

Templating in Alpine.js

Templating in Alpine.js refers to dynamically rendering HTML content using Alpine's directives. It allows you to conditionally display elements, loop through data, and update the UI efficiently.

Key Features of Templating in Alpine.js

- ✓ Conditional Rendering (x-show, x-if)
- ✓ Looping (x-for)
- ✓ Dynamic Content (x-text, x-html)
- ✓ Two-way Data Binding (x-model)
- ✓ Event Handling (@click, @change)

1. Conditional Rendering

✓ x-show (Toggle Visibility)

```
<div x-data="{ isVisible: false }">
  <button @click="isVisible = !isVisible">Toggle</button>
  <p x-show="isVisible">Hello, Alpine.js!</p>
</div>
```

✓ x-if (Remove from DOM)

```
<div x-data="{ show: false }">
  <button @click="show = !show">Toggle</button>
  <template x-if="show">
    <p>Hello, I am conditionally rendered!</p>
  </template>
</div>
```

2. Looping with x-for

```
<div x-data="{ items: ['Apple', 'Banana', 'Orange'] }">
  <ul>
    <template x-for="item in items" :key="item">
      <li x-text="item"></li>
    </template>
  </ul>
</div>
```

3. Dynamic Content

✓ x-text (Safe Text Output)

```
<div x-data="{ message: 'Hello, Alpine!' }">
  <p x-text="message"></p>
</div>
```

✓ x-html (Render HTML)

```
<div x-data="{ content: '<strong>Hello, Alpine.js!</strong>' }">
  <p x-html="content"></p>
</div>
```

4. Two-Way Data Binding with x-model

```
<div x-data="{ name: '' }">
  <input type="text" x-model="name" placeholder="Enter your name">
  <p>Hello, <span x-text="name"></span>!</p>
</div>
```

5. Event Handling

✓ Button Click

```
<div x-data="{ count: 0 }">
  <button @click="count++">Increase</button>
  <p>Count: <span x-text="count"></span></p>
</div>
```

✓ Input Change

```
<div x-data="{ text: '' }">
  <input type="text" x-model="text">
  <button @click="text = ''">Clear</button>
</div>
```

Conclusion

- ✓ x-show hides elements but keeps them in the DOM.
- ✓ x-if completely removes elements from the DOM.
- ✓ x-for is used for looping through arrays.
- ✓ x-text & x-html control dynamic content.
- ✓ x-model binds input fields to Alpine state.
- ✓ Event Handling makes components interactive.