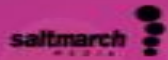


Web Components: The Future Is Not Far Away



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GREAT INDIAN
DEVELOPER
SUMMIT

A circular icon with a grid of dots, resembling a globe or a network, positioned between the words "DEVELOPER" and "SUMMIT".

Why WebComponents?

- Is there a “real” problem we are trying to solve
- Or is it just another “cool” thing to know
 - Semantic page design
 - Encapsulation
 - Extending functionality
 - User experience vs developer nightmare

BASICS



Custom Elements

Template

HTML Import

Shadow DOM

DEEP DIVE



Hello World!

Styling of Shadow DOM

Light DOM

Themes

Extends

IS IT READY?

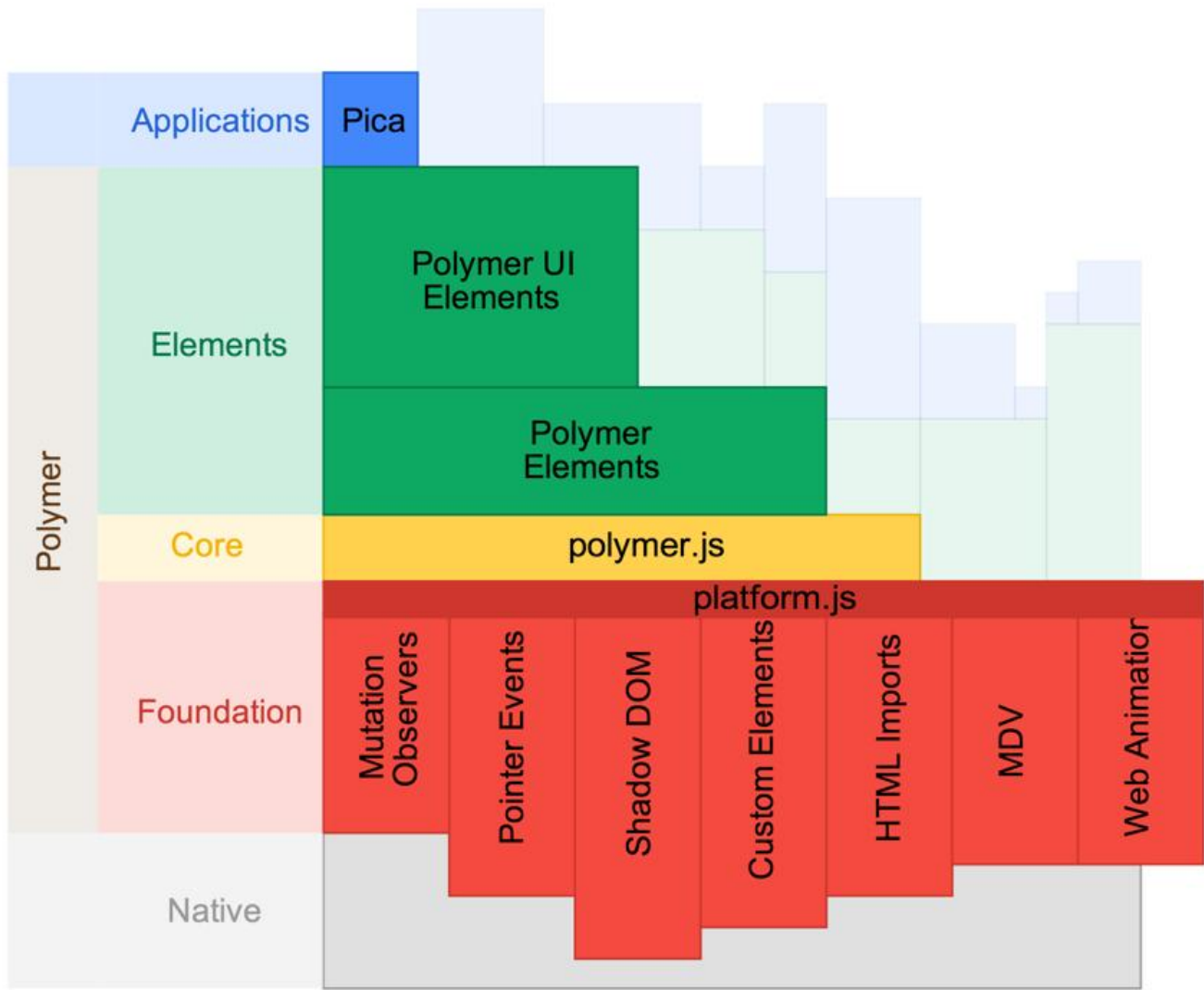


Cross browser compatibility

Are We Componentized Yet?

	Specced	Implementation				
		Polyfill	Chrome / Opera	Firefox	Safari	IE
Templates	Green	Green	Stable	Stable	8	Vote
HTML Imports	Green	Green	Stable	On Hold	Dark Grey	Vote
Custom Elements	Green	Green	Stable	Flag		Vote
Shadow DOM	Green	Green	Stable	Flag		Vote

- <http://jonrimmer.github.io/are-we-componentized-yet/>



- <http://stackoverflow.com/questions/18089075/what-is-the-difference-between-polymer-elements-and-angularjs-directives>

Using JS libs with WebComponents

Using MVC frameworks with WebComponents

Performance

Performance

- Object.observe
- Conditional loading of Polyfill
- Minimize shadow DOM count

Responsiveness

Accessibility

Accessibility

- ARIA
 - roles
 - widgets that aren't otherwise available in HTML 4
 - states
 - current interaction state of an element
 - properties
 - characteristics of these widgets
- Allow keyboard navigation

Debugging

Debugging

- Debug binding

Deployment

Globalization

Testing

Polymer

Polymer

- Data Binding
- Messaging
- Handy methods
- Paper library
- Extending components
- Accessing methods in Components
- Non UI components
- Polyfill
- Open Source
- Mixins

Why Not Angular?

IS IT PERFECT?



Open issues

- Issues with Polymer paper element library
- Using requires
- No library component composite for table and calendar
- It's not 1.0 yet
- Memory leaks and performance issues
- Issues with events and inheritance
- Debugging declarative binding
- Use of template in IE

WRAPPING UP



How we build Apps using Web Components?

- Bottom up approach
- Test in all browsers
- Conditional download of Polyfill
- Inheritance vs Composition

Thank you!