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### Home

Eurico Inocencio edited this page 32 seconds ago · 6 revisions

# **Preparation**

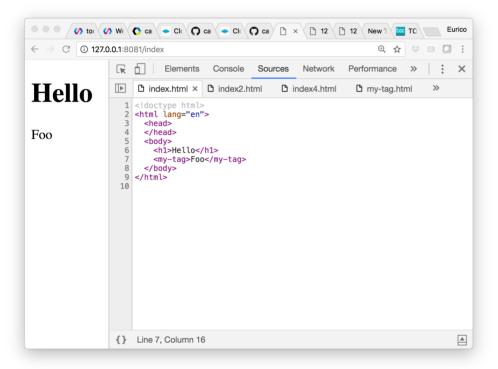
cd /Users/emi/Dropbox/casper2020/NTAP
polymer serve

Open localhost:8081/ index1 to index4 and my-tag should be opened in developer tab,

Open https://www.webcomponents.org/element/casper2020/casper-context-menu on another tab

## index.html

Just point out that my-tag is silently accepted by the browser,

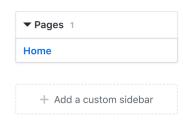


esc to open console

Now show the visibility of element in DOM and shadow-root

```
document.getElementsByTagName('my-tag')[0] // one element
document.getElementsByTagName('h2') // no element, shadow dom encapsulation
elm.shadowRoot.querySelector('h2') // and we grab the h2 in the shadow root
elm.shadowRoot.innerHTML = "<style>:host { color: red; }</style><h2>world of shadows
```

Styles are trapped inside shadow root



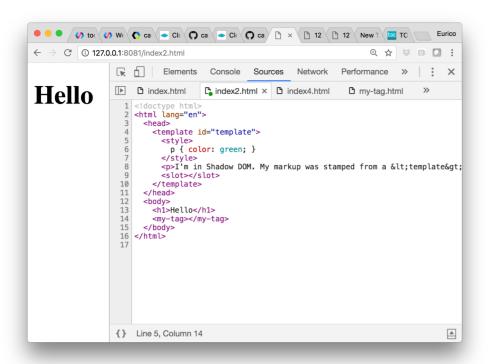
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## index2.html now the template



Point out that template is an inert content, it's not shown

## index3.html now the object

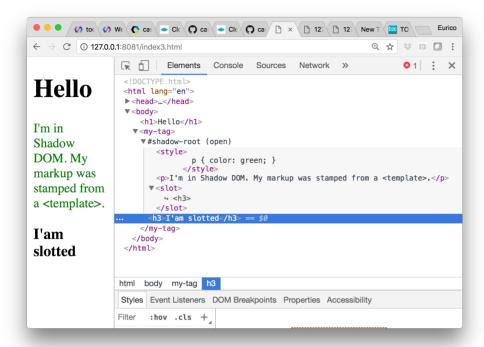
```
← → ♂ ① 127.0.0.1:8081/index3.html
                Elements Console Sources
Hello
               index.html
                                 index2.html
                                            the index3.html × the index4.html
                   <html lang="en">
                       <template id="template">
                        I'm in
Shadow
DOM. My
                         <slot></slot>
markup was
                11
12
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                       <script>
stamped
                         class MyTag extends HTMLElement
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from a
                          static get is () { return 'my-tag'; }
<template>.
                          constructor() {
                            super();
this.attachShadow({mode: 'open'});
let tmpl = document.getElementById('template');
                            this.shadowRoot.appendChild(tmpl.content.cloneNode(true));
                         customElements.define(MyTag.is, MyTag);
                       </script>
                     </head>
                {}
                   Line 19, Column 11
                                                                                \blacktriangle
```

Show the element registration

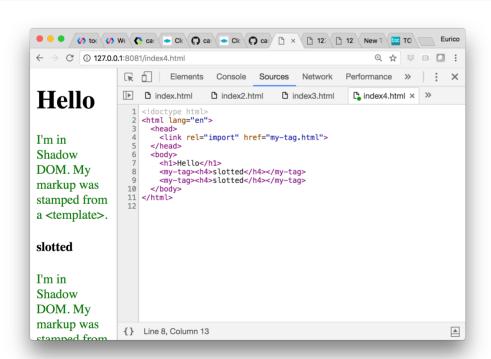
customElements.define(MyTag.is, MyTag); // when a my-tag is created the constructor

Stop in constructor, show the templating again, print tmpl.content Show the use of the slot edit my tag and insert an h3 inside my tag <h3>I'am slotted</h3>

Now it's a good time to show that h3 in light dom is linked from the shadow-dom, switch to the Elements tab



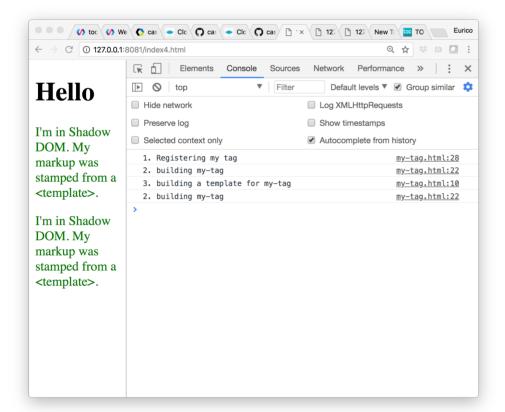
# index4.html moving our component to another file



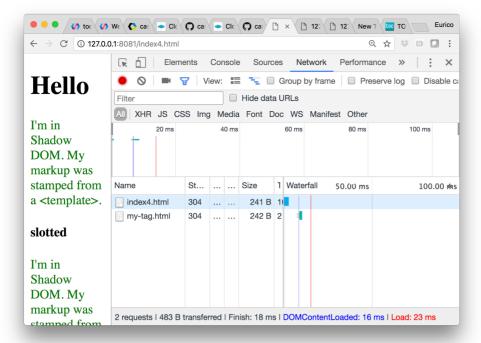
This index creates two tags, important point is the appearance of the import <link rel="import" href="my-tag.html">

```
● ● V toc V We C cas • Clc C cas • Clc C cas 1 127 New T 10 TO Eurico
  → C ① 127.0.0.1:8081/my-tag.html
                                                                                   ⊕ ☆ ፡ □ 🖸 :
                      Elements Console Sources Network Performance >> X
                      ▶ ☐ index2.html
                                           index3.html
                                                             ☐ index4.html
                                                                               my-tag.html × >>
                           <dom-module id="my-tag">
                                class MyTag extends HTMLElement
                                static get is () { return 'my-tag'; }
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                                 constructor() {
                                   super();
                                   super();
    console.log('2. building my-tag');
this.attachShadow({mode: 'open'});
this.shadowRoot.appendChild(MyTag.template.content.cloneNode(true
                               console.log('1. Registering my tag');
customElements.define(MyTag.is, MyTag);
                           </dom-module>
                       {} Line 21, Column 1
                                                                                                      ▲
```

Explain the get template method, it will create the static MyTag.\_template once as needed. Element registration will occur once as before As we have two tags the constructor will be called twice show the console trace



Now show the network trace



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