

<Web Components />

<!-- the future of Web development --->

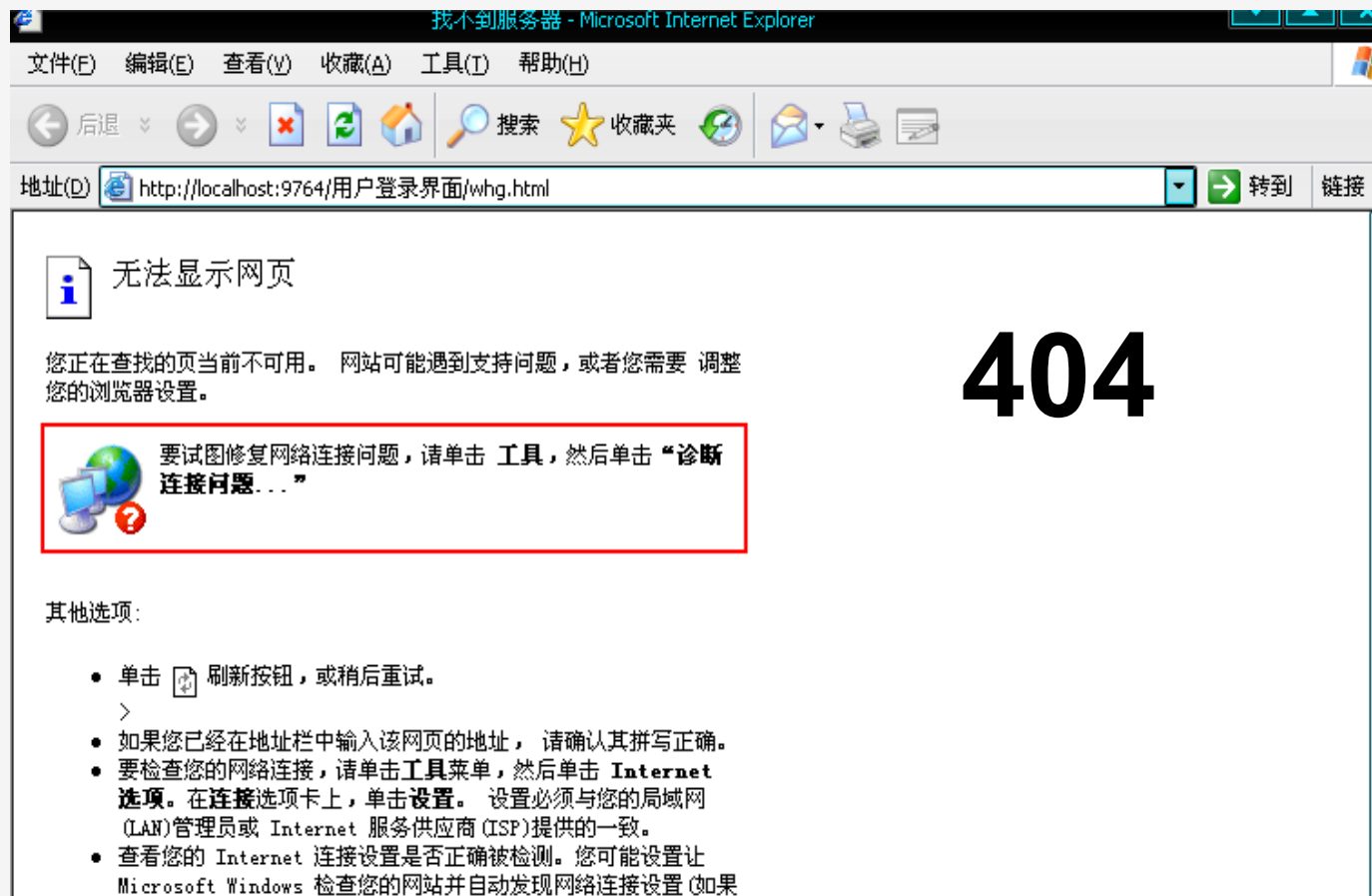
陈本峰 2014 - 6



信仰



作品





W3C[®]





一行JS代码将网页移动化

The Bootstrap logo consists of the word "Bootstrap" in a white, sans-serif font, centered on a solid purple rectangular background.

Bootstrap

The jQuery logo features an orange square icon with a white 'j' shape inside, followed by the word "jQuery" in a white, italicized sans-serif font, and the words "user interface" in a smaller, orange, lowercase sans-serif font below it.

jQuery
user interface

A teal banner for Semantic UI with a pattern of small white icons. It contains the title "Semantic UI", a subtitle "UI is the vocabulary of the web.", a descriptive sentence, and two buttons: "VIEW UI" and "DOWNLOAD".

Semantic UI
UI is the vocabulary of the web.
Semantic empowers designers and developers by
creating a language for sharing UI.

VIEW UI

DOWNLOAD

The Foundation ZURB logo features the word "Foundation" in a large, blue, sans-serif font, with the word "ZURB" in a smaller, bold, black, sans-serif font positioned below it.

Foundation
ZURB



UIKit

```
<div id="carousel-example-generic" class="carousel slide" data-ride="carousel">
  <!-- Indicators -->
  <ol class="carousel-indicators">
    <li data-target="#carousel-example-generic" data-slide-to="0" class="active"></li>
    <li data-target="#carousel-example-generic" data-slide-to="1"></li>
    <li data-target="#carousel-example-generic" data-slide-to="2"></li>
  </ol>

  <!-- Wrapper for slides -->
  <div class="carousel-inner">
    <div class="item active">
      
      <div class="carousel-caption">
        ...
      </div>
    </div>
    ...
  </div>

  <!-- Controls -->
  <a class="left carousel-control" href="#carousel-example-generic" data-slide="prev">
    <span class="glyphicon glyphicon-chevron-left"></span>
  </a>
  <a class="right carousel-control" href="#carousel-example-generic" data-slide="next">
    <span class="glyphicon glyphicon-chevron-right"></span>
  </a>
</div>
```

Bootstrap 轮播图组件的 引用方式

<my-slider>

</my-slider>

```
<div id="carousel-example-generic" class="carousel slide" data-ride="carousel">
  <!-- Indicators -->
  <ol class="carousel-indicators">
    <li data-target="#carousel-example-generic" data-slide-to="0" class="active"></li>
    <li data-target="#carousel-example-generic" data-slide-to="1"></li>
    <li data-target="#carousel-example-generic" data-slide-to="2"></li>
  </ol>

  <!-- Wrapper for slides -->
  <div class="carousel-inner">
    <div class="item active">
      <div class="item active">
        
        <div class="carousel-caption">
          ...
        </div>
      </div>
    </div>
    ...
  </div>

  <!-- Controls -->
  <a class="left carousel-control" href="#carousel-example-generic" data-slide="prev">
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  </a>
  <a class="right carousel-control" href="#carousel-example-generic" data-slide="next">
    <span class="glyphicon glyphicon-chevron-right"></span>
  </a>
</div>
```



- Template
- Custom Element
- Shadow DOM
- HTML Imports

目前的做法

```
<script id="indexTemplate" type="text/template">  
  <h1>Inside a template </h1>  
    
</script>
```

使用<template>元素

```
<template id="indexTemplate">  
  <h1>Inside a template</h1>  
    
</template>
```

```
var template = document.getElementById('indexTemplate');  
holder.appendChild(template.content.cloneNode(true));
```

<template>元素特点

- 内容被解析，但是不显示
- 图片资源不会被下载
- 脚本资源不会被下载或者执行

... 直到它被使用

```
<my-slider>
```

```
</my-slider>
```

```
<template>
```

```
  <!-- 关于my slider的所有代码 -->
```

```
</template>
```

```
<script>
```

```
var tpl = document.querySelector('template');
```

```
var ImgSliderProto = Object.create(HTMLElement.prototype);
```

```
ImgSliderProto.createdCallback = function() {
```

```
  var root = this.createShadowRoot();
```

```
  root.appendChild(document.importNode(tpl.content, true));
```

```
};
```

```
var ImgSlider = document.registerElement('my-slider', { prototype: ImgSliderProto});
```

```
</script>
```



Shadow DOM

The screenshot shows a web browser window titled "shadow-dom.html". The main content is a video player. A yellow tooltip points to a small square element on the video, labeled "input 30px x 30px". The video player's progress bar shows 03:27. Below the video is the Chrome DevTools interface. The "Elements" panel shows the following DOM tree structure:

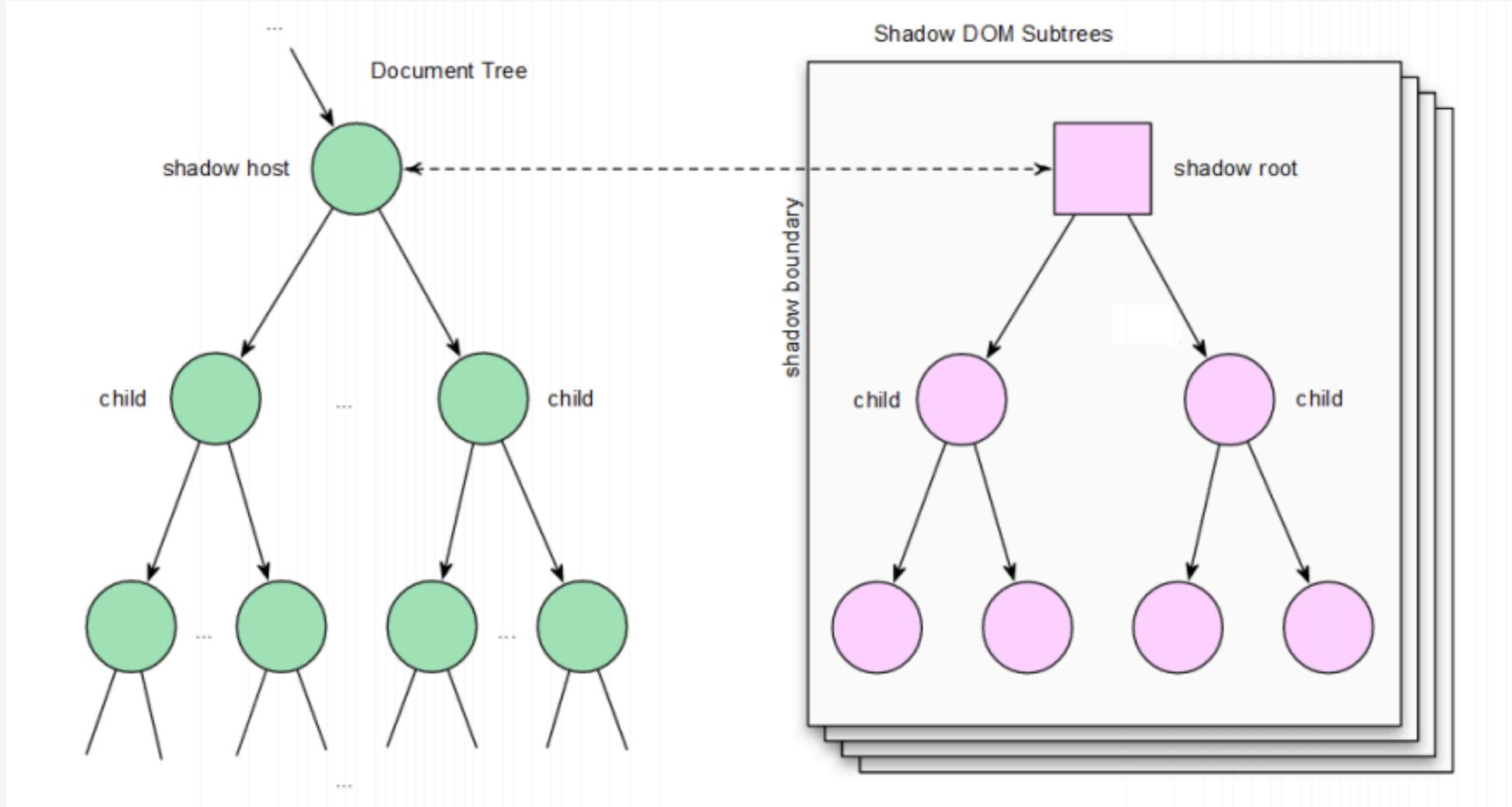
```
<head>
</head>
<body>
  <video width="640" height="360" controls>
    #document-fragment
      <div>
        <div style="display: none;"></div>
        <div>
          <div>
            <input type="button">
              <input type="range" precision="float" max="1975.27">
                #document-fragment
                  <div>
                    <div pseudo="-webkit-slider-runnable-track">
```

The "Styles" panel on the right shows the following styles for the selected element:

```
Computed Style Show inherited
Styles
element.style {
}
video[Attributes Style] {
  width: 640px;
  height: 360px;
}
Metrics
Properties
DOM Breakpoints
Event Listeners
```

The breadcrumb at the bottom of the Elements panel is: html > body > video > #document-fragment > div > div > div > input.

Shadow DOM



Shadow DOM 特点

- 挂载在某一个元素下面，但是不在DOM里面显示
- 完全独立当前文档，不受当前文档样式的影响

```
<link rel="import" href="my-slider.html">
```

```
<template id="myslider">
  <!-- slider 的完全代码 -->
</template>
<script>
  var sliderProto = Object.create(HTMLElement.prototype);
  sliderProto.createdCallback = function() {
    var template = document.querySelector('#myslider');
    var shadowRoot = this.createShadowRoot();
    var clone = template.content.cloneNode(true);
    shadowRoot.appendChild(clone);
  };
  document.register('myslider', {prototype: sliderProto});
</script>
```

```
<link rel="import" href="myslider.html">
<myslider></myslider>
```

Templates



Custom Elements



Shadow DOM

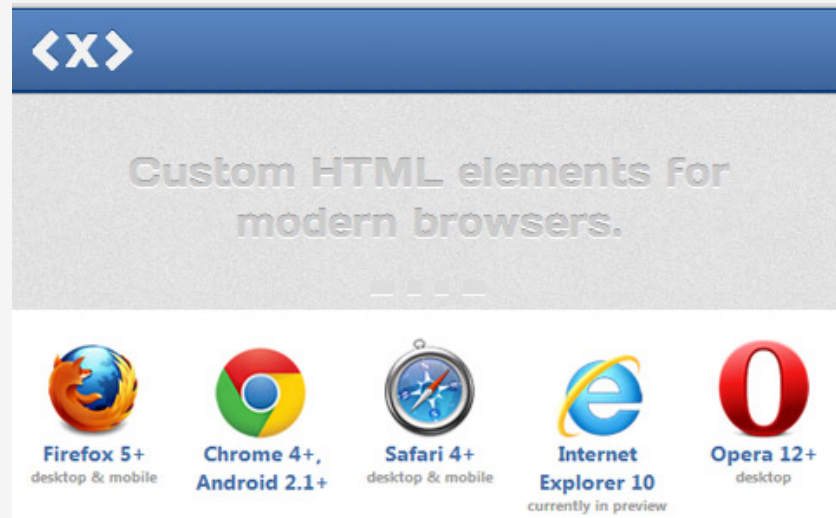


HTML Imports





<http://www.polymer-project.org/>



<http://x-tags.org/>



Amaze UI

中国首个开源 HTML5 跨屏前端框架

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