

Pittsburgh Tech Fest

Intro to Polymer

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HTML 5 and Web Components

Part of the HTML5 Standard

- Custom Elements
- HTML Templates
- Shadow Dom
- HTML Imports

Shadow Dom?

Any element can have an associated ordered list of zero or more node trees. – *Shadow DOM Specification*

- Encapsulation of Node Trees
- Allows for the addition of Scope

DOM

Shadow DOM

Shadow Dom vs Virtual Dom

Don't confuse the two, they are entirely different concepts...

Virtual DOM is a memory copy of the DOM used to make DOM changes and parsing more performant (utilizing diffs)

Shadow DOM is a collection of encapsulated node trees combined to create a composed single DOM and is more concerned with scoping.

React.JS uses a virtual DOM, but does not utilize a Shadow DOM.

Polymer.js

Polymer is a framework based on the Web Component Specification

Targeted toward Evergreen Browsers only

(polyfills aim to support IE 10+)

Polymer Structure

Add reference to webcomponents.js

Import Dependencies

Register custom Component (is)

Example..

Can I touch it?

DOM Composition...

Data Binding...

Polymer

Provided Elements

Elements Page

Quite a full selection with great documentation

Pros

Reusability second to none

It's the future direction of the web

Solid collection of Controls

Material Design

Scope

Solid Unit Testing tools

Cons

Browser Support spotty even with the polyfills
Vulcanize really necessary

Q&A

Please feel free to contact me if you have any additional questions.