Template literals

Template literals

Multiline strings | Interpolation | Template tags

Template tags

Template tags

```
const interpolated = interpolate`I paid ${10}€`

function interpolate(literals, ...expressions) {
  let string = ``
  for (const [i, val] of expressions.entries()) {
    string += literals[i] + val
  }
  string += literals[literals.length - 1]
  return string
}
```

Custom Elements

Custom elements

Extender HTML(HTMLElement) con tus propios tags

```
<my-component datos="datos"></my-component>

class MyComponent extends HTMLElement {
  connectedCallback() {
    this.innerHTML = `<h1>Hello world</h1>`;
  }
}

customElements.define('my-component', MyComponent);
```

¿lit-element?

HTML Templates

HTML Templates

```
<template id="template">
  <script>
    const button = document.getElementById('click-me');
    button.addEventListener('click', event => alert(event
  </script>
  <style>
    #click-me {
      background: tomato;
      .....
      padding: .5rem 1rem;
    }
  </style>
  <button id="click-me">Log click event</button>
</template>
```

¿lit-html?

Shadow dom

Shadow dom

- Versión encapsulada del DOM.
- Simplifica CSS: el DOM dentro del ámbito significa que puedes usar simples selectores de CSS, nombres de id/clase más genéricos, y no preocuparte por conflictos de nombres.
- https://developers.google.com/web/fundamentals/web-components/shadowdom
- shadowRoot, attachShadow({ mode: 'open' })

¿lit-element?

Light Dom

Light Dom

Para diferenciar del "shadow DOM", llamamos "light DOM" al DOM normal (en el árbol DOM principal)

```
<my-element>
  <p>I won't render</p>
</my-element>
```

Slots

Slots

La manera de componer unos web components con otros

Polyfill

Polyfill

A polyfill, or polyfiller, is a piece of code (or plugin) that provides the technology that you, the developer, expect the browser to provide natively. Flattening the API landscape if you will.Oct 8, 2010

Lit-element

- El coñazo de hacerlo from the scratch
- Ejemplo compmleto
- No hay bindings.... @click, etc..
- Sigue las best practices

Lit-html

Lit-html

- https://lit-html.polymer-project.org/guide/concepts

Extra: el problema con las CSS

- CSS custom properties
- Constructible stylesheets
- CSS Modules
- host element
- host
- With the exception of **inherited CSS properties**, shadow roots are also isolated from styles defined outside the shadow root, whether in the main page or an outer shadow root.
- https://lit-element.polymer-project.org/guide/styles#CSS-Inheritance-and-shadow-DOM
- Constructable Stylesheets
- CSS Custom Properties

Extra: Life-cycle callbacks

- connectedCallback
- lit-element lifecycle versus estandar web components
- https://lit-element.polymer-project.org/guide/lifecycle#firstupdated
- https://developer.mozilla.org/en-US/docs/Web/Web_Components/Using_custom_elements#Using_the_lifecycle_callbacks