

Templates

Cory House
bitnative.com
Twitter: @housecor



pluralsight 
hardcore developer training

Agenda

Existing
template
strategies

Defining
Templates

Activating
Templates

Injecting
Data

Nested
Templates

You Already Use Templates Today



HAML



Razor



Django



Jade

We Need Native HTML Templates



`<script>`



`<link>`



``

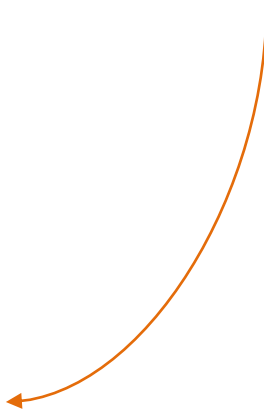


`?`

Where Do We Put This?

Simple template of a table row:

```
<tr>  
  <td class="first-name"></td>  
  <td class="last-name"></td>  
  <td class="address"></td>  
  <td class="phone"></td>  
</tr>
```



Today's Common Approaches to Templates

1. HTML in Script Tags

```
<script type="text/custom-name-here">
```

- + Nothing inside runs or renders

- Not DOM Elements -> XSS risk from using .innerHTML

2. Hidden DOM elements

```
<div style="display: none;" id="my-template"></div>
```

- + Easy to clone – just DOM elements

- Everything inside still runs. May throw 404's, <script> runs, etc.

The Solution?  `<template>`

Template Characteristics

Inert

- **Does nothing until cloned**

Template Activation

- 1 `var template = document.querySelector('#mytemplate');`
- 2 `var clone = document.importNode(template.content, true);`
- 3 `document.body.appendChild(clone);`

Defining and Cloning Templates

Demonstration

Inject Data Into Templates

Inject data before cloning by manipulating the template clone.

Steps:

//1 Get a reference to the template

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

//2 Use document.importNode to clone the template's content

```
var clone = document.importNode(template.content, true);
```

//3 Change the target element within the template as desired

```
clone.querySelector('.verb').textContent = 'awesome';
```

//4 Append element to page

```
document.body.appendChild(clone);
```

Injecting Data Into Templates

Demonstration

Nested Templates

Must manually clone both the parent and child templates

```
<template id="header">  
  <div>Header</div>  
  <template id="body">  
    <div>Body</div>  
  </template>  
</template>
```

Cloning Nested Templates

Demonstration

Summary

We've been getting by with hacks for HTML templates

`<template>` gives us a standard

All content inside does nothing until activated via cloning

No native data interpolation/logic, but hey, it's just DOM! 😊