POLYMER

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Weil Menschen Geschäfte AUS machen!

Introduction

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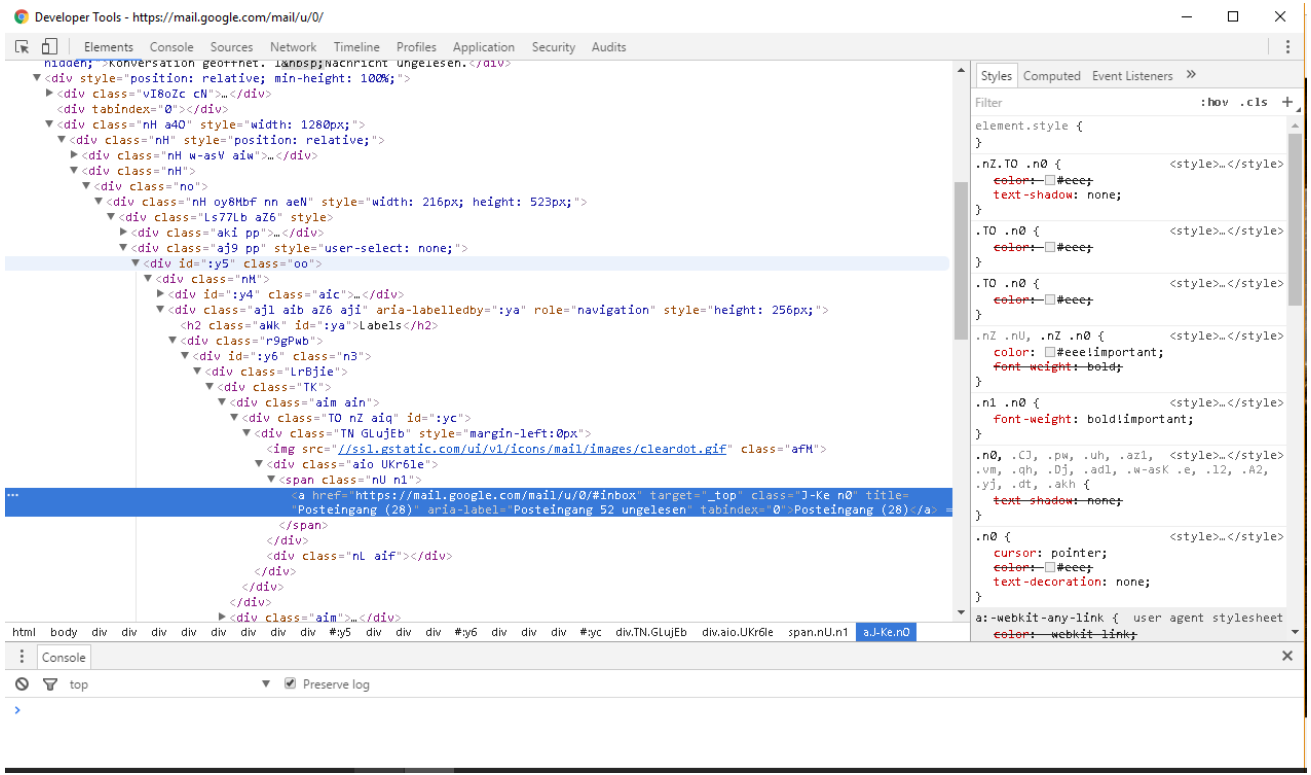
What is polymer

Polymer is a **new type of library** for the web, built on top of **Web Components and web standards,** and designed to leverage the **evolving web platform** ... on **modern browsers.**

POLYMER

Solve the semantic madness



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Introduction

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Polymer focuses on creating stylish and complex reusable UI components; just like widgets.

- **Web Components**
  - **Shadow dom**
  - **HTML Imports**
  - **Custom elements have it‘s own lifecycle**
- **Material Design**

Material Design

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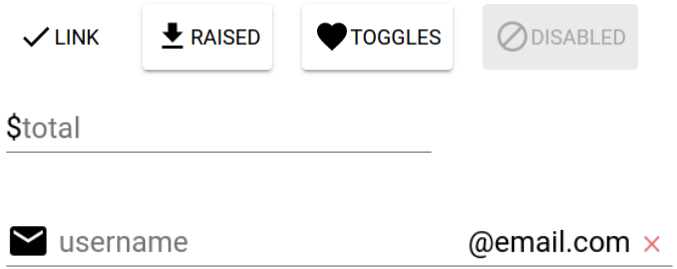
Material Design is a unified system that combines theory, resources, and tools for crafting digital experiences.



https://elements.polymer-project.org/browse?package=paper-elements
https://getmdl.io

Introduction

- Templates (<template></template>)
- Automatic data-binding ({{model}} or [[model]]) with model driven views
- DOM Mutation observers
- Pointer Events: Unified mouse/touch events
- Shadow DOM: Encapsulation of HTML, scripts and css styles in the component
- HTML Imports
- Web Animators

Compatibility

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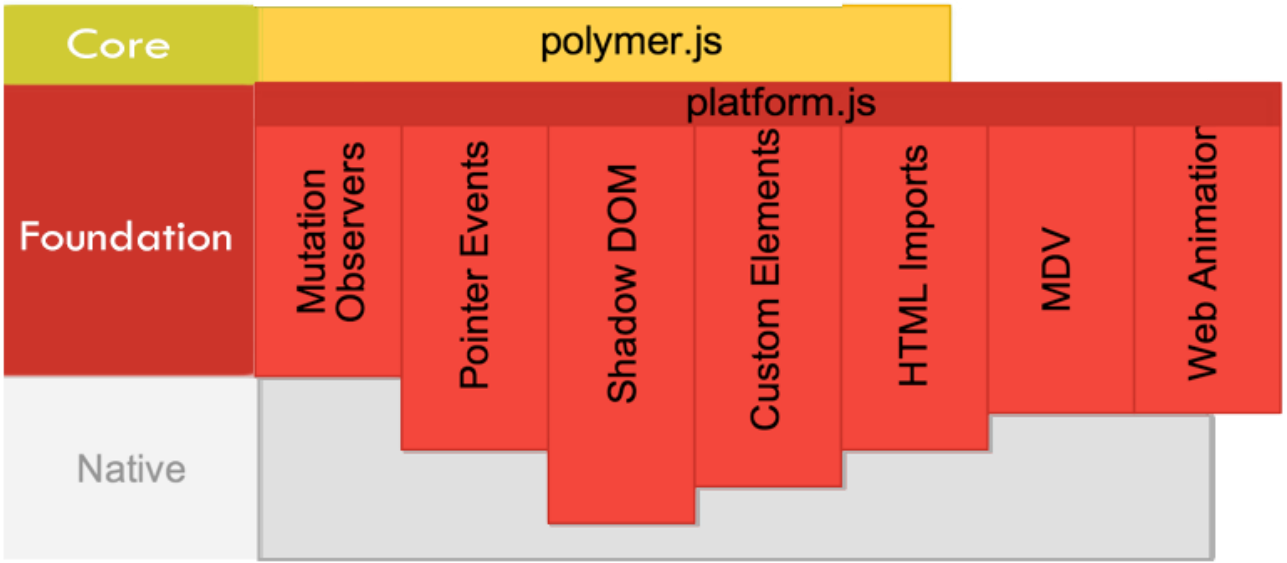
- **polyfills**



Component Structure

```
<dom-module id=„hello-world">
    <template>
        <style> /* CSS rules for your element */
        </style> <!-- local DOM for your element -->
        <div>{{greeting}}</div> <!-- data bindings in local DOM -->
    </template>
    <script> // element registration
    Polymer(
        { is: „hello-world",
        // add properties and methods on the element's prototype
        properties: {
            // declare properties for the element's public API
            greeting: {
                type: String,
                value: "Hello!" } } });
    </script>
</dom-module>
```

Website Structure

- Starting from the smallest components and building towards bigger and more complex components.
- Complex components are declarative collection of smaller components.
- Write underlying base components once and reuse

[Thinking in polymer]

Testing (Polymer WCT)

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- Mocha for a test framework, complete with support for BDD and TDD.
- Chai for more assertion types that can be used with your Mocha tests.
- Sinon for spies, stubs, and mocks.
- Selenium for running tests against multiple browsers.
- Accessibility Developer Tools for accessibility audits.

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Catalog

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0.10.1 **App** App Elements App elements	1.0.10 **Fe** Iron Elements Polymer core elements	1.0.7 **Md** Paper Elements Material design elements	1.1.1 **Go** Google Web Components Components for Google's APIs and services
1.0.1 **Au** Gold Elements Ecommerce Elements	1.0.0 **Ne** Neon Elements Animation and Special Effects	2.0.0 **Pt** Platinum Elements Offline, push, and more	1.0.0 **Mo** Molecules Wrappers for third-party libraries

Getting started

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- Polymer CLI: polymer init
- Polymer starter kit (2)
  https://github.com/PolymerElements/polymer-starter-kit
- Progressive Web App Template
  https://github.com/StartPolymer/progressive-web-app-template
- **Customelements.io**
- Youtube polycast & polymer summits

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Example
Movie List

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https://github.com/tur-nr/polymer-redux

Why redux?

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- Passing properties is annoying
- Polymer fires events only to its parents

Redux solves that problems!

PEOPLE
~~TECHNOLOGIES~~ RUN BUSINESSES.

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WE KNOW THAT. YOU KNOW THAT.