



Juiz de Fora, Maio 2015



+Gilson

# Agenda

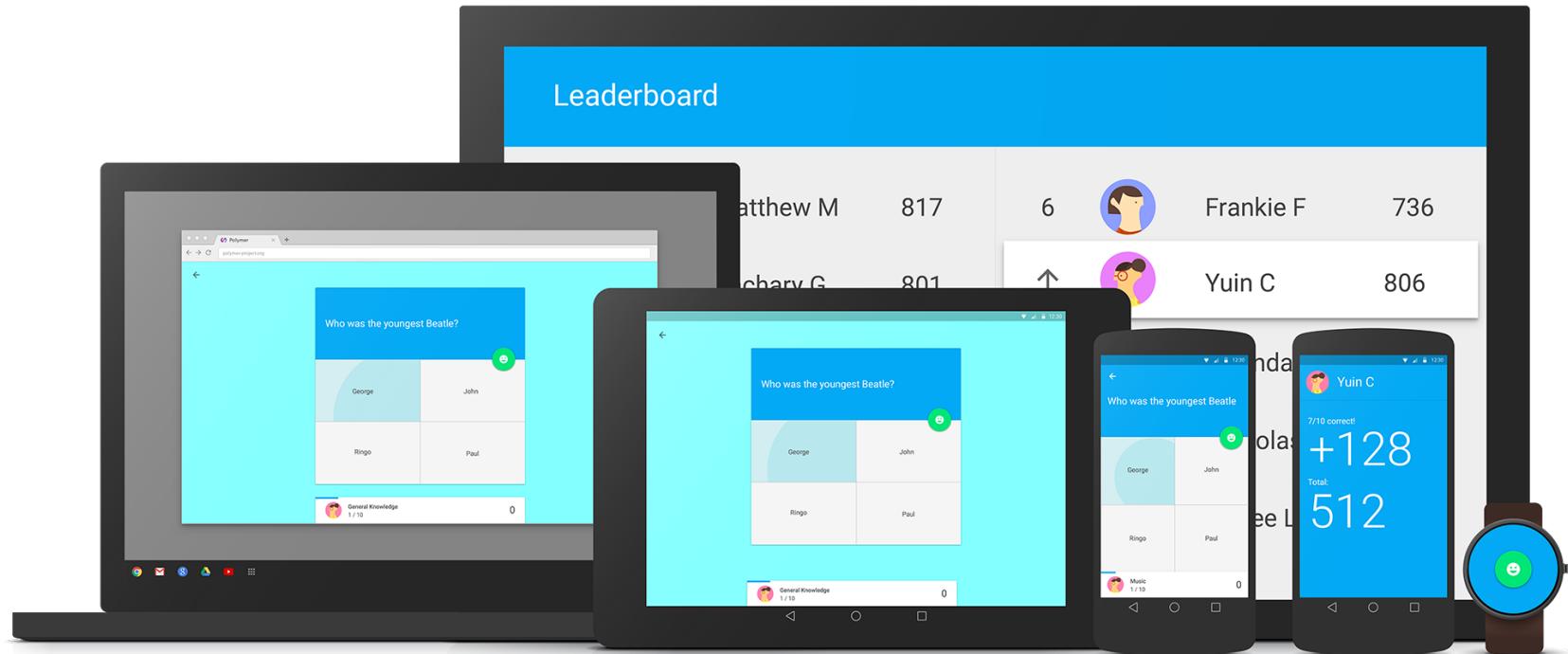
Web Components

Polymer

Saiba Mais

# Web Components

Quais problemas solucionar?





Construir abas  
Deveria ser fácil!

```
<div id="tabs">
  <ul>
    <li><a href="#fragment-1"><span>One</span></a></li>
    <li><a href="#fragment-2"><span>Two</span></a></li>
    <li><a href="#fragment-3"><span>Three</span></a></li>
  </ul>
  <div id="fragment-1">
    <p>First tab is active by default:</p>
    <pre><code>$("#tabs").tabs(); </code></pre>
  </div>
  <div id="fragment-2">
    Lorem ipsum dolor sit amet, consectetuer adipiscing eli
    Lorem ipsum dolor sit amet, consectetuer adipiscing eli
  </div>
  <div id="fragment-3">
    Lorem ipsum dolor sit amet, consectetuer adipiscing eli
    Lorem ipsum dolor sit amet, consectetuer adipiscing eli
    Lorem ipsum dolor sit amet, consectetuer adipiscing eli
  </div>
</div>

<script>
$("#tabs").tabs();
</script>
```

```
<div id="tabstrip">
    <ul>
        <li>Tab 1</li>
        <li>Tab 2</li>
    </ul>
    <div>Content 1</div>
    <div>Content 2</div>
</div>
<div id="tabs">
    <ul>
        <li><a href="#>Tab 1</a></li>
        <li><a href="#>Tab 2</a></li>
        <li><a href="#>Tab 3</a></li>
    </ul>
    <div id="frame1">
        <p>First tab content</p>
        <pre><code>
            // fade-out current tab over 1000 milliseconds
            close: {
                duration: 1000,
                effects: "fadeOut"
            },
            // fade-in new tab over 500 milliseconds
            open: {
                duration: 500,
                effects: "fadeIn"
            }
        </code></pre>
    </div>
    <div id="frame2">
        Lorem ipsum dolor sit amet, consectetur adipiscing elit.
        Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusamus et iusto odio dignissimos
        ducimus qui blanditiis praesentium voluptatum deleniti atque
        corrupti quos dolores et quas molestias excepturi sint occaecati
        consequatur autem vel eum iure reprehenderit qui in ea voluptate
        velit esse quam nihil molestiae consequatur, vel illum qui dolorem
        est fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud
        exercitationem ullamco laboris nisi ut aliquip ex ea commodo
        consequat. Duis aute irure dolor in reprehenderit in voluptate
        velit esse cillum dolore eu fugiat nulla pariatur. Excepteur
        sint occaecat cupidatat non proident, sunt in culpa qui officia
        deserunt mollit anim id est laborum.
    </div>
    <div id="frame3">
        Lorem ipsum dolor sit amet, consectetur adipiscing elit.
        Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusamus et iusto odio dignissimos
        ducimus qui blanditiis praesentium voluptatum deleniti atque
        corrupti quos dolores et quas molestias excepturi sint occaecati
        consequatur autem vel eum iure reprehenderit qui in ea voluptate
        velit esse quam nihil molestiae consequatur, vel illum qui dolorem
        est fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud
        exercitationem ullamco laboris nisi ut aliquip ex ea commodo
        consequat. Duis aute irure dolor in reprehenderit in voluptate
        velit esse cillum dolore eu fugiat nulla pariatur. Excepteur
        sint occaecat cupidatat non proident, sunt in culpa qui officia
        deserunt mollit anim id est laborum.
    </div>
</div>
<script>
$( "#tabs" ).kendoTabStrip();
</script>
```

```
var tabview = new Y.TabView({
  children: [
    {
      label: 'foo',
      content: '<p>foo content</p>'
    }, {
      label: 'bar',
      content: '<p>bar content</p>'
    }, {
      label: 'baz',
      content: '<p>baz content</p>'
    }
  ]
});
```

```
<div id="tabs">
  <div id="tabstrip">
    <ul>
      <li><a href="#">Tab 1</a></li>
      <li><a href="#">Tab 2</a></li>
      <li><a href="#">Tab 3</a></li>
    </ul>
    <div id="content">
      <div>Content 1</div>
      <div>Content 2</div>
      <div>Content 3</div>
    </div>
  </div>
  <div id="first">
    First tab content
    <pre><code>
      <script>
        $( "#tabstrip" ).tabstrip( {
          animation: "slide",
          closable: true,
          first: "First tab content"
        } );
      </script>
    </div>
  </div>
  <div id="second">
    Second tab content
    <pre><code>
      <script>
        $( "#tabstrip" ).tabstrip( {
          animation: "slide",
          closable: true,
          first: "First tab content"
        } );
      </script>
    </div>
  </div>
  <div id="third">
    Third tab content
    <pre><code>
      <script>
        $( "#tabstrip" ).tabstrip( {
          animation: "slide",
          closable: true,
          first: "First tab content"
        } );
      </script>
    </div>
  </div>
</div>
```

```
<div id="tabs"> <div id="tabstrip">
  <ul> <ul>
    <li><a href="#">Tab 1</a> <li>Tab 2</li>
    <li><a href="#">Tab 3</a> </ul>
  </ul> <div>Content</div>
  <div id="first-panel"> <div>Content</div>
    <p>First panel</p>
    <pre><code>
      <script>
        $( "#tabstrip" ).tabstrip();
        // ...
      </script>
    </code></pre>
  </div>
  <div id="second-panel"> <div>Content</div>
    <p>Second panel</p>
    <pre><code>
      <script>
        $( "#tabstrip" ).tabstrip();
        // ...
      </script>
    </code></pre>
  </div>
  <div id="third-panel"> <div>Content</div>
    <p>Third panel</p>
    <pre><code>
      <script>
        $( "#tabstrip" ).tabstrip();
        // ...
      </script>
    </code></pre>
  </div>
</div>
<script>
$( "#tabs" )
  .tabstrip()
  .addPanel("first-panel");
  .addPanel("second-panel");
  .addPanel("third-panel");
</script>
```

```
var tabs = angular.module('tabs', []);
tabs.directive('angularTabs', function() {
  return {
    restrict: 'E',
    transclude: true,
    scope: { heading: '@' },
    controller: function($scope, $element) {
      var panels = $scope.panels = [];

      $scope.select = function(panel) {
        [].forEach.call(panels, function(panel) {
          panel.selected = false;
        });
        panel.selected = true;
      }

      this.addPanel = function(panel) {
        if (panels.length == 0) {
          $scope.select(panel);
        }
        panels.push(panel);
      }
      template:
        '<div id="container">' +
        '  <aside>{{heading}}</aside>' +
        '  <div class="tab-wrapper">' +
        '    <h2 ng-repeat="panel in panels" ng-click="select(panel)" ng-class="{active: panel.selected}">' +
        '    </h2>' +
        '    <div class="contents" ng-transclude></div>' +
        '  </div>',
        replace: false
      };
    });
});
```

```
angular.module('tabs', []).
directive('angularTabs', function() {
  return {
    restrict: 'E',
    transclude: true,
    scope: { heading: '@' },
    controller: function($scope, $element) {
      var panels = $scope.panels = [];

      $scope.select = function(panel) {
        [].forEach.call(panels, function(panel) {
          panel.selected = false;
        });
        panel.selected = true;
      }

      this.addPanel = function(panel) {
        if (panels.length == 0) {
          $scope.select(panel);
        }
        panels.push(panel);
      }
      template:
        '<div id="container">' +
        '  <aside>{{heading}}</aside>' +
        '  <div class="tab-wrapper">' +
        '    <h2 ng-repeat="panel in panels" ng-click="select(panel)" ng-class="{active: panel.selected}">' +
        '    </h2>' +
        '    <div class="contents" ng-transclude></div>' +
        '  </div>',
        replace: false
      };
    });
});
```

```
<div id="tabs"> <div id="tabstrip">
  <ul> <li><a href="#"> </a> </li>Tab
    <li><a href="#"> </a>Tab
    <li><a href="#"> </a>Tab
  </ul> <div>Content
  <div id="first"> <div>Content
    <p>First</p>
    <pre><code>
</code></pre> <script>
$( "#tabstrip" ).tabstrip();
    </script>
  </div> <div id="first"> <div>Content
    <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p>
    <div> <div>Content
      <div> <div>Content
        <div> <div>Content
          <div> <div>Content
            <div> <div>Content
              <div> <div>Content
                <div> <div>Content
                  <div> <div>Content
                    <div> <div>Content
                      <div> <div>Content
                        <div> <div>Content
                          <div> <div>Content
                            <div> <div>Content
                              <div> <div>Content
                                <div> <div>Content
                                  <div> <div>Content
                                    <div> <div>Content
                                      <div> <div>Content
                                        <div> <div>Content
                                          <div> <div>Content
                                            <div> <div>Content
                                              <div> <div>Content
                                                <div> <div>Content
                                                  <div> <div>Content
                                                    <div> <div>Content
                                                      <div> <div>Content
                                                        <div> <div>Content
                                                          <div> <div>Content
                                                            <div> <div>Content
                                                              <div> <div>Content
                                                                <div> <div>Content
                                                                  <div> <div>Content
                                                                    <div> <div>Content
                                                                      <div> <div>Content
                                                                        <div> <div>Content
                                                                          <div> <div>Content
                                                                            <div> <div>Content
                                                                              <div> <div>Content
                                                                                <div> <div>Content
                                                                                  <div> <div>Content
                                                                                    <div> <div>Content
                                                                                      <div> <div>Content
                                                                                        <div> <div>Content
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
</div>
<script>
$( "#tabs" )
  .tabstrip();
</script>
```

```
var tabview = new TabView();
tabview.children = [
  { label: "content", content: "Content 1" },
  { label: "content", content: "Content 2" },
  { label: "content", content: "Content 3" },
  { label: "content", content: "Content 4" }
]);
```

```
angular.module('tabs', []);
directive('angularTabs', function() {
  return {
    restrict: 'E',
    transclude: true,
    scope: { heading: '@' },
    controller: function($scope, $element) {
      var panels = $scope.panels = [];

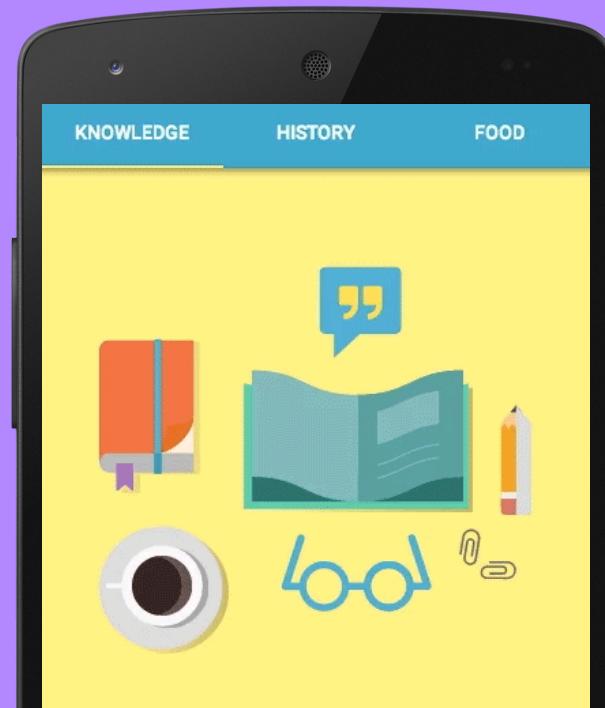
      $scope.select = function(panel) {
        [].forEach.call(panels, function(panel) {
          panel.selected = false;
        });
        panel.selected = true;
      }

      this.addTabPanel = function(panel) {
        if (panels.length == 0) {
          $scope.select(panel);
        }
        panels.push(panel);
      },
      template:
        '<div id="container">' +
        '  <aside>{{heading}}</aside>' +
        '  <div class="tab-wrapper">' +
        '    <h2 ng-repeat="panel in panels" ng-click="select(panel)" ng-class="{active: panel.selected}">' +
        '    </h2>' +
        '    <div class="contents" ng-transclude></div>' +
        '  </div>',
      replace: false
    };
  }
}).
```

# Web Components

Menos código. Menos confusão.

```
<paper-tabs>  
  <paper-tab>KNOWLEDGE</paper-tab>  
  <paper-tab>HISTORY</paper-tab>  
  <paper-tab>FOOD</paper-tab>  
</paper-tabs>
```



# O que são Web Components?

# Custom Elements

defina novos componentes HTML/DOM

# Custom Elements

define novo  
HTML

✓ **declarativo**, legível

```
<paper-tabs selected="1">  
  <paper-tab>Tab 1</paper-tab>  
  <paper-tab>Tab 2</paper-tab>  
  <paper-tab>Tab 3</paper-tab>  
</paper-tabs>
```

✓ **Com significado** HTML

✓ **Extensivo** → reusável



.selected = 1

# Custom Elements

define novo  
HTML

✓ **declarativo, legível**

✓ **Com significado HTML**

✓ **Extensivo → reusável**

```
var tabs = document.querySelector('paper-tabs');
tabs.addEventListener('core-activate', function() {
  console.log(this.selected);
});
```



.selected = 1

# Templates

Template nativo para o client

# HTML Templates

templates nativos para o client

- ✓ **usa DOM** para criar DOM → no XSS
- ✓ **analisado**, não renderizado
- ✓ **conteúdo é inerte** até que clonado/usado
- ✓ **fragmento doc** → não é parte da página

```
<template>
  <div class="comment">
    
  </div>
  <script>...</script>
</template>
```

# Shadow DOM

## DOM/CSS escopo



```
<video src="foo.webm" controls></video>
```

Na Verdade é  
Shadow DOM



```
<video src="foo.webm" controls></video>
```

The screenshot shows a web browser's developer tools with the "Elements" tab selected. A video player is displayed on the left, showing a black screen with a play button and a progress bar. On the right, the DOM tree is shown, with the `<video>` element highlighted. Its shadow root is expanded, revealing the internal controls: a play button, a range slider for volume, two buttons for brightness and contrast, and a zoom slider. Below the video element is a pre-tag containing inspector-related text.

```
<h3 class="__web-inspector-hide-shortcut__"><video src="./videos/bunny.webm" controls>
  <#shadow-root (user-agent)>
    <div>
      <div>
        <div>
          <input type="button">
          <input type="range" step="any" max="0">
            <div style="display: none;">0:00</div>
            <div>0:00</div>
          <input type="button">
          <input type="range" step="any" max="1" none;">
            <input type="button" style="display: none;">
            <input type="button" style="display: none;">
          </div>
        </div>
      </div>
    </video>
    <pre style="text-align: center; font-size: 33px; __web-inspector-hide-shortcut__">...</pre>
```

html body div div section video #shadow-root div

Styles Event Listeners DOM Breakpoints Properties

+ Find in Styles Filter

# HTML Imports

carregando web components

## Example: Bootstrap

```
<link rel="stylesheet" href="bootstrap.css">
<link rel="stylesheet" href="fonts.css">
<script src="jquery.js"></script>
<script src="bootstrap.js"></script>
<script src="bootstrap-tooltip.js"></script>
<script src="bootstrap-dropdown.js"></script>
```

## Example: Bootstrap

```
<link rel="import" href="bootstrap.html">
```

# Custom Elements

Cria novos elementos HTML e extende os já existentes

# Templates

Native templating in the browser

# Shadow DOM

Scoped CSS!!! + encapsulated markup

# HTML Imports

Carrega elementos customizados, definições e resources

# FIND



The screenshot shows a web browser window with the title "Custom Elements - A Web..." and the URL "customelements.io/?q=web%20components". The page has a dark blue header with the text "□△○" and "Custom Elements" in large white font, followed by "a web components gallery for modern web apps". Below the header is a search bar containing "web components". A table below the search bar lists a single result:

Name	Description	Stars	Forks	Author
notifications	A Web Components of Web Notifications API is amazing, and can do amazing notifications, using Web Notification http://mateusortiz.github.io/notification-elements	5	2	mateusortiz

```
$ bower install Polymer/core-toolbar  
$ bower install Polymer/core-icon-button
```

# IMPORT



```
<head>
  <link rel="import" href="core-toolbar.html">
  <link rel="import" href="core-icon-button.html">
</head>
```

# USE



```
<core-toolbar>
  <core-icon-button icon="menu"></core-icon-button>
  <span flex>Toolbar</span>
    <core-icon-button icon="refresh"></core-icon-button>
  <core-icon-button icon="add"></core-icon-button>
</core-toolbar>
```

# USE



```
<core-toolbar>
  <core-icon-button icon="menu"></core-icon-button>
  <span flex>Toolbar</span>
    <core-icon-button icon="refresh"></core-icon-button>
  <core-icon-button icon="add"></core-icon-button>
</core-toolbar>
```

=

Toolbar

C

+

# Browser support

*Winter 2015*

Templates



Custom Elements



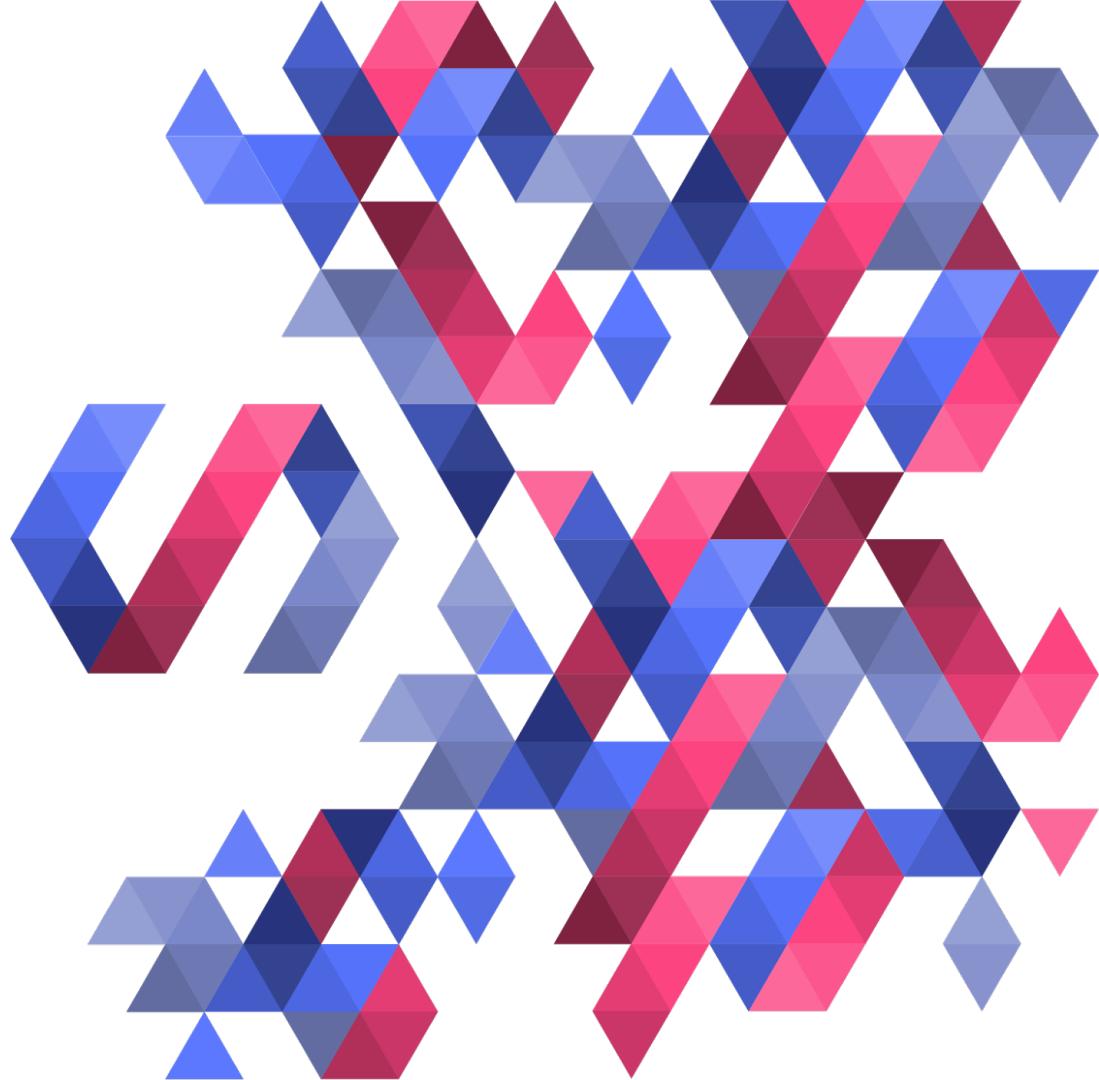
Shadow DOM



HTML Imports



# polymer



# Incrementa Web Components com webcomponents.js\*

\* anteriormente chamado platform.js

Adiciona “syntactic sugar”  
com polymer.js  
Facilita o entendimento

# Suporte a browsers

Inverno 2015 (*com Polymer*)

Templates



Custom Elements



Shadow DOM



HTML Imports



# Suporte a browsers

Inverno 2015 (*com Polymer*)

Templates



Custom Elements



Shadow DOM



HTML Imports



# Sugaring: Custom Elements





vanilla

```
document.registerElement('paper-tabs', {  
  prototype: Object.create(HTMLElement.prototype)  
});
```



polymer

```
<polymer-element name="paper-tabs">  
  ...  
</polymer-element>
```

usage

```
<paper-tabs>...</paper-tabs>  
// document.createElement('paper-tabs');
```



vanilla

```
document.registerElement('paper-tabs', {  
  prototype: Object.create(HTMLElement.prototype)  
});
```



polymer

```
<polymer-element name="paper-tabs">  
  ...  
</polymer-element>
```

usage

```
<paper-tabs>...</paper-tabs>  
// document.createElement('paper-tabs');
```



vanilla

```
document.registerElement('paper-tabs', {  
  prototype: Object.create(HTMLElement.prototype)  
});
```



polymer

```
<polymer-element name="paper-tabs">  
  ...  
</polymer-element>
```

usage

```
<paper-tabs>...</paper-tabs>  
// document.createElement('paper-tabs');
```





vanilla

```
document.registerElement('super-button', {  
  prototype: Object.create(HTMLButtonElement.prototype),  
  extends: 'button'  
});
```



polymer

```
<polymer-element name="super-button" extends="button">  
  ...  
</polymer-element>
```

usage

```
<button is="super-button">...</button>  
// document.createElement('button', 'super-button');
```



vanilla

```
document.registerElement('super-button', {  
  prototype: Object.create(HTMLButtonElement.prototype),  
  extends: 'button'  
});
```



polymer

```
<polymer-element name="super-button" extends="button">  
  ...  
</polymer-element>
```

usage

```
<button is="super-button">...</button>  
// document.createElement('button', 'super-button');
```



vanilla

```
document.registerElement('super-button', {  
  prototype: Object.create(HTMLButtonElement.prototype),  
  extends: 'button'  
});
```



polymer

```
<polymer-element name="super-button" extends="button">  
  ...  
</polymer-element>
```

usage

```
<button is="super-button">...</button>  
// document.createElement('button', 'super-button');
```

# Sugaring: Templates





vanilla

```
<template>  
  ...  
</template>
```



polymer

```
<polymer-element name="user-list" noscript>  
  <template>  
    <ul>  
      <template repeat="{{user, i in users}}>  
        <li>{{user.name}}</li>  
      </template>  
    </ul>  
  </template>  
</polymer-element>
```



vanilla

```
<template>  
  ...  
</template>
```



polymer

```
<polymer-element name="user-list" noscript>  
  <template>  
    <ul>  
      <template repeat="{{user, i in users}}>  
        <li>{{user.name}}</li>  
      </template>  
    </ul>  
  </template>  
</polymer-element>
```

# Sugaring: Shadow DOM





vanilla

```
var shadow = el.createShadowRoot();
shadow.innerHTML = "<style>h2 { color: red; }</style>" +
    "<h2>I'm a profile-card</h2>";
```



polymer

```
<polymer-element name="profile-card" noscript>
  <template>
    <link rel="stylesheet" href="styles.css">
    <h2>I'm a profile-card</h2>
  </template>
</polymer-element>
```



vanilla

```
var shadow = el.createShadowRoot();
shadow.innerHTML = "<style>h2 { color: red; }</style>" +
    "<h2>I'm a profile-card</h2>";
```



polymer

```
<polymer-element name="profile-card" noscript>
  <template>
    <link rel="stylesheet" href="styles.css">
    <h2>I'm a profile-card</h2>
  </template>
</polymer-element>
```

# Components

<h1>

<ul>

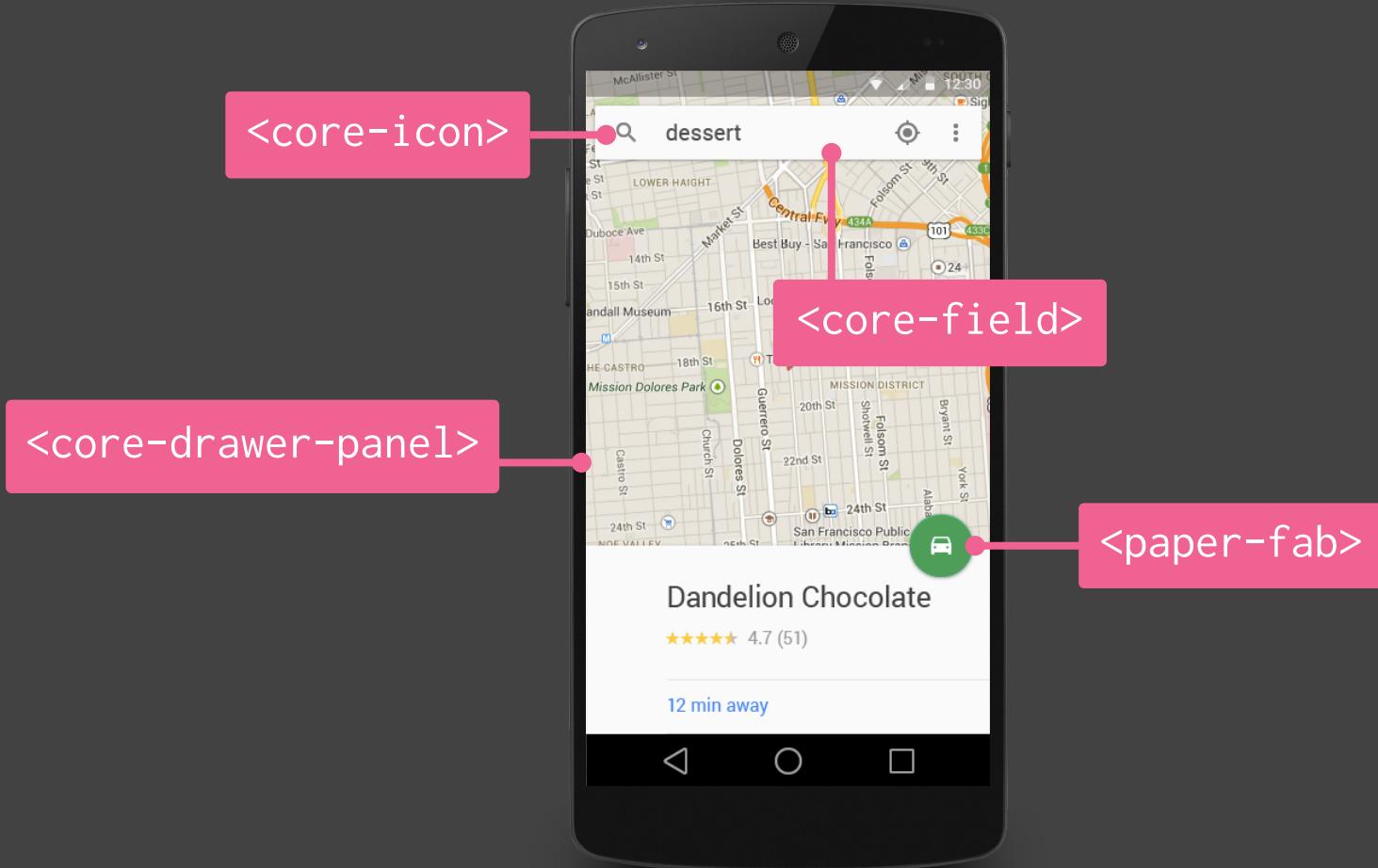
<p>

<animated-pages>

<menu-button>

<page-scaffold>

E se nós desenvolvessemos  
HTML para web mobile?



# core-elements

Image: <http://bit.ly/1mZjnTu>



## <core-toolbar>

Um container básico para controlar tabs ou botões



## <core-toolbar>

Um container básico para controlar tabs ou botões

```
<link rel="import"  
      href="core-toolbar.html">
```

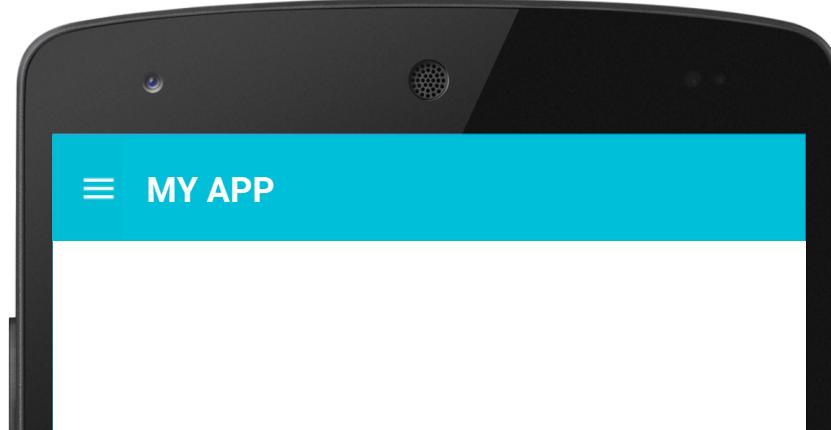


## <core-toolbar>

Um container básico para controlar tabs ou botões

```
<link rel="import"  
      href="core-toolbar.html">
```

```
<core-toolbar>  
  <div>MY APP</div>  
</core-toolbar>
```



## <core-toolbar>

Um container básico para controlar tabs ou botões

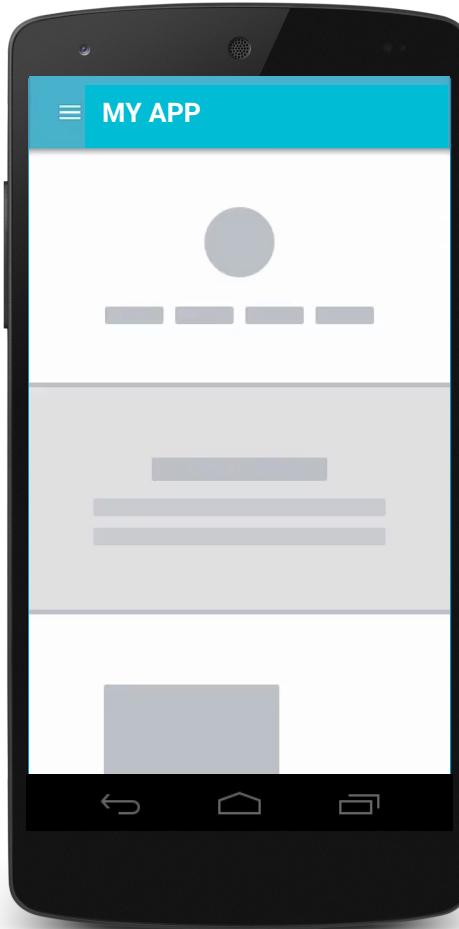
```
<link rel="import"  
      href="core-toolbar.html">
```

```
<core-toolbar>  
  <core-icon-button icon="menu">  
  </core-icon-button>  
  <div>MY APP</div>  
</core-toolbar>
```

# <core-header-panel>

Um container simples com uma seção de cabeçalho e outra de conteúdo

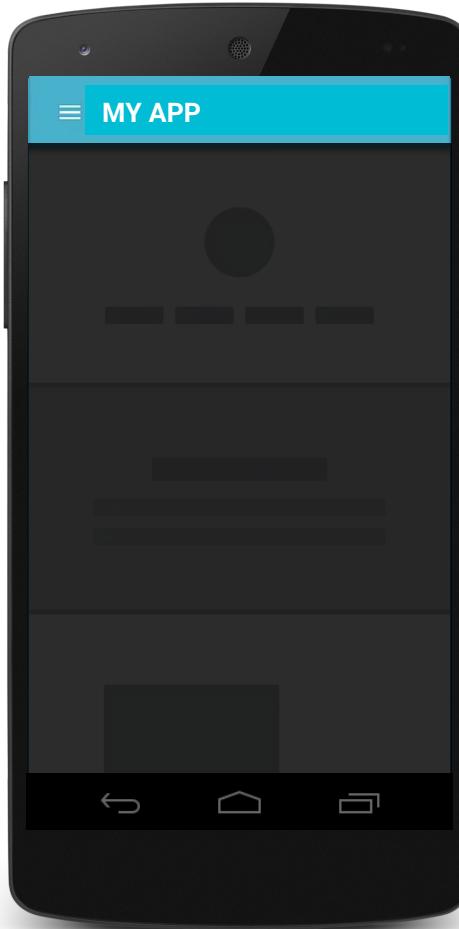
```
<core-header-panel flex>
  <core-toolbar>
    <core-icon-button icon="menu">
    </core-icon-button>
    <div>MY APP</div>
  </core-toolbar>
  <div class="content">...</div>
</core-header-panel>
```



# <core-header-panel>

Um container simples com uma seção de cabeçalho e outra de conteúdo

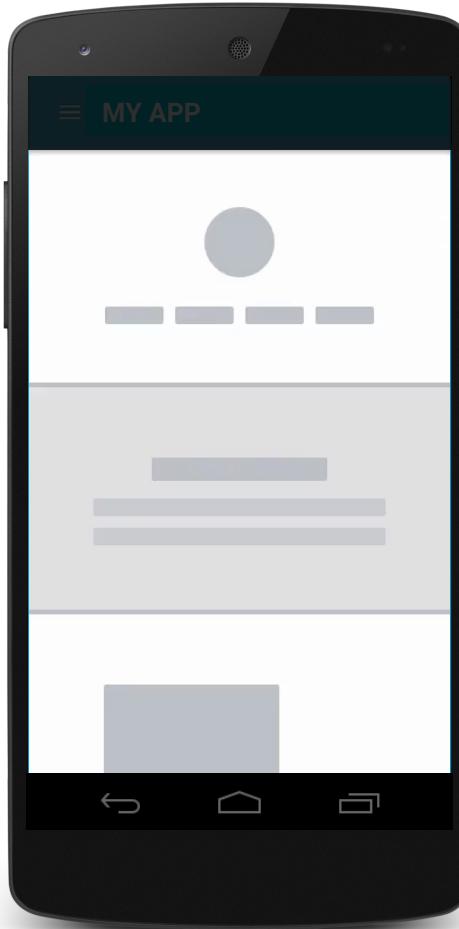
```
<core-header-panel flex>
  <core-toolbar>
    <core-icon-button icon="menu">
    </core-icon-button>
    <div>MY APP</div>
  </core-toolbar>
  <div class="content">...</div>
</core-header-panel>
```



# <core-header-panel>

Um container simples com uma seção de cabeçalho e outra de conteúdo

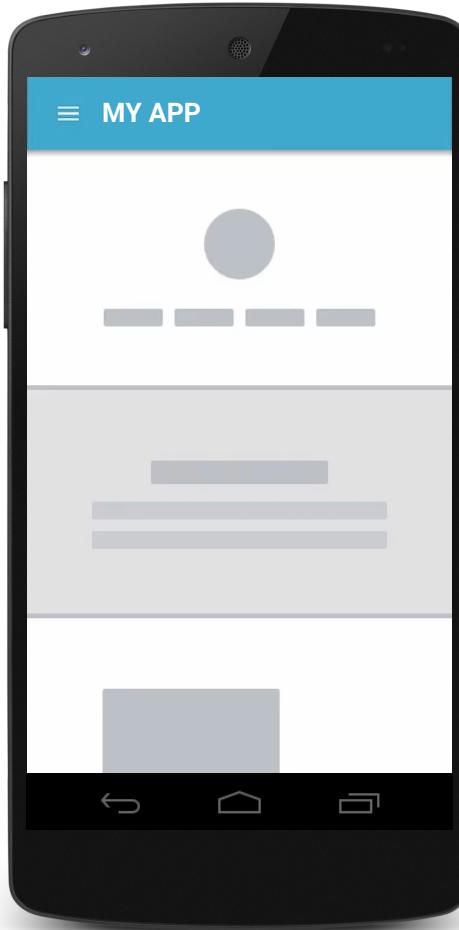
```
<core-header-panel flex>
  <core-toolbar>
    <core-icon-button icon="menu">
    </core-icon-button>
    <div>MY APP</div>
  </core-toolbar>
  <div class="content">...</div>
</core-header-panel>
```



# <core-header-panel>

Um container simples com uma seção de cabeçalho e outra de conteúdo

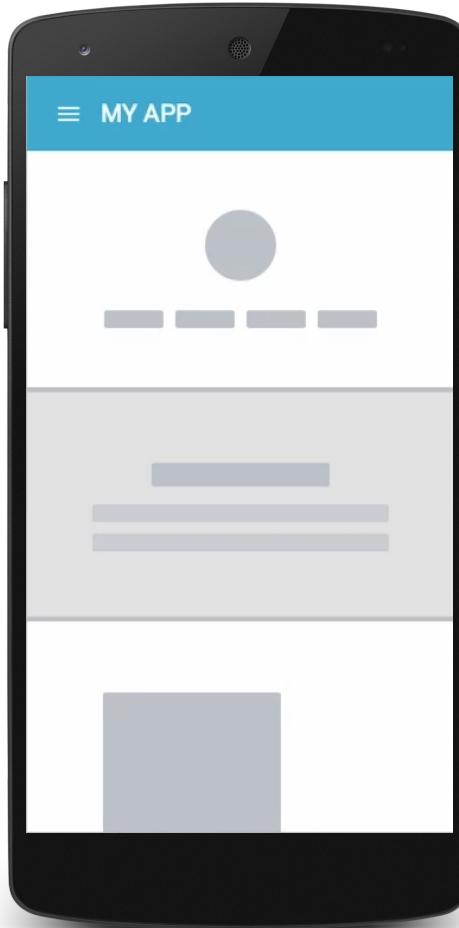
```
<core-header-panel flex>
  <core-toolbar>
    <core-icon-button icon="menu">
    </core-icon-button>
    <div>MY APP</div>
  </core-toolbar>
  <div class="content">...</div>
</core-header-panel>
```



# <core-header-panel>

*Toolbar vai rolar com a página*

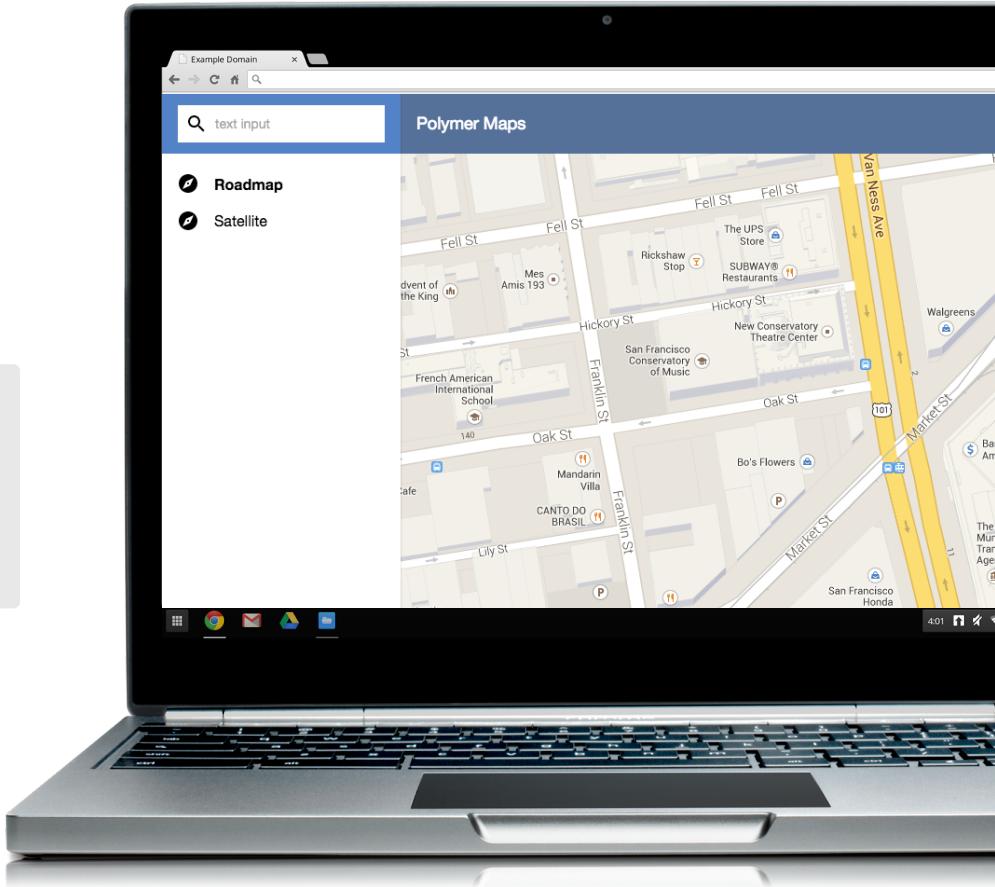
```
<core-header-panel mode="scroll" flex>
  <core-toolbar>
    <core-icon-button icon="menu">
    </core-icon-button>
    <div>MY APP</div>
  </core-toolbar>
  <div class="content">...</div>
</core-header-panel>
```



# <core-drawer-panel>

Um container **responsivo** que combina um drawer panel e uma área para o conteúdo principal.

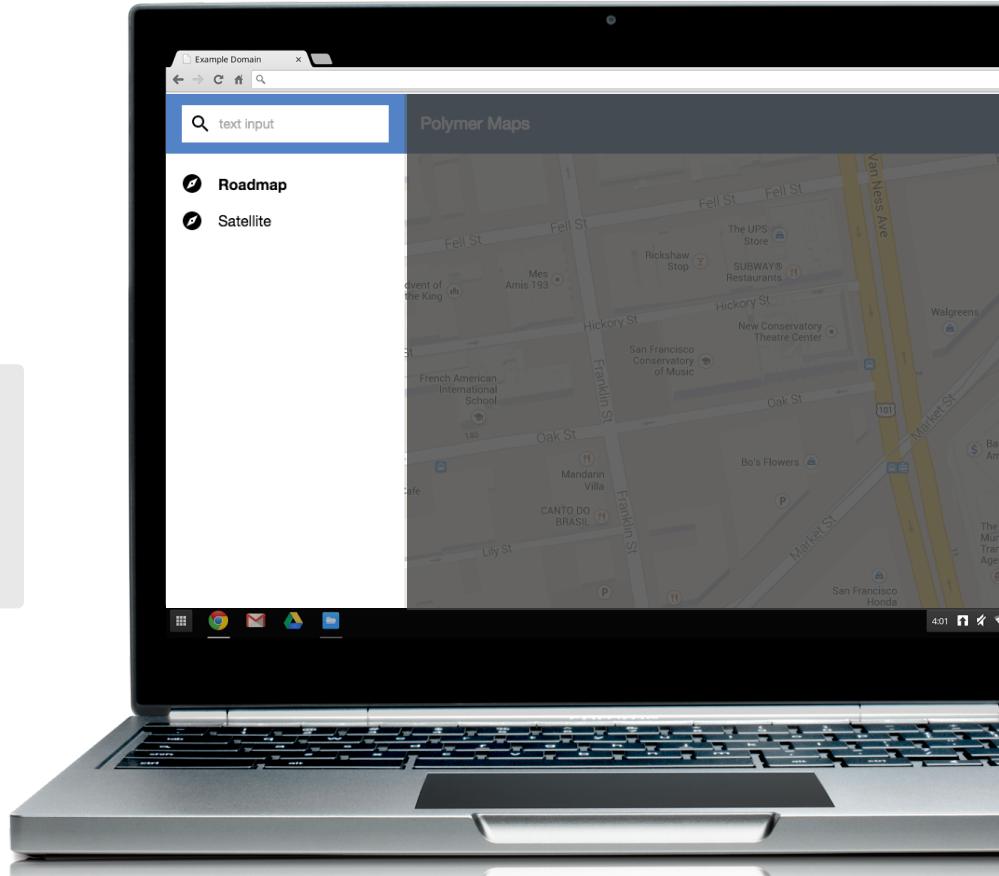
```
<core-drawer-panel>
  <div drawer> Drawer panel... </div>
  <div main> Main panel... </div>
</core-drawer-panel>
```



# <core-drawer-panel>

Um container **responsivo** que combina um drawer panel e uma área para o conteúdo principal.

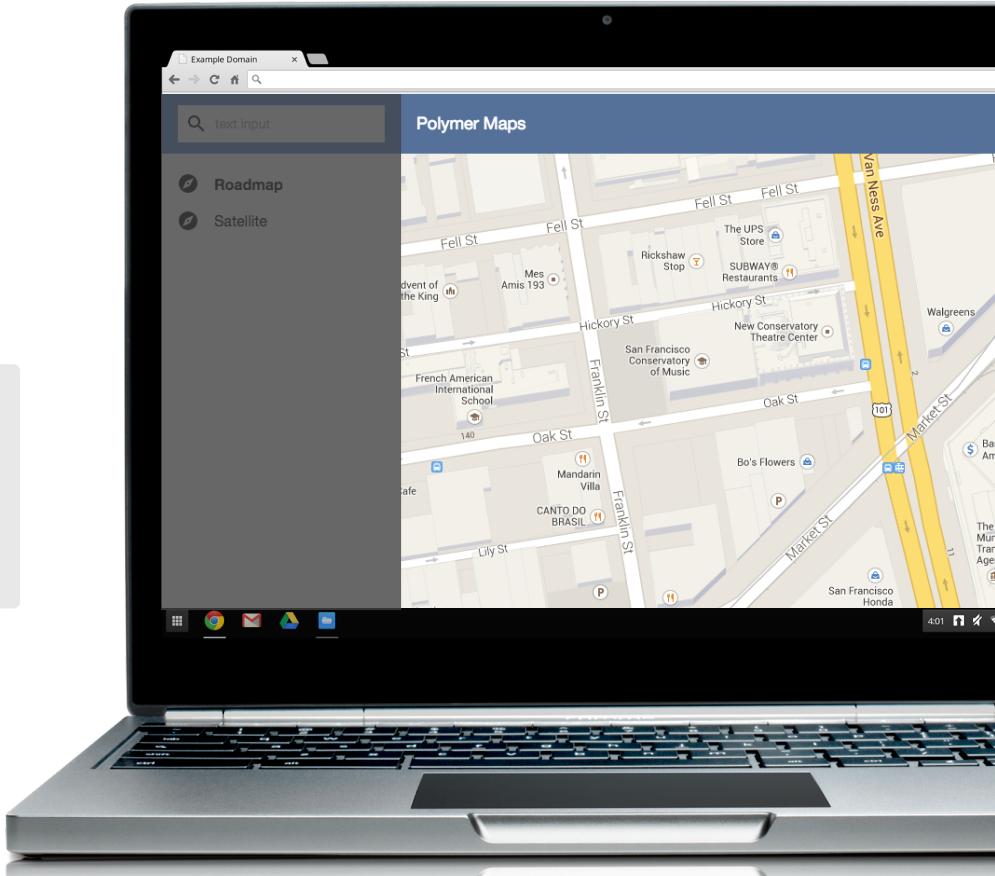
```
<core-drawer-panel>
  <div drawer> Drawer panel... </div>
  <div main> Main panel... </div>
</core-drawer-panel>
```

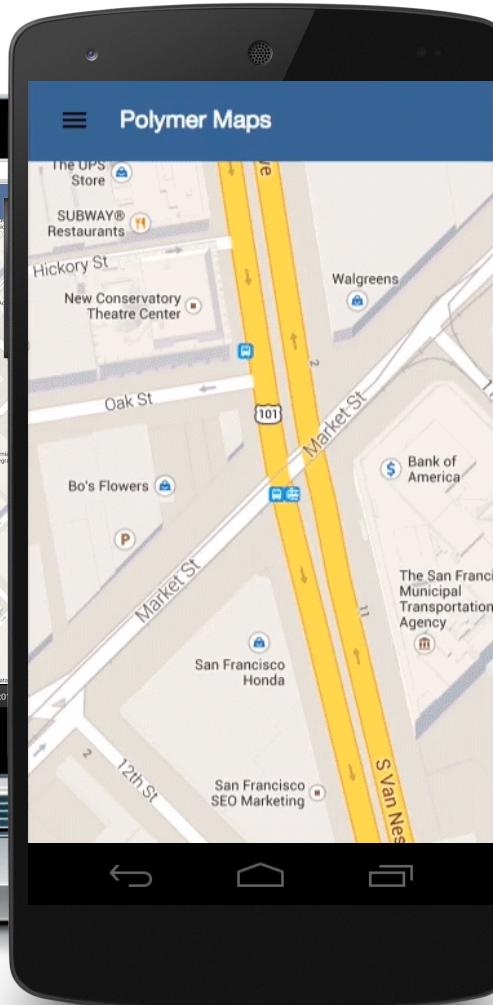
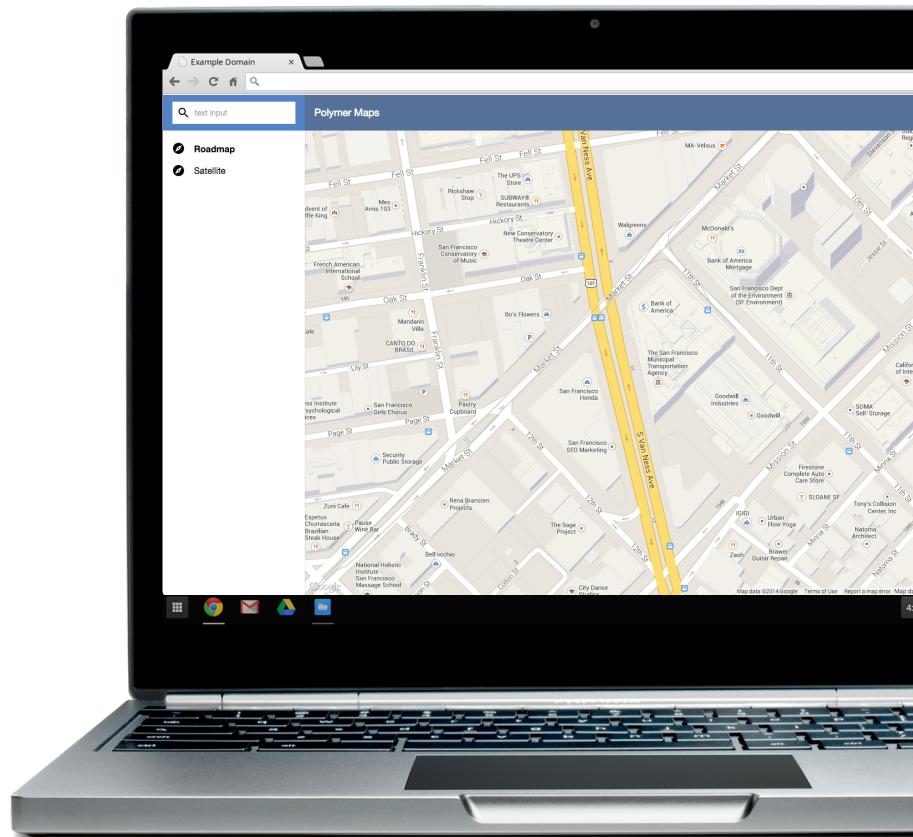


# <core-drawer-panel>

Um container **responsivo** que combina um drawer panel e uma área para o conteúdo principal.

```
<core-drawer-panel>
  <div drawer> Drawer panel... </div>
  <div main> Main panel... </div>
</core-drawer-panel>
```







# paper-elements

Type only numbers... (floating)

---

```
<paper-input floatinglabel  
    label="Type only numbers... (floating)"  
    validate="^[\d]*$"  
    error="Input is not a number!">  
</paper-input>
```

```
<paper-checkbox></paper-checkbox>
```

What are the surnames of Bonnie and Clyde.

- Parson
- Parker
- Patterson
- Barlow
- Barret
- Barrow

# <paper-ripple>

Um efeito para indicar toque ou ações do mouse

```
<div class="card">  
    
  <paper-ripple fit></paper-ripple>  
</div>
```



# <paper-shadow>

Uma sombra dinâmica para carregar sombra e relações espaciais

```
<paper-shadow z="5" animated>
  <div class="card">...</div>
</paper-shadow>
```

In which American State did chilli con carne originate?

- A. New Mexico
- B. Louisiana
- C. Arizona
- D. Texas

# Estilo

## ::shadow

Permite a você dar um estilo interno ao elemento da sombra



```
<paper-slider min="0" max="100">  
</paper-slider>
```

## ::shadow

Permite a você dar um estilo interno ao elemento da sombra

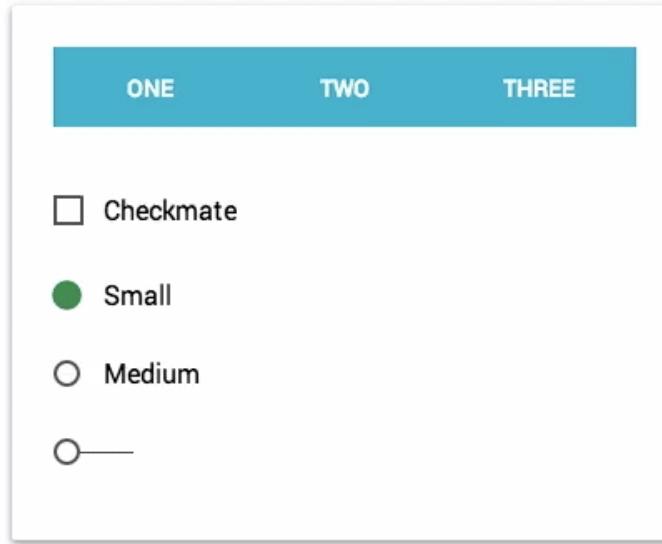


```
<paper-slider min="0" max="100">  
</paper-slider>
```

```
paper-slider::shadow #sliderKnobInner {  
    background-color: #f4b400;  
}
```

# /deep/

Estilo vai sobrescrever  
todas as sombras



```
html /deep/ paper-ripple {  
  background-color: #E91E63;  
}
```

Com ::shadow e /deep/ você  
pode aplicar temas a todo site

source: ebidel.github.io/material-playground

### Basic components

SIMPLE BUTTON

RAISED BUTTON

A checkbox

A radio button

Another radio button

### Text fields and dialogs

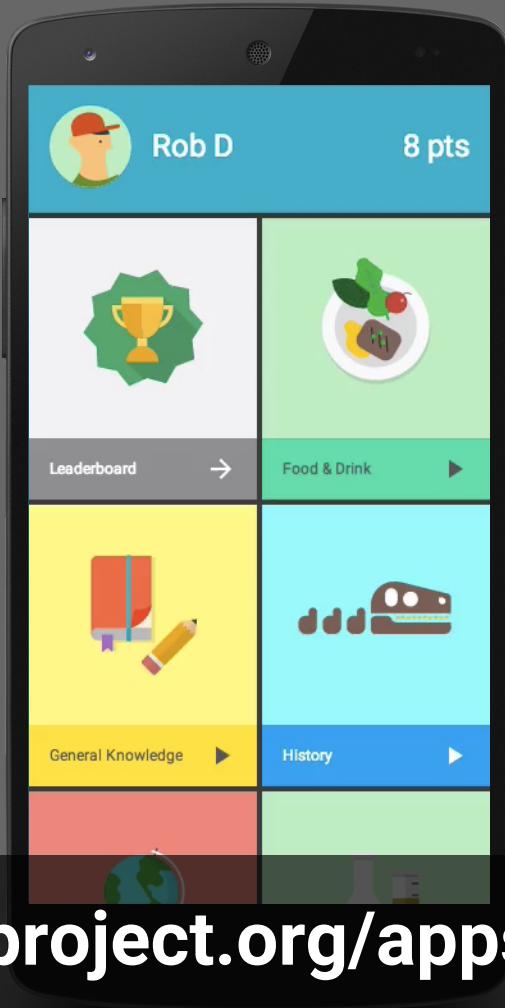
Type something...

Type only numbers... (floating)

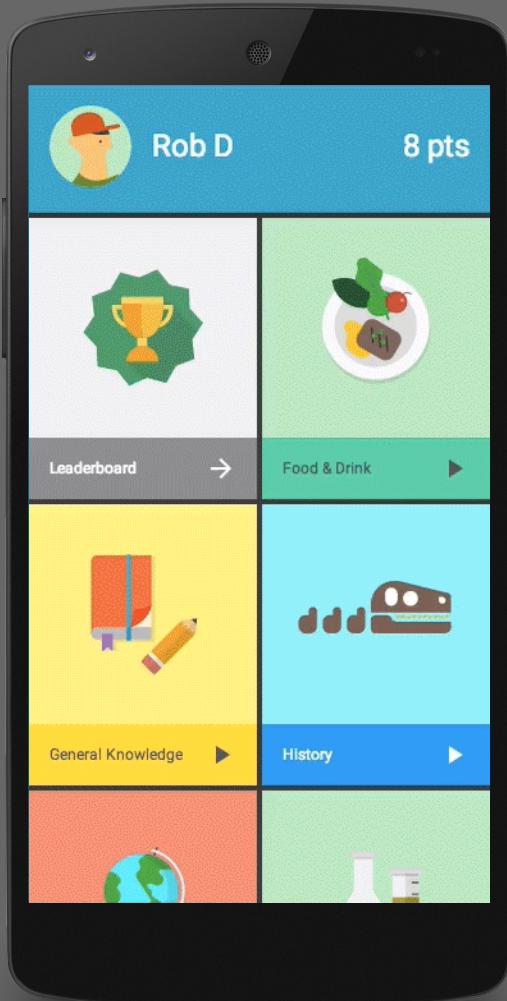
DIALOG

### Progress and sliders





[polymer-project.org/apps/topeka/](http://polymer-project.org/apps/topeka/)



# polymer-project.org

Paper Elements

Checkbox

Radio Button

Toggle Button

Input

Toolbar

Tabs

A. No ink effect and no sliding bar

ITEM ONE      ITEM TWO      ITEM THREE

B. The bar slides to the selected tab

ITEM ONE      ITEM TWO      ITEM THREE

# Apps



# Welcome to the future

Web Components usher in a new era of web development based on encapsulated and interoperable custom elements that extend HTML itself. Built atop these new standards, Polymer makes it easier and faster to create anything from a button to a complete application across desktop, mobile, and beyond.

[GET POLYMER](#)[VIEW ON GITHUB](#)[Use Elements \(30 sec\) →](#)[Create Elements \(5 min\) →](#)[Build an app \(30 min\)](#)

```
<!-- Polyfill Web Components support for older browsers -->
<script src="components/platform/platform.js"></script>

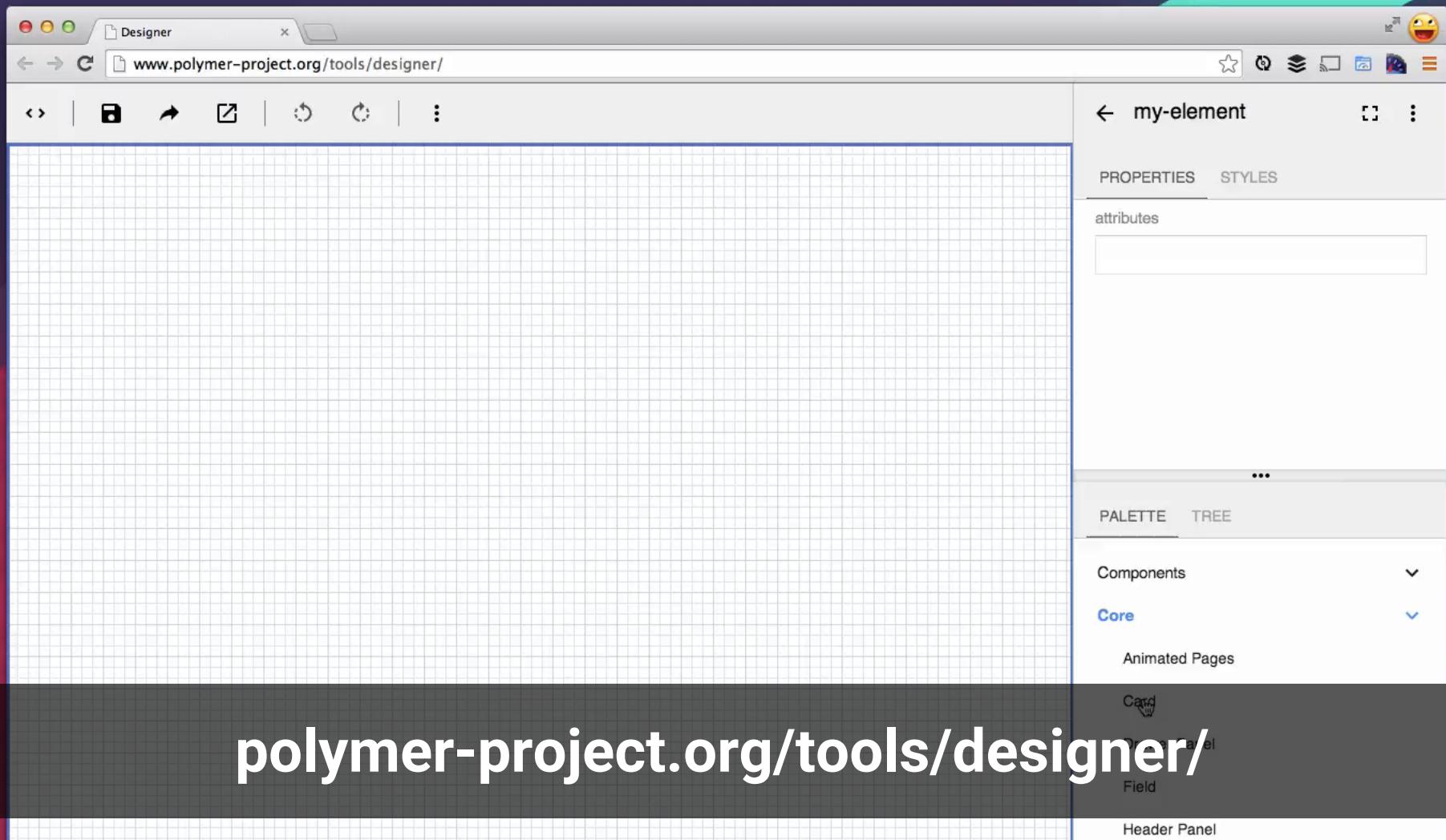
<!-- Import element -->
<link rel="import" href="google-map.html">
```

# polymer-project.org

## Using Polymer Elements

Polymer (and all Web Components) is

1 Import element.



# APIs

# APIs (as elements)

*“Eu quero adicionar um marcador ao Google map.”*

```
}

</style>

<div id="map"></div>

<script src="http://maps.googleapis.com/maps/api/js?callback=mapReady">
</script>
<script>
  var marker = null;

  function getCurrentLocation(callback) {
    navigator.geolocation.watchPosition(callback);
  }

  function addMarker(opts, info) {
    var marker = new google.maps.Marker(opts);

    var infoWindow = new google.maps.InfoWindow({content: info});

    google.maps.event.addListener(marker, 'click', function() {
      infoWindow.open(opts.map, marker);
    });
  }

  return marker;
}

function mapReady() {
  var container = document.querySelector('#map');
  var map = new google.maps.Map(container, {
    zoom: 14, disableDefaultUI: true
  });

  getCurrentLocation(function(pos) {
    var current = new google.maps.LatLng(pos.coords.latitude,
                                         pos.coords.longitude);
    map.setCenter(current);

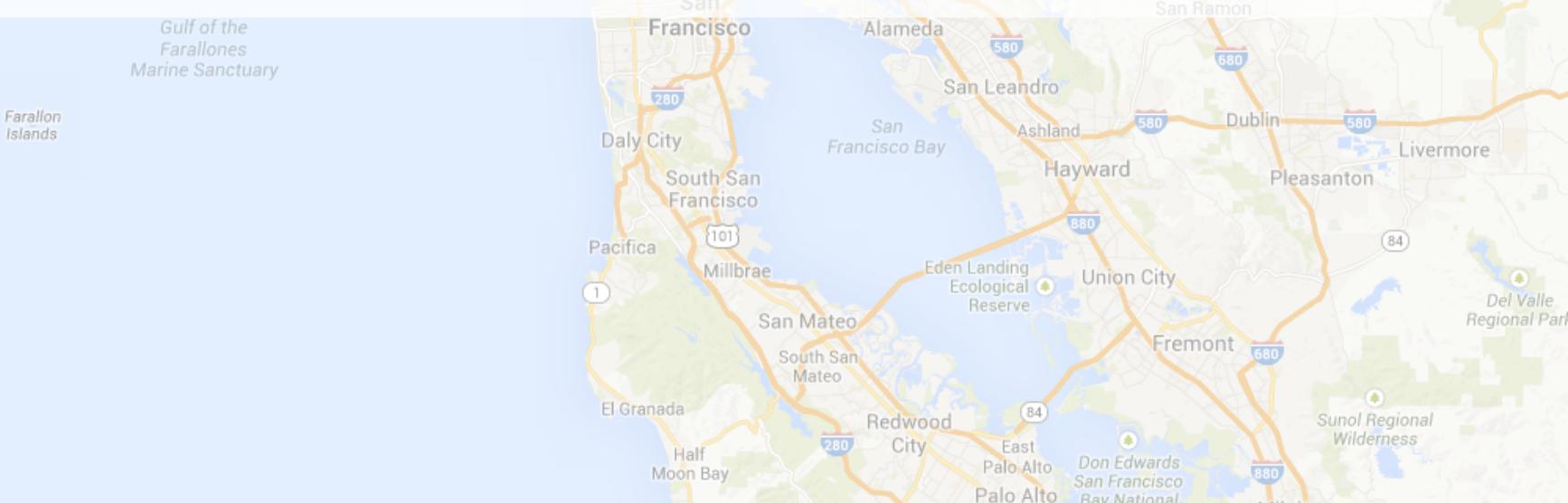
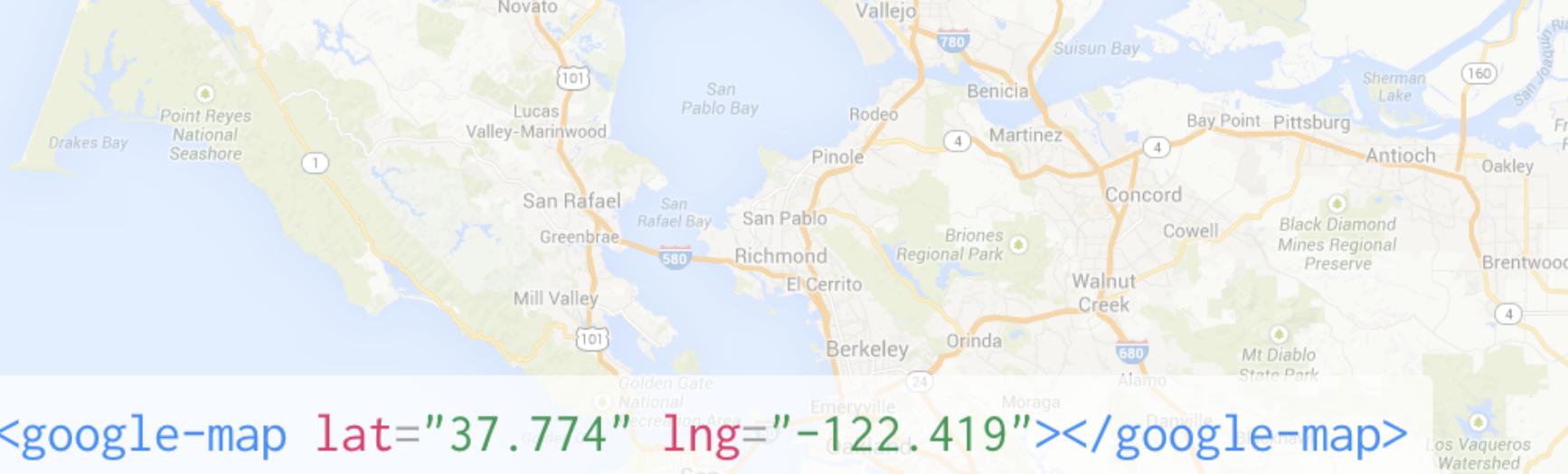
    // Re-position marker or create new one.
    if (marker) {
      marker.setPosition(map.getCenter());
    } else {
      marker = addMarker({
        position: current, map: map, title: 'Your location'
      }, '<b>Your location</b>');
    }
  });
}
```

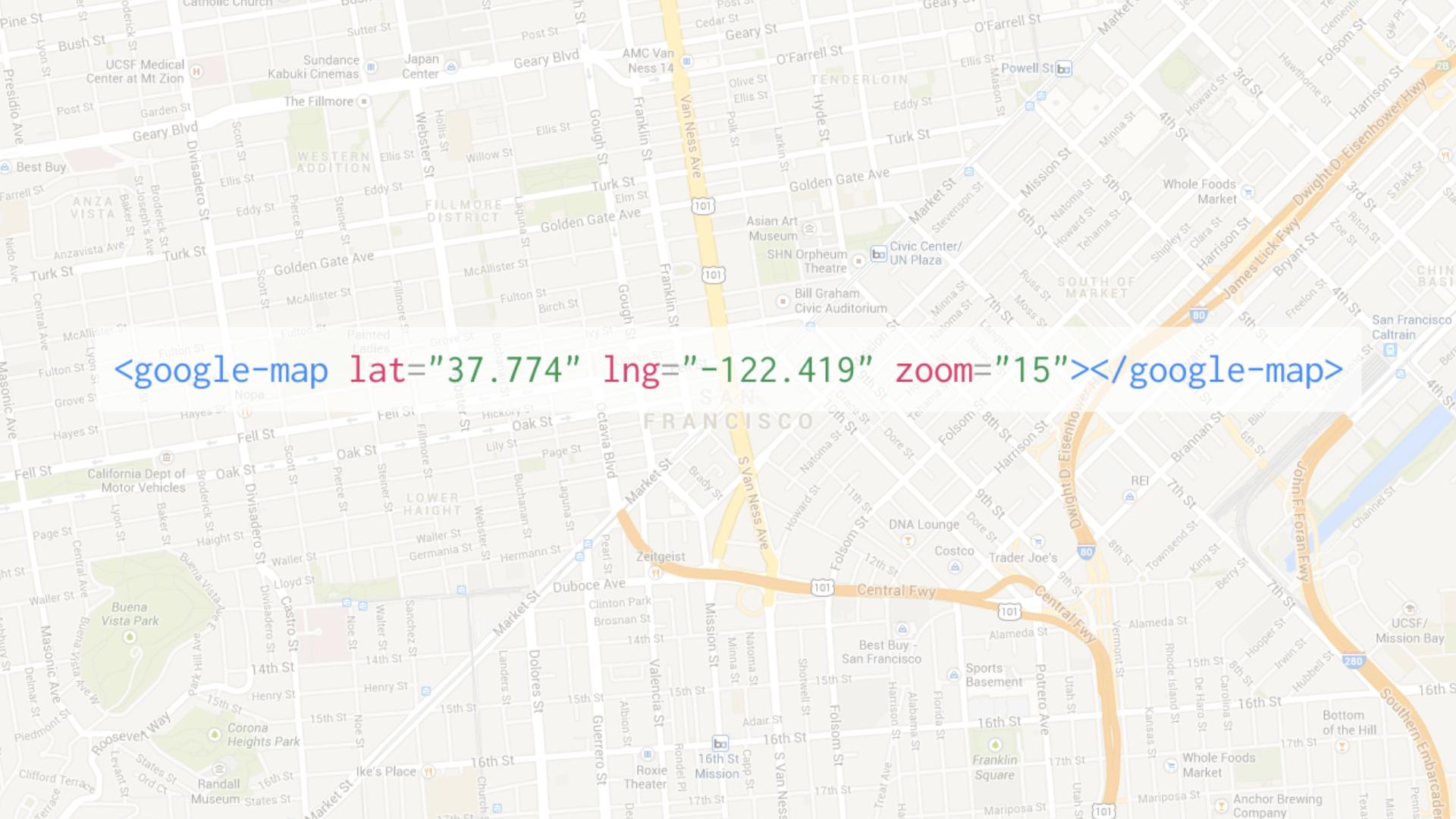
# Tanto código para um marcador

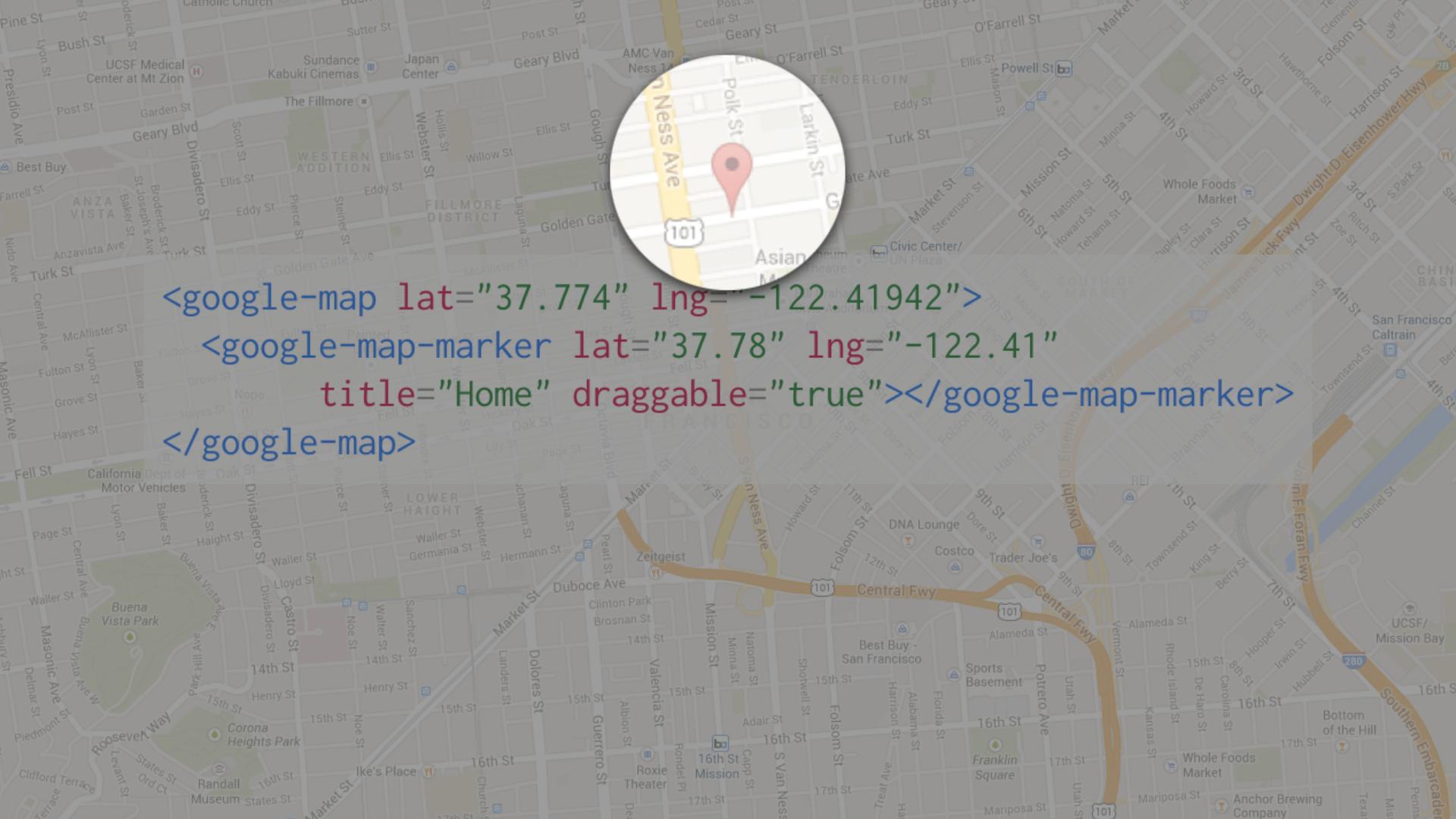
```
<google-map></google-map>
```



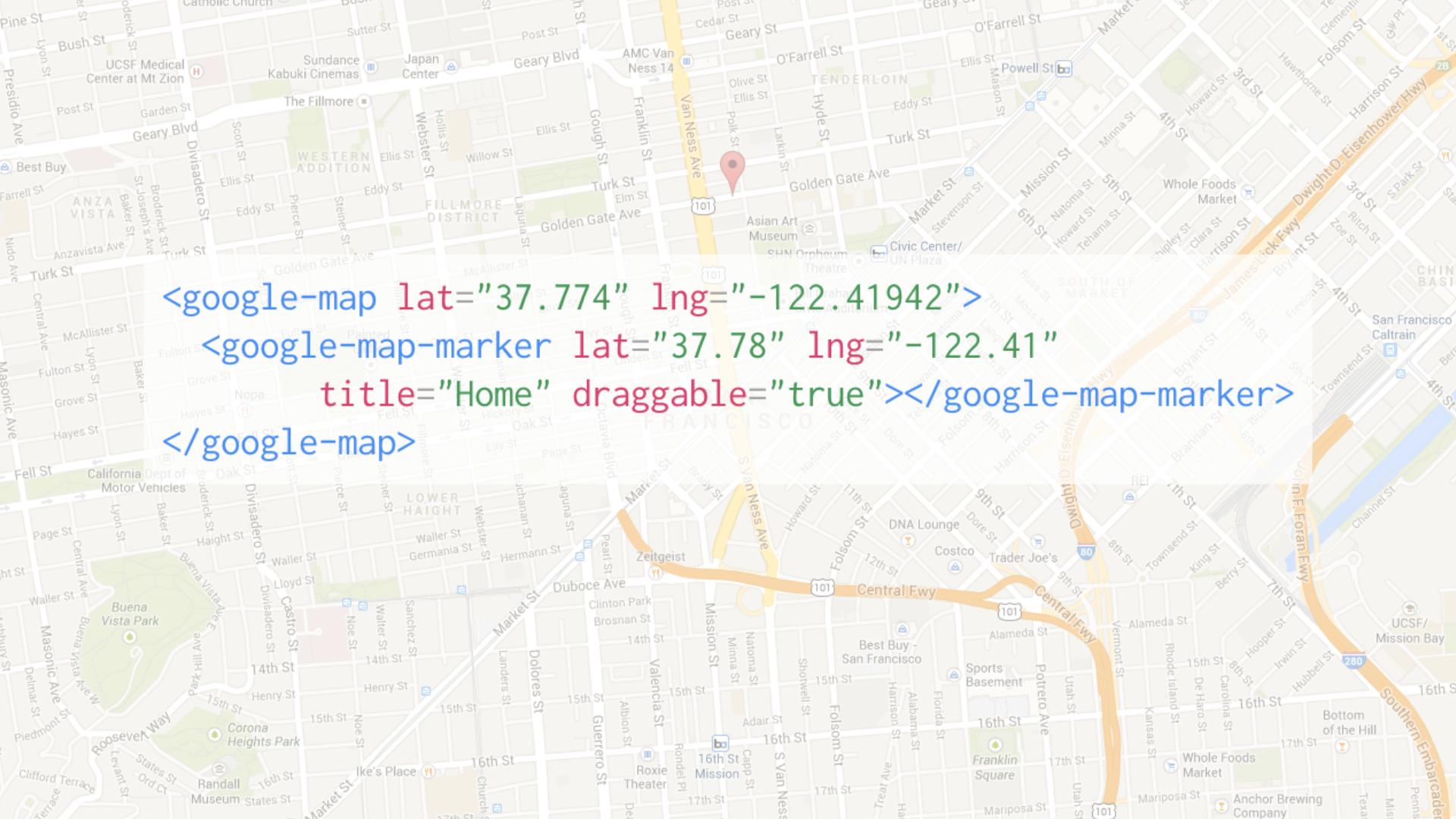
<google-map></google-map>







```
<google-map lat="37.774" lng="-122.41942">
<google-map-marker lat="37.78" lng="-122.41"
    title="Home" draggable="true"></google-map-marker>
</google-map>
```



```
<google-map lat="37.774" lng="-122.41942">
<google-map-marker lat="37.78" lng="-122.41"
    title="Home" draggable="true"></google-map-marker>
</google-map>
```

# Google Web Components

A collection of web components for Google APIs & services. Built with Polymer.

[g+1](#) 387 | [Tweet](#) 280 | [Like](#) 110

`<google-analytics>`

[DEMO](#) [DOCS](#) [GITHUB](#)

```
bower install GoogleWebComponents/google-analytics [--save]
```

`<google-apis>`

[DEMO](#) [DOCS](#) [GITHUB](#)

```
bower install GoogleWebComponents/google-apis [--save]
```

`<google-calendar>`

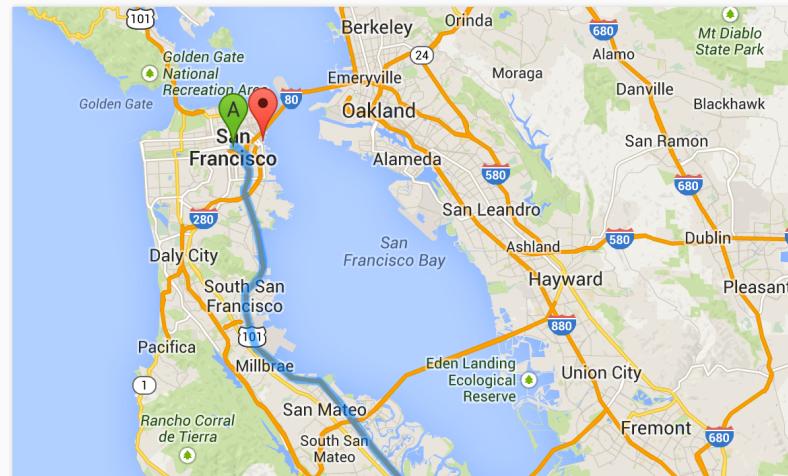
[DEMO](#) [DOCS](#) [GITHUB](#)

```
bower install GoogleWebComponents/google-calendar [--save]
```

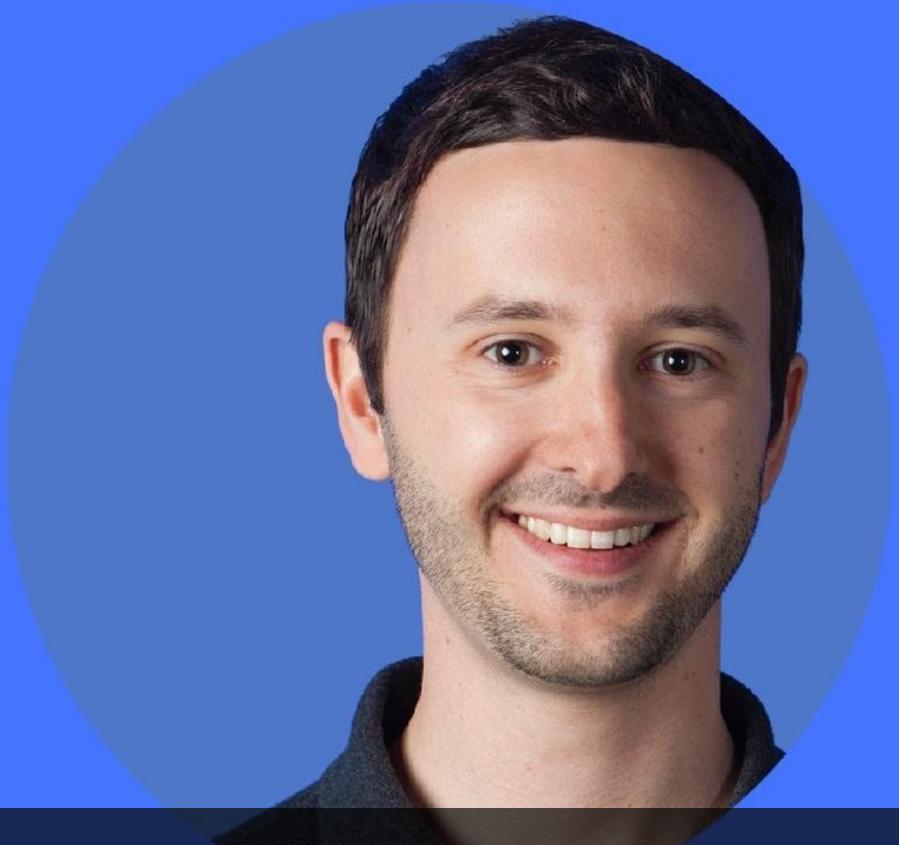
`<google-sheets>`

[DEMO](#) [DOCS](#) [GITHUB](#)

```
bower install GoogleWebComponents/google-sheets [--save]
```



# I/O Bytes Develop



[youtube.com/watch?v=eORqFaf\\_QzM](https://youtube.com/watch?v=eORqFaf_QzM)

# PubNub



Blog

Support

Network Status

GET Meeting



SOLUTIONS

PRODUCTS

DEVELOPERS

PRICING

CUSTOMERS



# PubNub Global Data Stream Network

Realtime Communication for IoT, Mobile, and Web

Get Started Now

# Mão na Massa

Junte-se a revolução

# Aprenda



# WebComponents.org

a place to discuss and evolve web component best-practices

## WHAT?

WebComponents.org is where pioneers and community-members of the Web Components ecosystem (like *Polymer*, *X-tags*, and other interested parties) document web components best practices so that others can follow the same path instead of needlessly striking out on their own.

## BROWSER SUPPORT

CHROME   OPERA   FIREFOX   SAFARI   IE



## SPECS



### WEB COMPONENTS

This document is a non-normative reference, which provides an overview of Web Components. It summarizes the normative information in the respective specifications in easy-to-digest prose with illustrations.



### CUSTOM ELEMENTS

This specification describes the method for enabling the author to define and use new types of DOM elements in a document.



### HTML IMPORTS

HTML Imports are a way to include and reuse HTML documents in other HTML documents.

## ARTICLES



### WEB COMPONENTS BEST PRACTICES

Web Components (WC) are a new set of web platform features that enable developers to build applications in a declarative, composable way. The following is an initial list of best practices we advocate component authors consider to ensure their elements are good citizens in the Web Component ecosystem.

[Read More >](#)

[see all articles](#)



# Welcome to the future

Web Components usher in a new era of web development based on encapsulated and interoperable custom elements that extend HTML itself. Built atop these new standards, Polymer makes it easier and faster to create anything from a button to a complete application across desktop, mobile, and beyond.

[GET POLYMER](#)[VIEW ON GITHUB](#)[Use Elements \(30 sec\) →](#)[Create Elements \(5 min\) →](#)[Build an app \(30 min\)](#)

```
<!-- Polyfill Web Components support for older browsers -->
<script src="components/platform/platform.js"></script>

<!-- Import element -->
<link rel="import" href="google-map.html">
```

# polymer-project.org

## Using Polymer Elements

Polymer (and all Web Components) is

1 Import element.

```
<link rel="import"  
      href="bower_components/core-iconset-svg/core-iconset-svg.html">  
  
<core-iconset-svg></core-iconset-svg> •
```



goo.gl/Ji3WdW

# Construa

**Comece com <seed-  
element>**  
[github.com/PolymerLabs/seed-element](https://github.com/PolymerLabs/seed-element)



This repository

Search or type a command



Explore Gist Blog Help



robododson



PolymerLabs / seed-element



Unwatch

42



Star

75



Fork

11

Polymer element boilerplate <http://www.polymer-project.org/docs/start/reusableelements.html> — Edit

56 commits

2 branches

0 releases

7 contributors



branch: master

seed-element / +



Update Polymer to 0.3.4



addyosmani authored 4 days ago

latest commit 4b144241fd



tests Fixed encoding of file

8 days ago



.bowerrc Added trailing newline to file

8 days ago



README.md Converted DOS file endings to unix

8 days ago



bower.json Update Polymer to 0.3.4

4 days ago



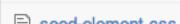
demo.html Add meta viewport tag

3 months ago



index.html Add meta viewport tag

3 months ago



seed-element.css remove hidden unicode char at beg of file, also add missing newline a...

2 months ago



seed-element.html Update example docs with additional support pragmas

a month ago



README.md

# seed-element

See the [component page](#) for more information.

## Getting Started

Code

Issues

4

Pull Requests

0

Wiki

Pulse

Graphs

Settings

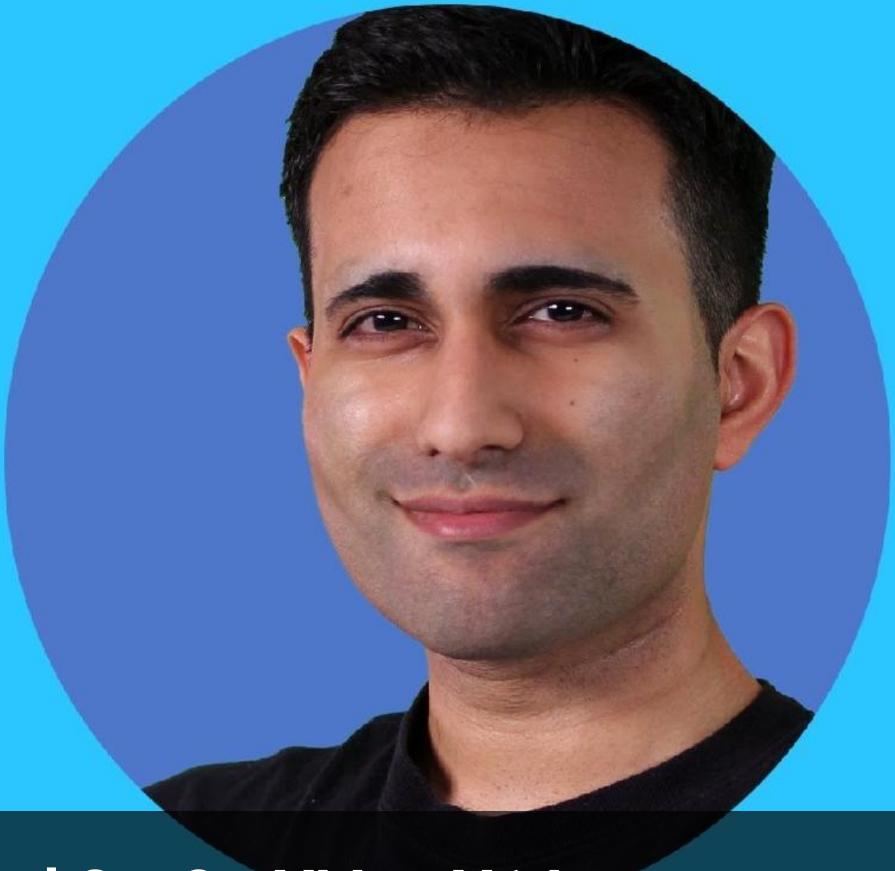
HTTPS clone URL

<https://github.com> You can clone with [HTTPS](#), [SSH](#), or [Subversion](#). 

Clone in Desktop

Download ZIP

I/O Bytes  
Develop



[youtube.com/watch?v=2toYLLcoY14](https://youtube.com/watch?v=2toYLLcoY14)



Filter

index.html



PolymerApp

▶ api

▶ components

▶ images

▶ post-service

▶ starter

▶ step-2

▶ step-3

▶ step-4

▶ step-5

.bowerrc

.gitignore

bower.json

README.md

# Chrome Dev Editor



```
27<body unresolved fullbleed layout vertical>
28  <core-header-panel flex>
29
30    <core-toolbar>
31      <paper-tabs class="fit" selected="messages" flex>
32        <paper-tab name="messages">Messages</paper-tab>
33        <paper-tab name="favorites">Favorites</paper-tab>
34      </paper-tabs>
35    </core-toolbar>
36
37  <!-- main page content will go here -->
38  <div class="container" layout vertical center>
39
40    <post-list show="messages"></post-list>
41
42  </div>
```

<http://goo.gl/UjLvb2>

# Compartilhe!



# Custom Elements

a web components gallery for modern web apps



Tweet

1,312



Like

1k



G+

325



Star

309

## What are Web Components?

Web Components are a collection of standards which are working their way through the W3C. They enable truly encapsulated and reusable components for the web. And if you think HTML5 changed the web, wait to see what Web Components will do.

For lots more information about it, including articles and presentations, check out [webcomponents.org](http://webcomponents.org).

— Zeno Rocha, project lead.

## Submit your own

Got a great idea for a custom element? Awesome! There are boilerplates for [Polymer](#), [X-Tag](#), and [VanillaJS](#) that you can fork and get up and running with a simple component.

When you're ready to go, submit it to the form below and it'll appear on this site for others to play and use!

<https://github.com/me/my-element>

Submit

## Latest elements

### basic-synth

A basic 8-bit synthesizer bound to the <audio>-tag.

### yin-yang-cat

Use the Gamepad API to control a cat.

## Most popular elements

### customelements.io

A custom element for flexible GIF playback

### voice-elements

Use Gamepad API to control the Web Speech API that allows you to

```
{  
  "name": "my-element",  
  "version": "0.0.0",  
  "description": "My awesome Custom Element",  
  "license": "MIT",  
  "keywords": [  
    "web-components"  
  ],  
  "ignore": [  
    "**/*.*,  
    "node_modules",  
    "bower_components"  
  ]  
}
```

## bower.json

A photograph taken from space, showing the dark void of space above and the blue and white mottled surface of Earth below. In the upper left quadrant, a small satellite or module is visible against the black background.

# EXPLORE

<obrigado>