

This project is a Lightning Web Component (LWC) named `ContactList`, designed for Salesforce. It retrieves and displays a list of contacts in a paginated, searchable, and sortable table. The project also includes a corresponding Apex controller and a set of test classes to ensure the functionality and reliability of the component.

Key Features

- **Contact Retrieval:** Fetches a list of contacts from Salesforce using an Apex controller.
- **Search Functionality:** Allows users to search for contacts by name.
- **Sorting:** Enables sorting of contacts by Name, Email, or Phone in both ascending and descending order.
- **Pagination:** Supports navigation through multiple pages of contacts with a configurable page size.
- **Error Handling:** Provides clear error messages in case of issues during data retrieval.

Project Structure

Lightning Web Component (LWC)

`contactList.html`

This file defines the component's HTML structure and layout. Key elements include:

- A search input field for filtering contacts by name.
- A table displaying contacts with sortable columns for Name, Email, and Phone.
- Pagination controls for navigating between pages.

`contactList.js`

This JavaScript file manages the component's logic, including data retrieval, filtering, sorting, and pagination. Key methods include:

- `connectedCallback()`: Initializes the component by loading contacts.
- `loadContacts()`: Fetches contacts from the Apex controller.
- `handleSearchChange()`: Filters the contact list based on the user's search input.
- `sortContacts()`: Sorts the contacts based on the selected field and direction.
- `previousPage()` and `nextPage()`: Navigate between pages.

`contactList.css`

The CSS file ensures the component is visually appealing and follows Salesforce's Lightning Design System (SLDS). Key styles include:

- Hover effects for rows.
- Styles for pagination controls.
- Column headers with sorting indicators.

Apex Controller

ContactController.cls

The Apex controller is responsible for fetching contact records from Salesforce. It includes methods to handle errors and cache results.

Apex Test Class

ContactControllerTest.cls

The test class ensures that the Apex controller functions as expected, covering various scenarios including success, no data, and exception handling.