ESCUELADEVROCK.COM

GDG Río de La Plata

Polymer Toolbox + Firebase:

Construyendo Aplicaciones en la web moderna

@antirockstars

@jonatanariste

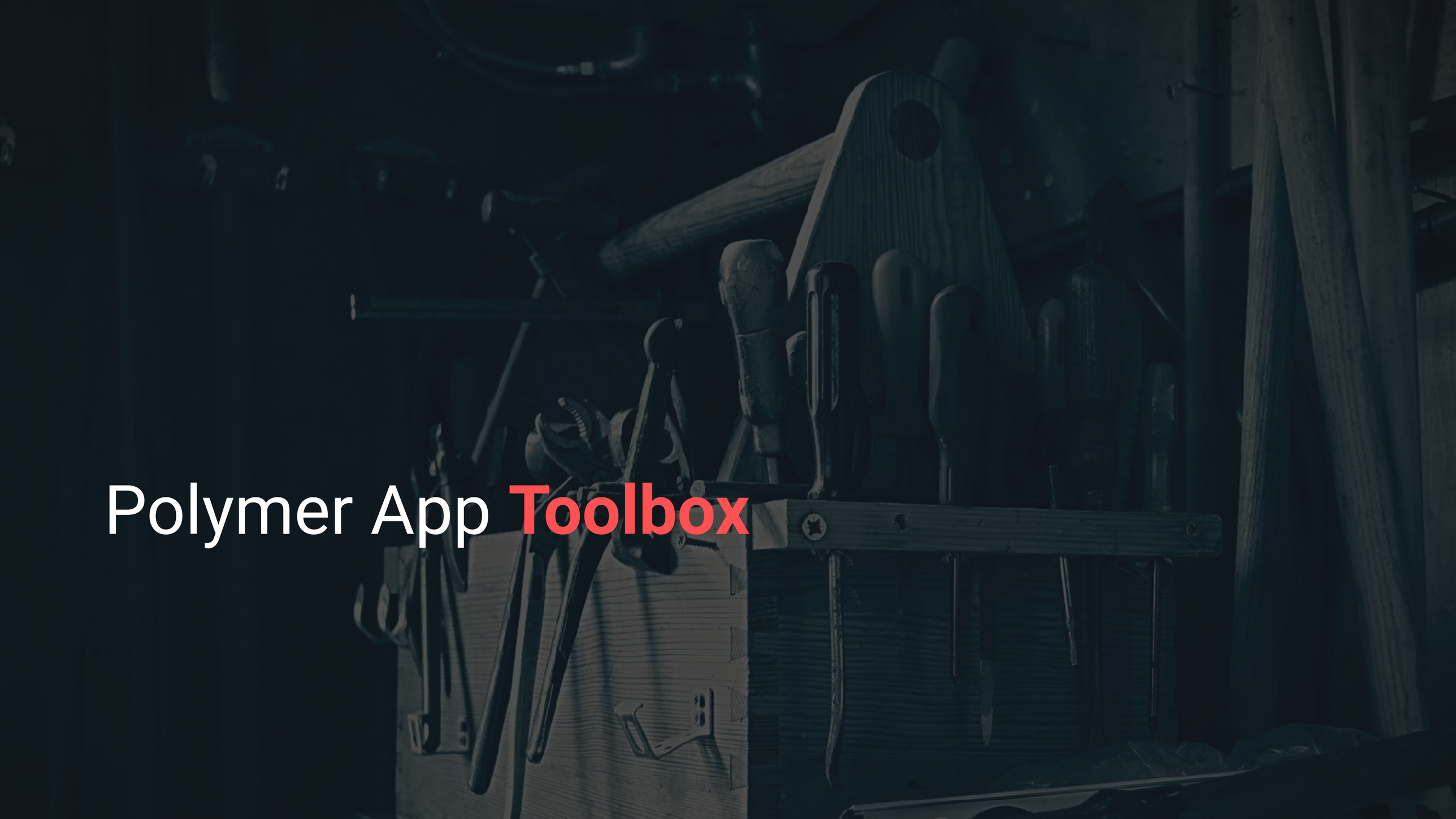
Proveer herramientas y librerías usando las ultimas características de la plataforma web para construir
la próxima generación de aplicaciones.

Proveer herramientas y librerías usando las ultimas características de la plataforma web para construir **progressive web apps.**

Utilizar la plataforma web para brindar **grandes experiencias de usuario.**

Usá la plataforma
para construir grandes aplicaciones

- Carga minima e indispensable
- Sobrecarga minima
- Offline-first
- Acortar el tiempo de la primera interacción



Polymer App **Toolbox**

Polymer App **Toolbox**

Layout

Routing

Localization

Storage

CLI

Polymer App **Toolbox**

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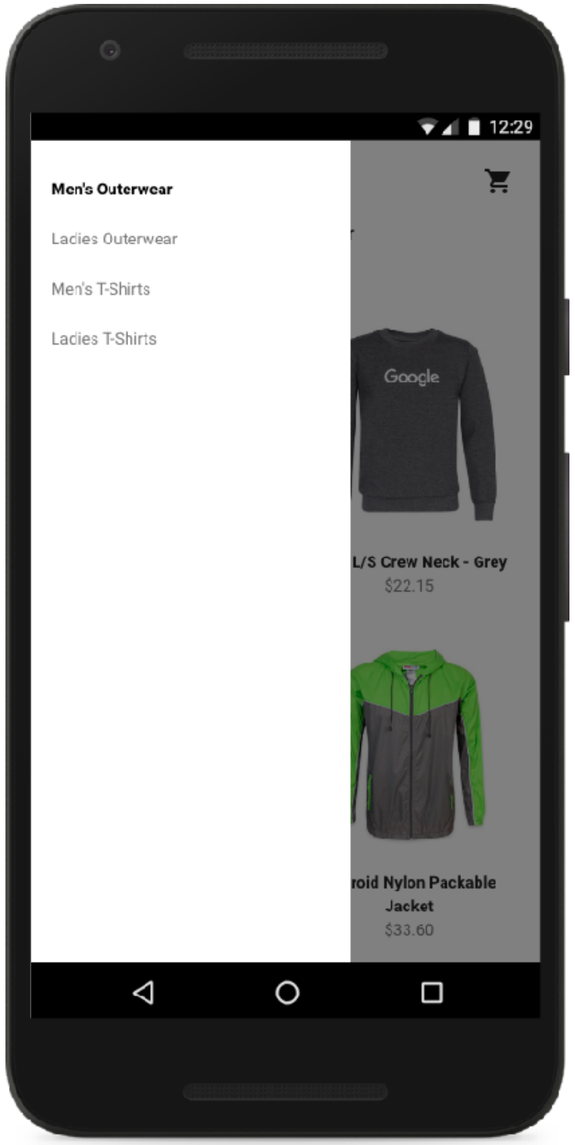
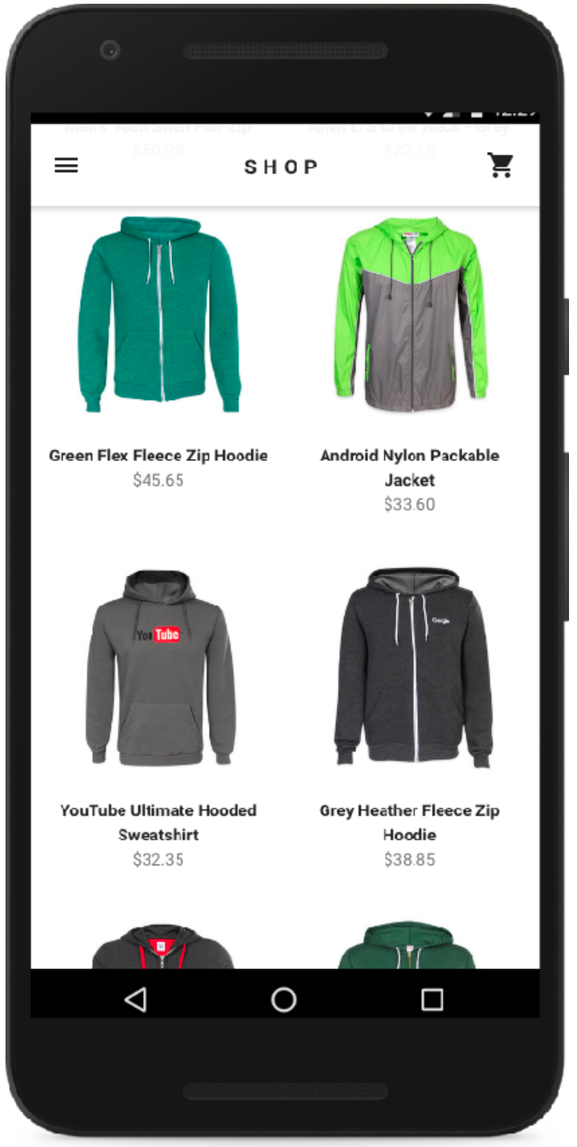
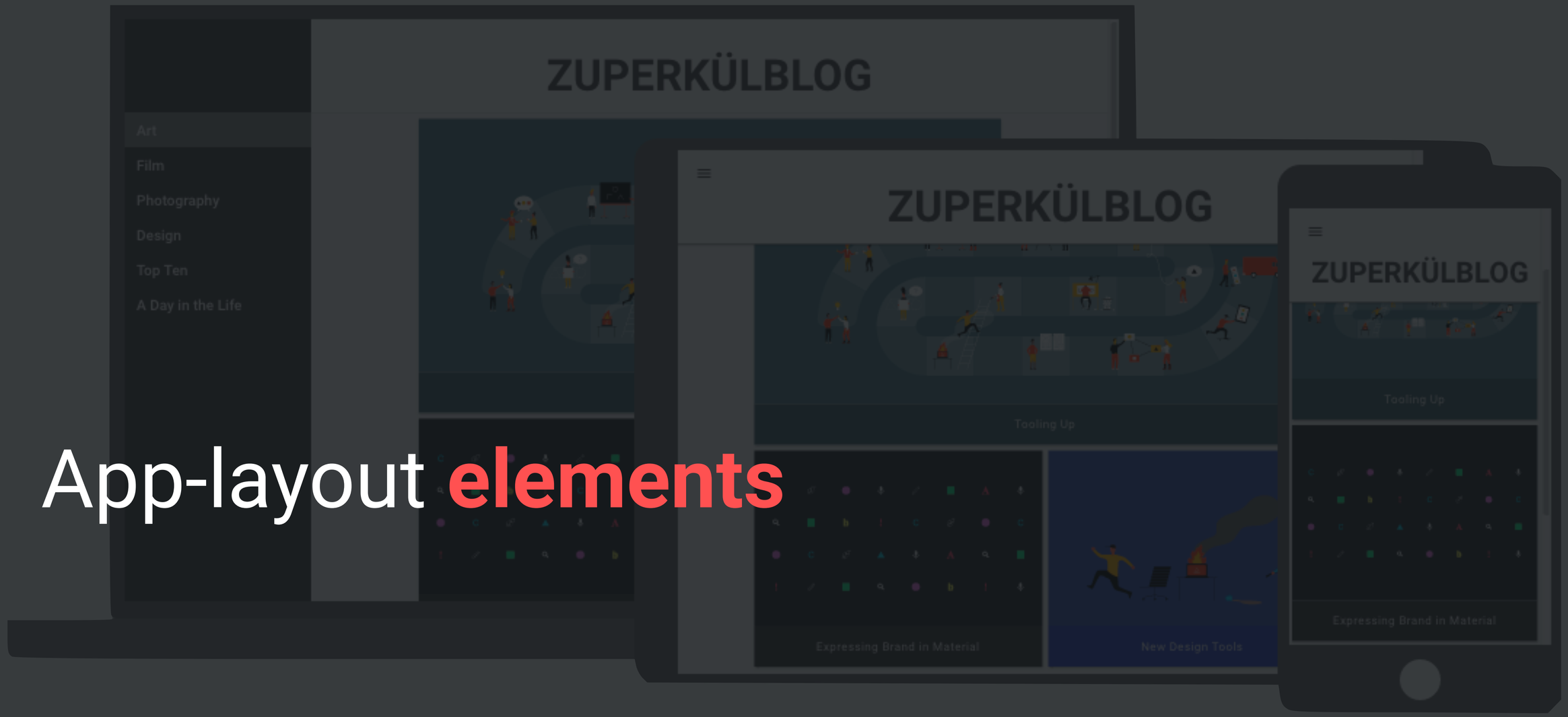
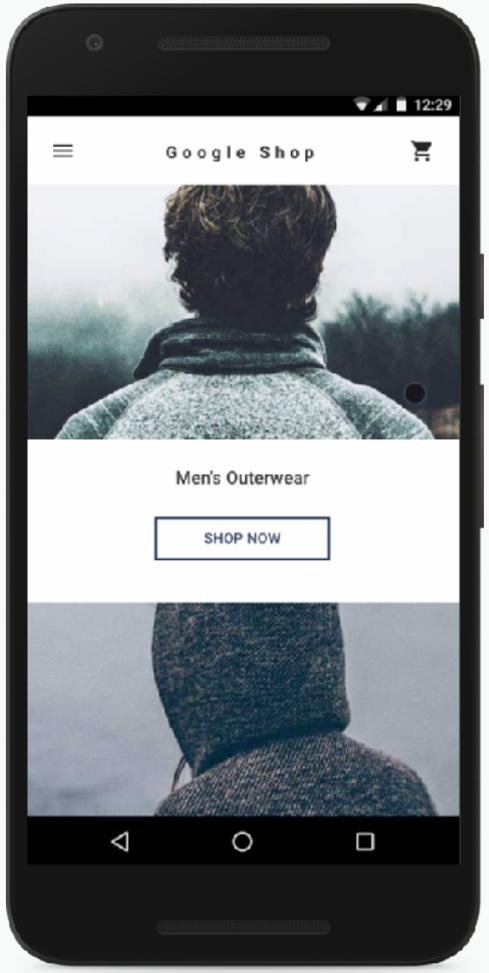
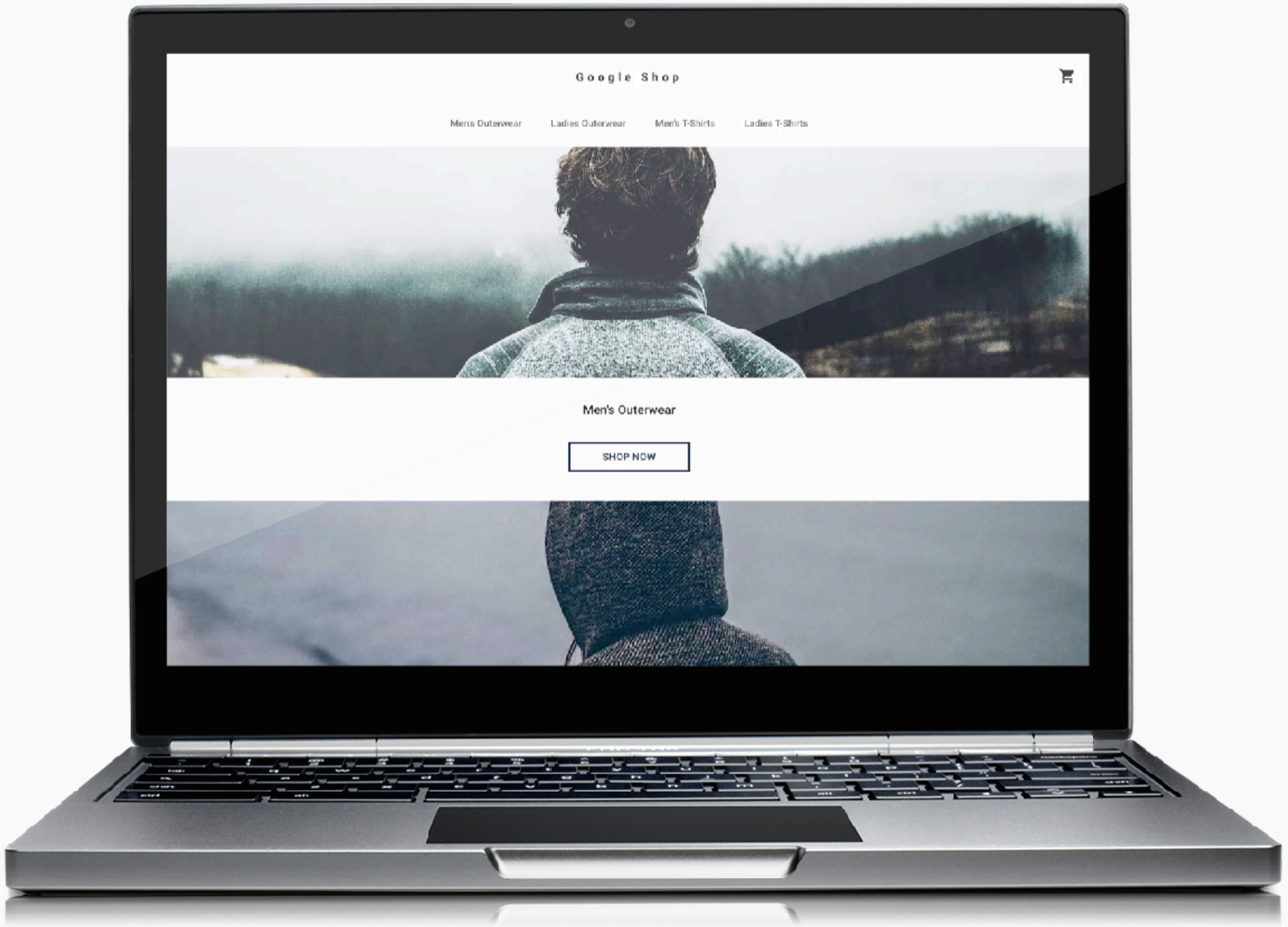

12:29
Men's Outerwear
Ladies Outerwear
Men's T-Shirts
Ladies T-Shirts
Google
L/S Crew Neck - Grey
$22.15
oid Nylon Packable
Jacket
$33.60


SHOP
Green Flex Fleece Zip Hoodie
$45.65
Android Nylon Packable
Jacket
$33.60
YouTube Ultimate Hooded
Sweatshirt
$32.35
Grey Heather Fleece Zip
Hoodie
$38.85



App-layout **elements**


12:29
Google Shop
Men's Outerwear
SHOP NOW


Google Shop
Mens Outerwear
Ladies Outerwear
Men's T-Shirts
Ladies T-Shirts
Men's Outerwear
SHOP NOW

```
<app-drawer-layout>

    <app-drawer>
      <app-toolbar>App name</app-toolbar>
    </app-drawer>

    <app-header-layout>

      <app-header fixed effects="waterfall">
        <app-toolbar>
          <paper-icon-button icon="menu" drawer-toggle></paper-icon-button>
          <div spacer title>My Drive</div>
        </app-toolbar>
      </app-header>

      <sample-content size="100"></sample-content>

    </app-header-layout>

  </app-drawer-layout>
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```
<app-drawer-layout fullbleed>

    <app-drawer>
      <app-toolbar>App name</app-toolbar>
    </app-drawer>

    <app-header-layout has-scrolling-region>

      <app-header condenses reveals effects="waterfall">
        <app-toolbar>
          <paper-icon-button icon="menu" drawer-toggle></paper-icon-button>
        </app-toolbar>
        <app-toolbar></app-toolbar>
        <app-toolbar>
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      </app-header>

      <sample-content size="100"></sample-content>

    </app-header-layout>

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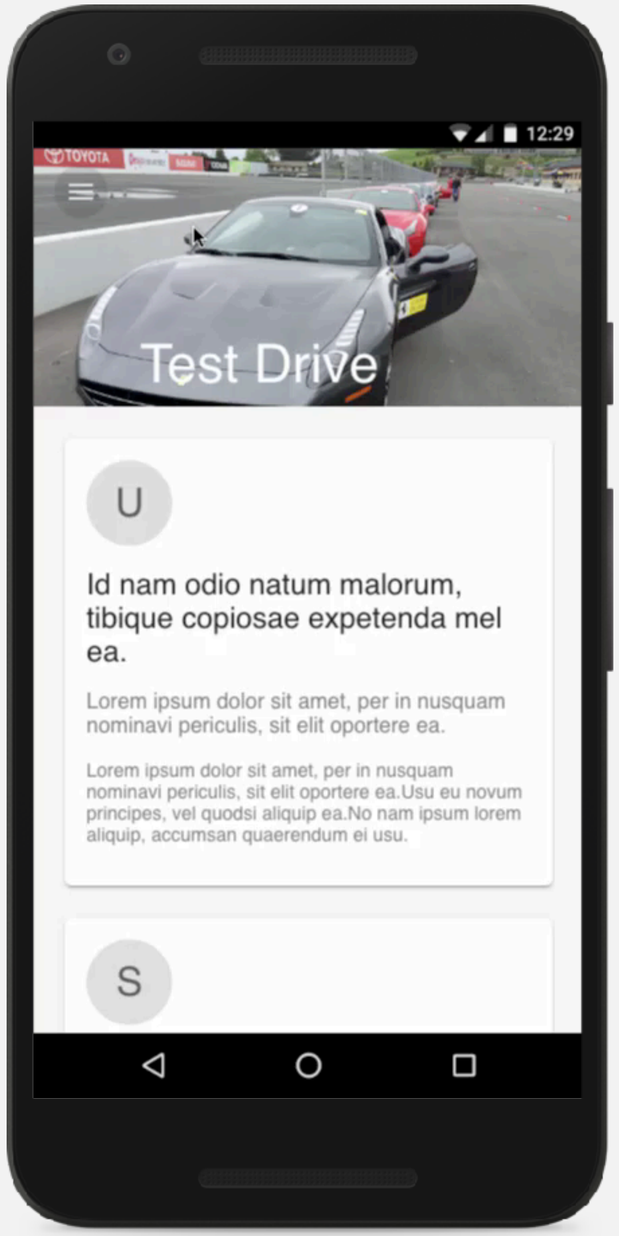

12:29
Test Drive
U
Id nam odio natum malorum, tibique copiosae expetenda mel ea.
Lorem ipsum dolor sit amet, per in nusquam nominavi periculis, sit elit oportere ea.
Lorem ipsum dolor sit amet, per in nusquam nominavi periculis, sit elit oportere ea.Usu eu novum principes, vel quodsi aliquip ea.No nam ipsum lorem aliquip, accumsan quaerendum ei usu.
S

Polymer App **Toolbox**

Layout

Routing

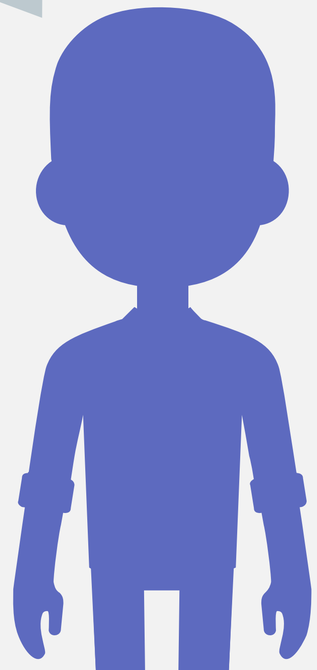
Localization

Storage

CLI

Nececidad: Modular, simple routing

¿Qué router **tengo que usar?**

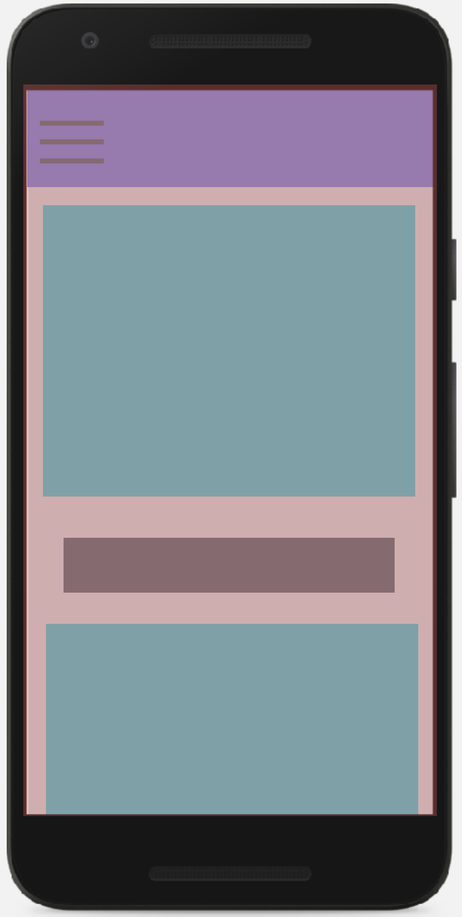


¡Usá el router que quieras! **¡Hay web components!**

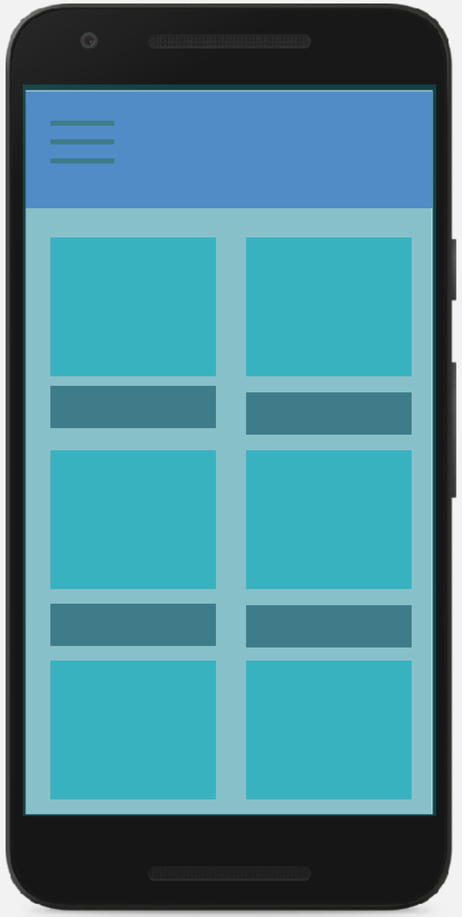
No, en serio, **qué router?**

<app-route>

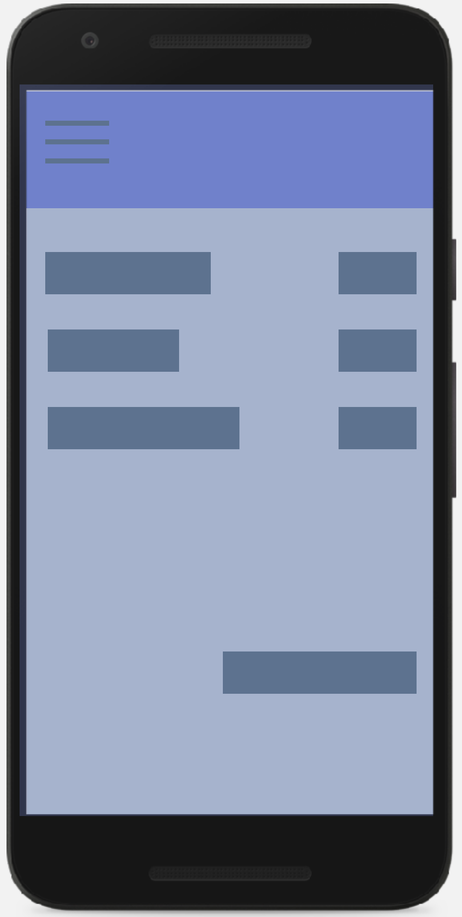
/



/items

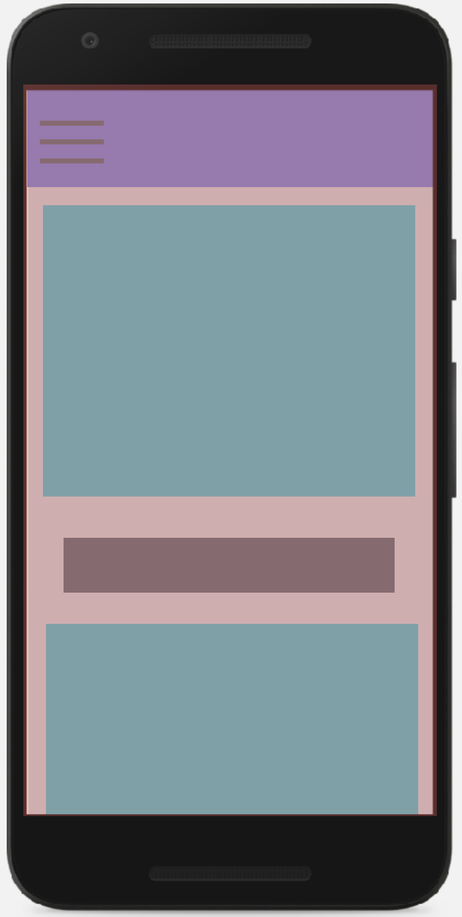


/cart



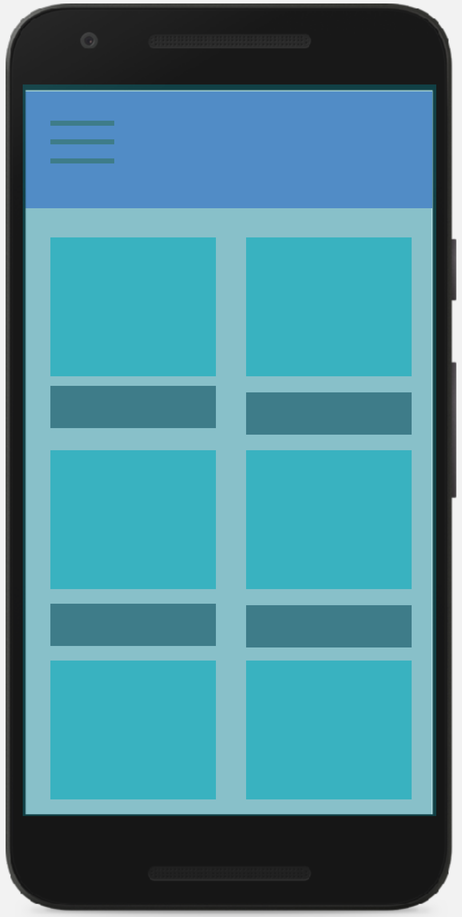
/

<app-route path="/">



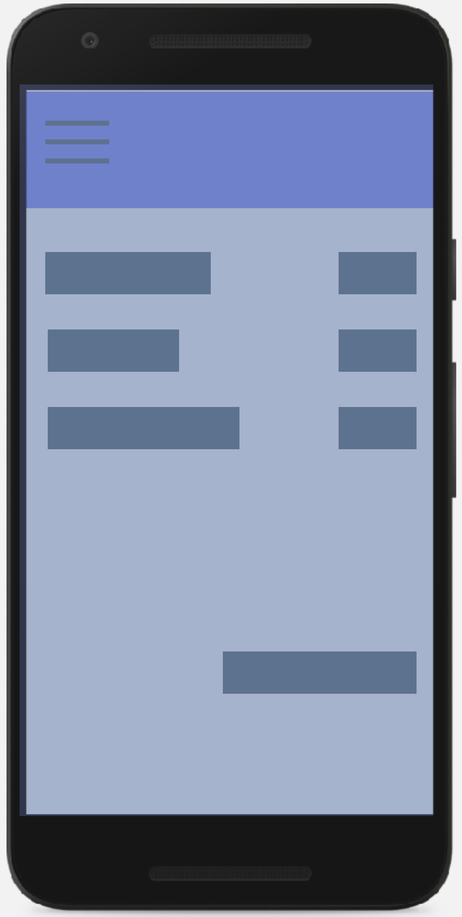
/items

<app-route path="/items">



/cart

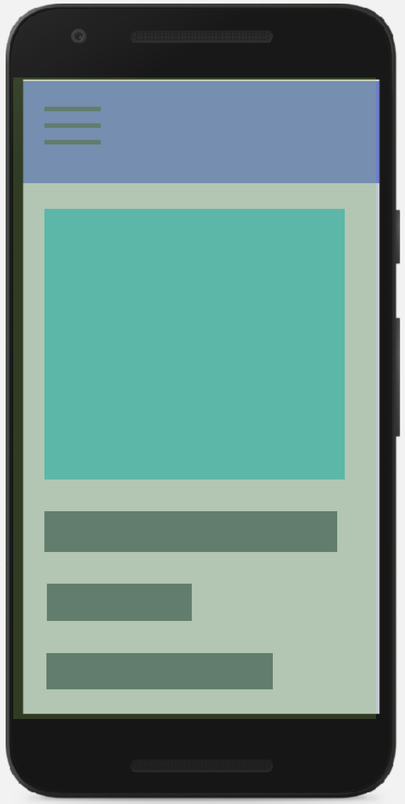
<app-route path="/cart">



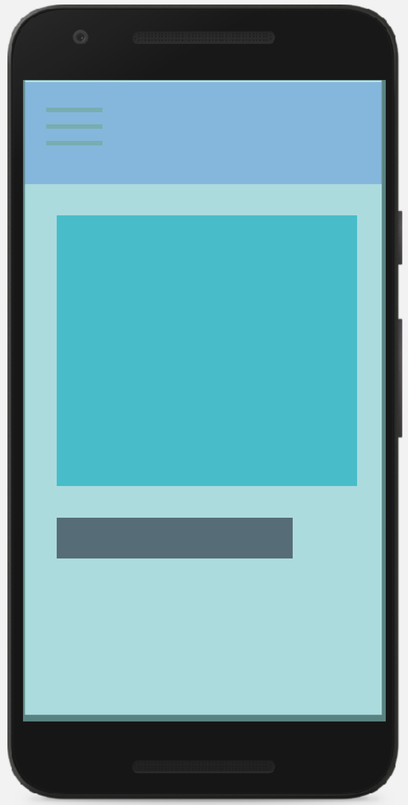
/items/detail/[itemId]

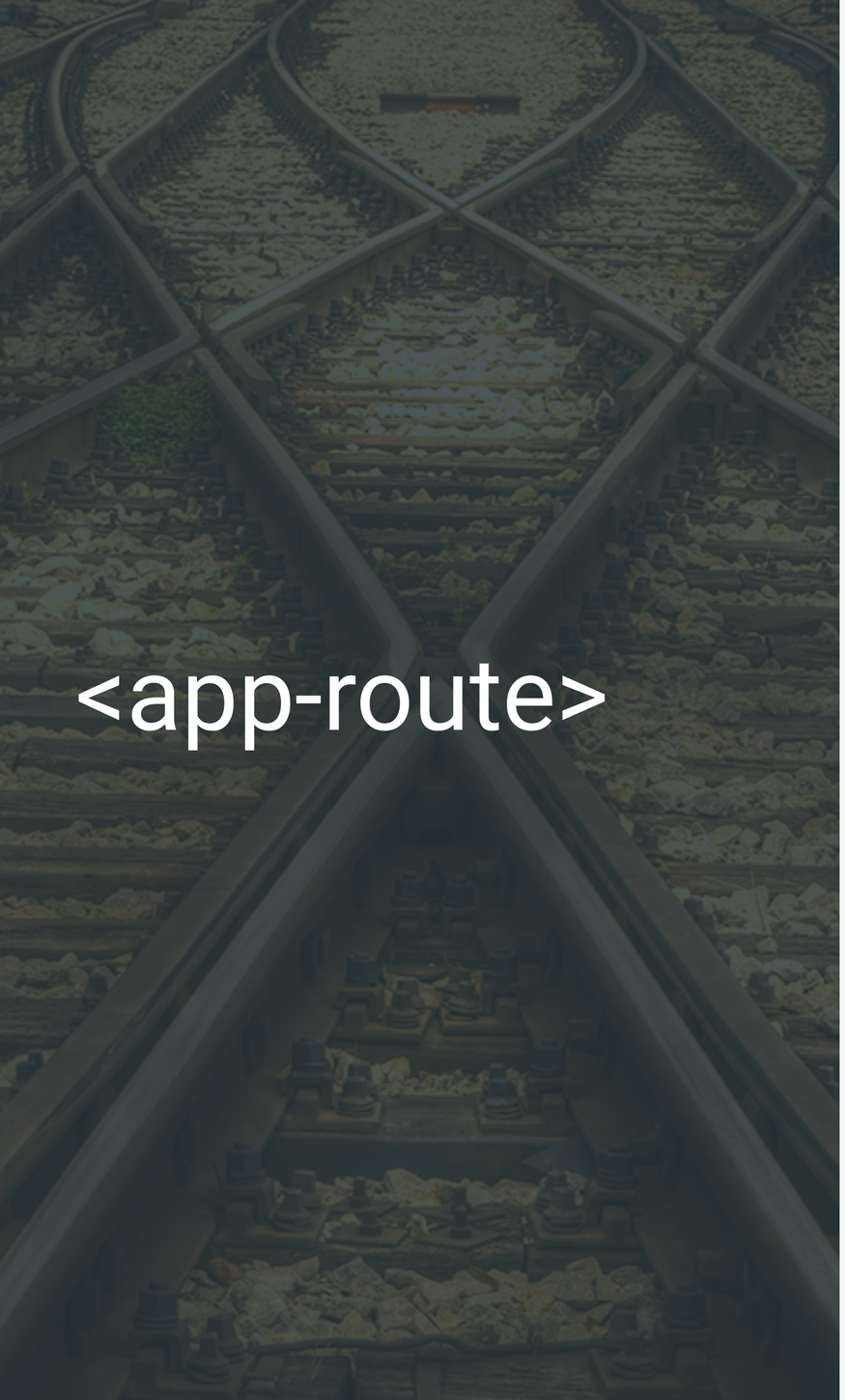
```
<app-route path="/items/detail/:itemId">
```

/items/detail/foo



/items/detail/bar





<app-route>

Flexible

Modular

Relacionado a componentes

Polymer App **Toolbox**

Layout

Routing

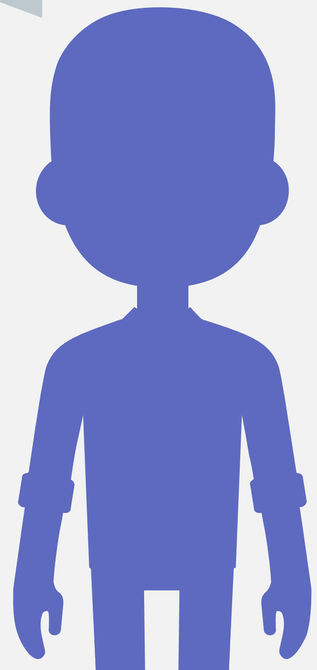
Localization

Storage

CLI

Necesidad: Un modulo de localización idiomática

¿Como puedo traducir **mi app?**



¡Usá la herramienta que quieras!
¡**Hay web components!**

No en serio, **¿que l10n?**

app-localize-behavior

app-localize-behavior

*con el objecto **Intl***

app-localize-behavior

```
Polymer({
  is: "x-app",
  behaviors: [
    Polymer.AppLocalizeBehavior
  ],
  properties: {
    language: {
      value: 'en'
    },
    resources: {
      value: function() {
        return {
          'en': { 'hello': 'My name is {name}.' },
          'fr': { 'hello': "Je m'apelle {name}." }
        }
      }
    }
  }
});
```

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        }
      }
    }
  }
});
```

app-localize-behavior

```
<dom-module id="x-app">
  <template>
    <div>{{localize('hello', 'Batman')}}</div>
  </template>
</dom-module>
```

Translation and localization

Hello!
My name is Batman
I have 10,000 cats. Almost 42% of them are black.
Sale begins Dec 31, 1969, at 4:00 PM. Everything is $10.00.

```
localize('greeting')
localize('intro', 'name', 'Batman')
localize('cats', 'numCats', 10000, 'pctBlack', 0.42)
localize('sale', 'start', 150, 'time', 15, 'price', 10)
```

Plurals and genders

no apple / one apple/ 3 apples
Robin ate a banana at his house.
Robin ate no bananas at her house.
Robin ate 4 bananas at their house.

```
localize('fruit', 'num', 0) / localize('fruit', 'num', 1) /
localize('fruit', 'num', 3)
localize('bananas', 'name', 'Robin', 'gender', 'male', 'num', 1)
localize('bananas', 'name', 'Robin', 'gender', 'female', 'num', 0)
localize('bananas', 'name', 'Robin', 'gender', 'other', 'num', 4)
```

Polymer App **Toolbox**

Layout

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CLI

Necesitad: Integrar información

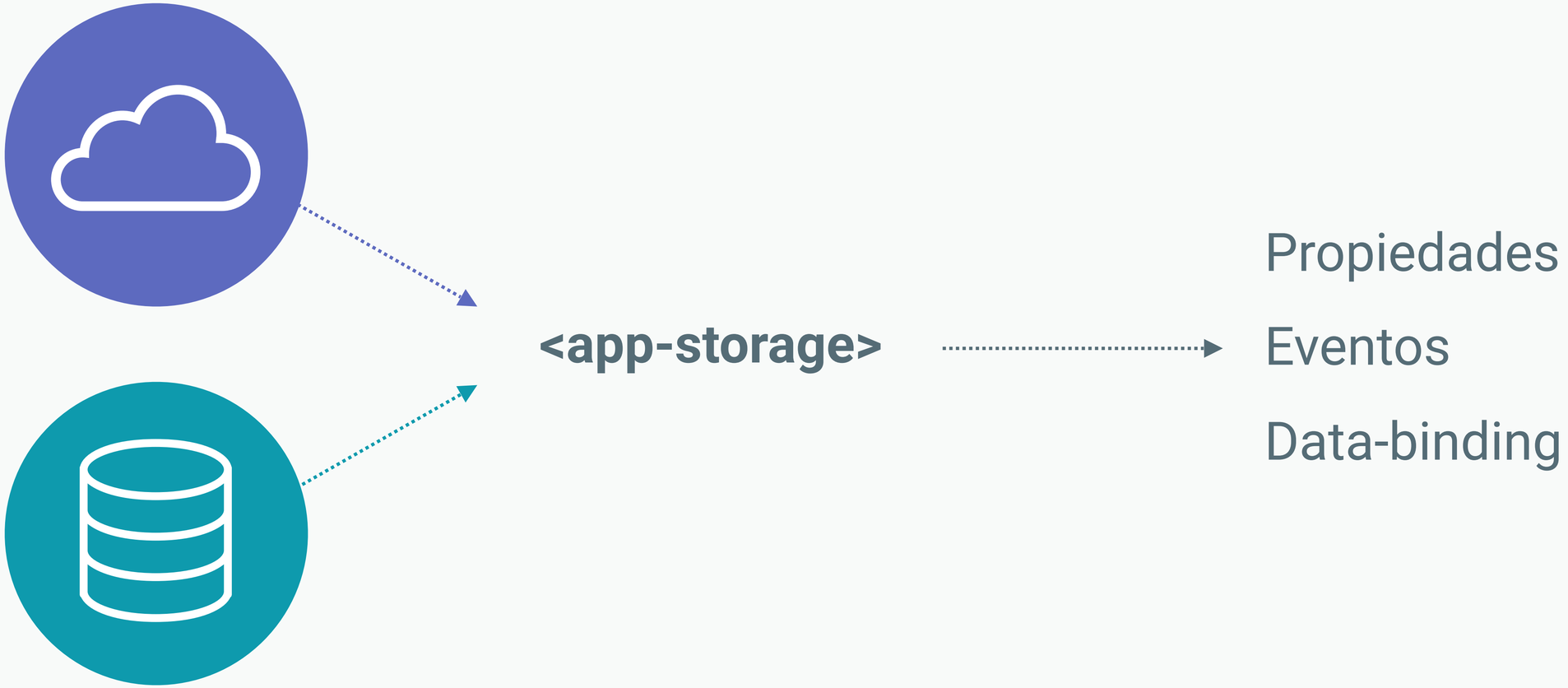
Cómo conecto
data a mi app?

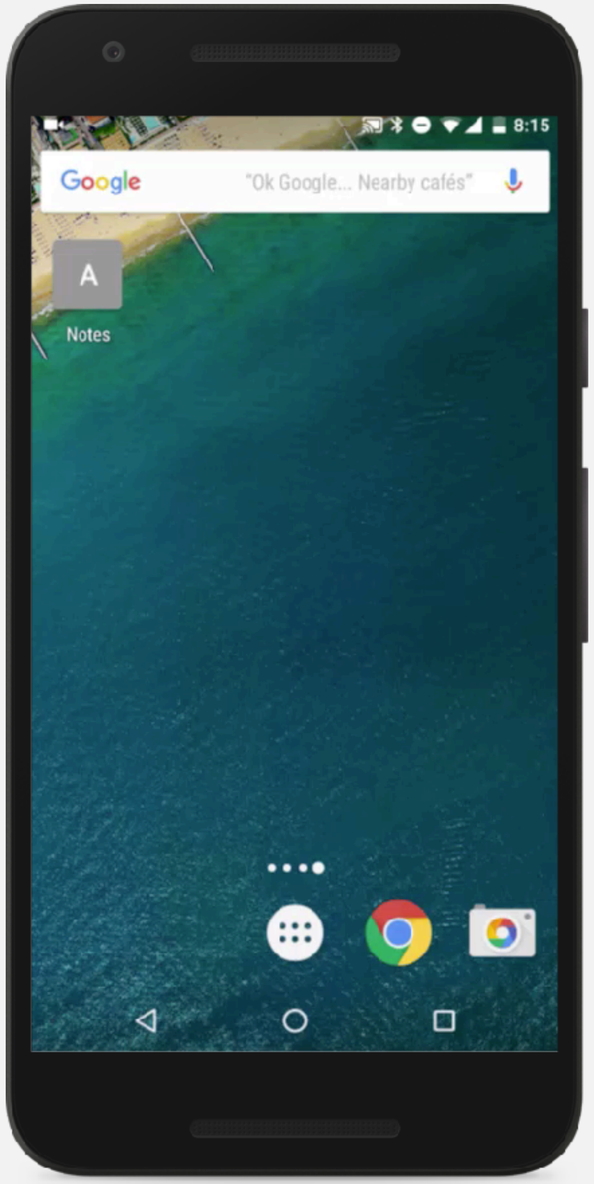
¡Como quieras!
¡Hay web components!

No, en serio,
¿Cómo?

app-storage

Integración de datos simple con simple data binding




8:15
Google
"Ok Google... Nearby cafés"
A
Notes

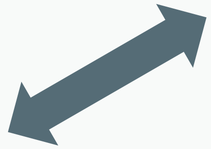
<tu-cloud-api>
implementación
<app-storage>
exposición
{{data}}

<tu-app>

<app-indexdb-mirror>
implementación
<app-storage>
exposición
{{data}}

<tu-cloud-api>
implementación
<app-storage>
exposición
{{data}}

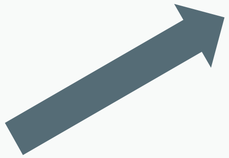
<app-indexdb-mirror>
implementación
<app-storage>
exposición
{{data}}



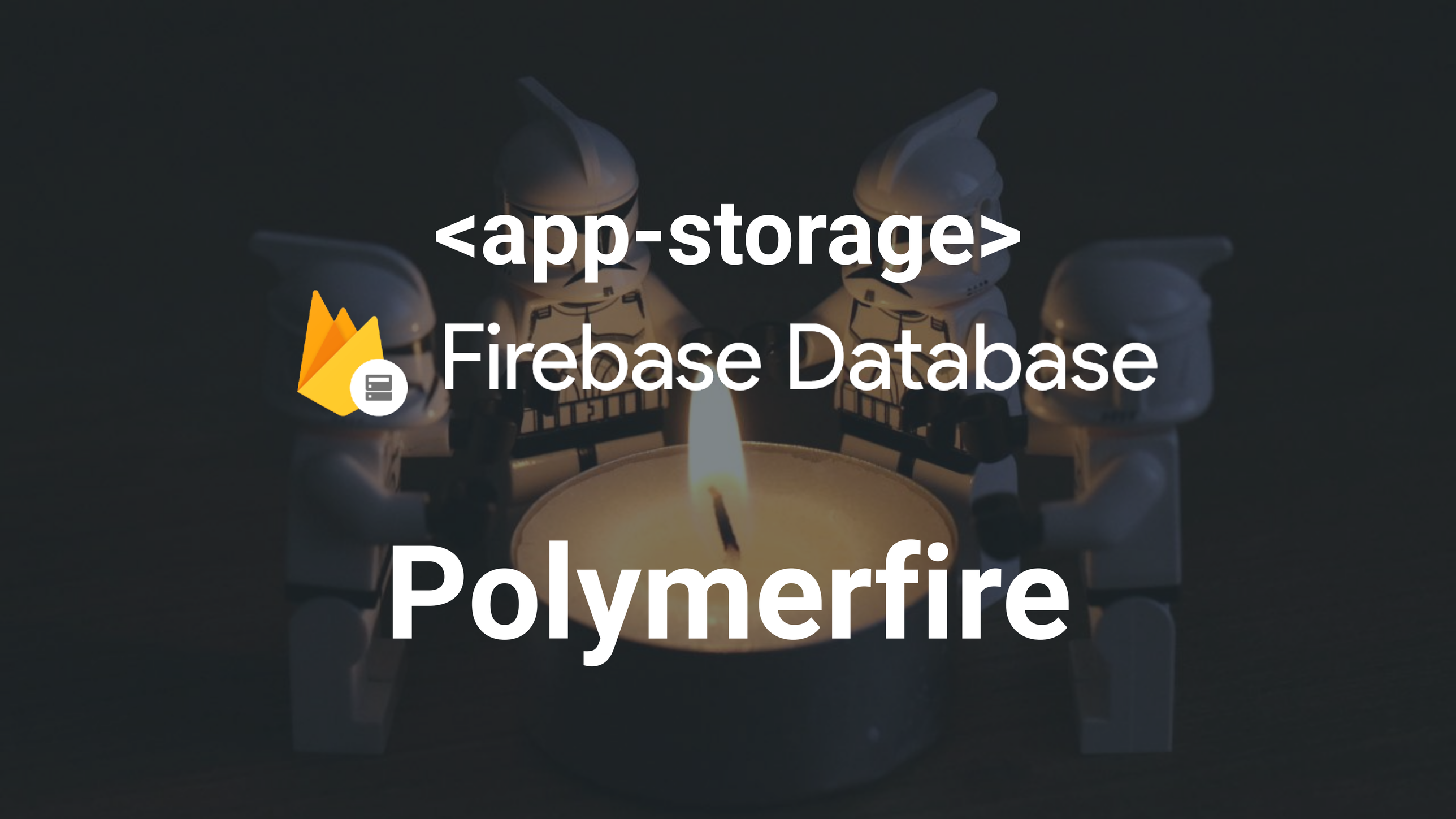
<tu-app>

<your-cloud-api>
implements
<app-storage>
exposes
{{data}}

<app-indexdb-mirror>
implements
<app-storage>
exposes
{{data}}



<your-app>


<app-storage>
Firebase Database
Polymerfire

Entrega eficiente?

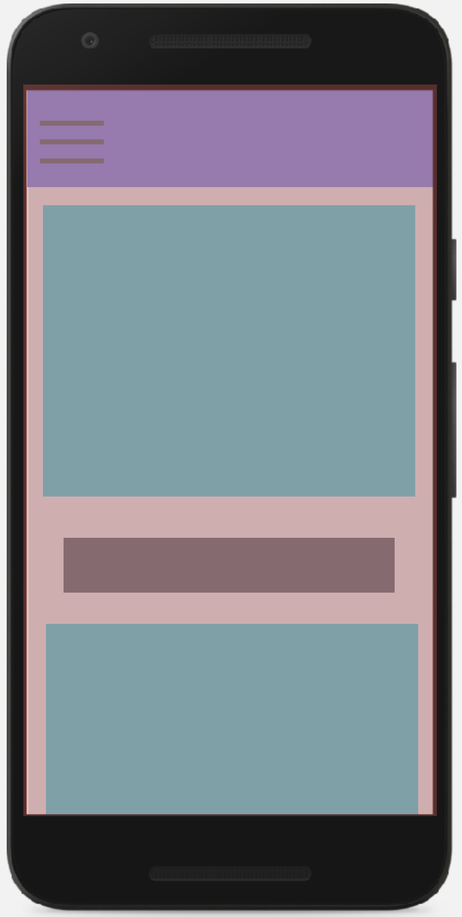
Tiempo para la
Primer Splash Screen
!=
Tiempo para la
Primera Interacción

Usá la plataforma
para servir apps.

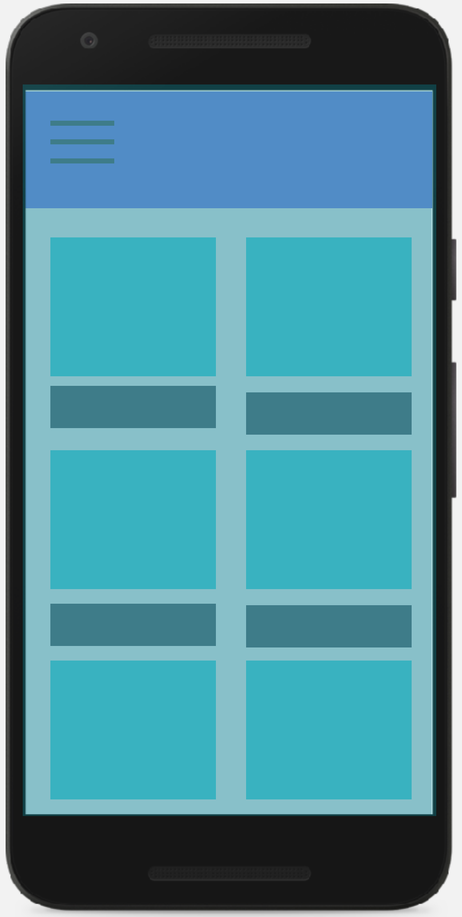
La **Plataforma Web** Moderna

- Web Components
- HTTP/2 + Server Push
- Service Worker

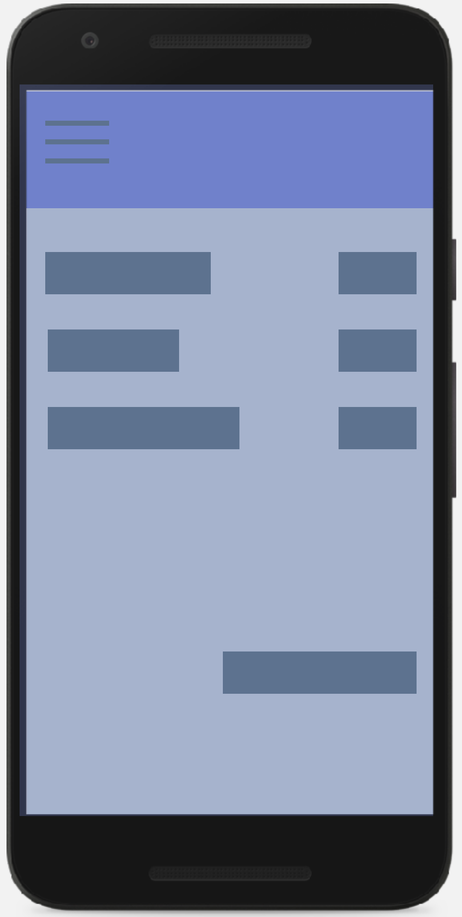
/

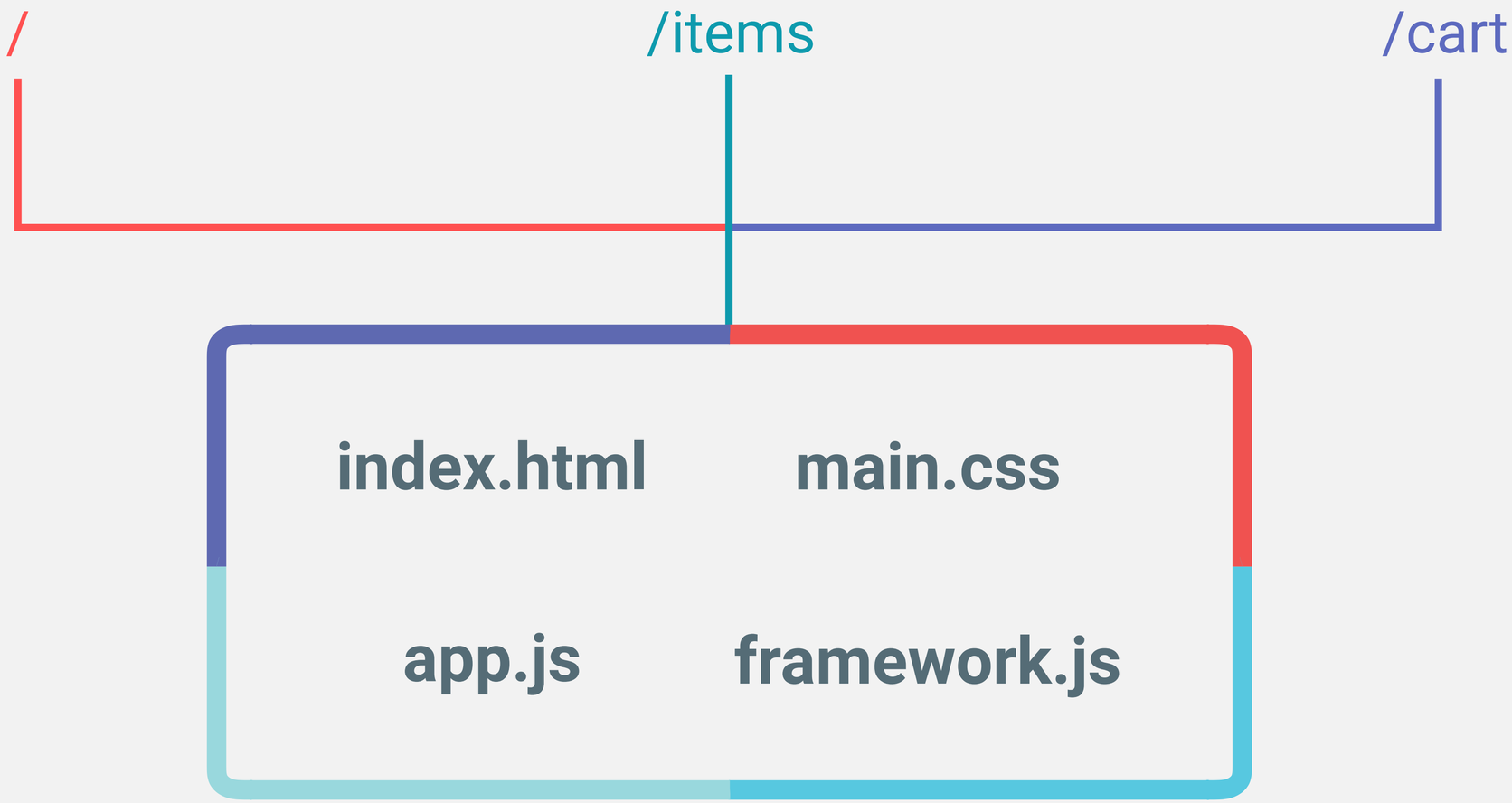


/items



/cart

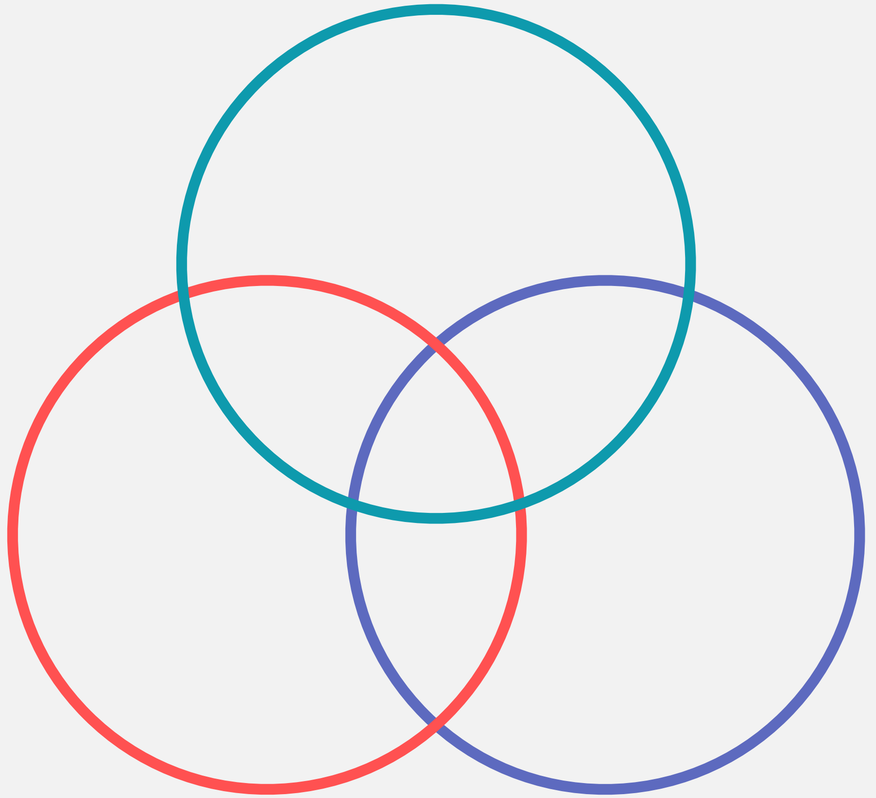



/
/items
/cart
index.html
main.css
app.js
framework.js

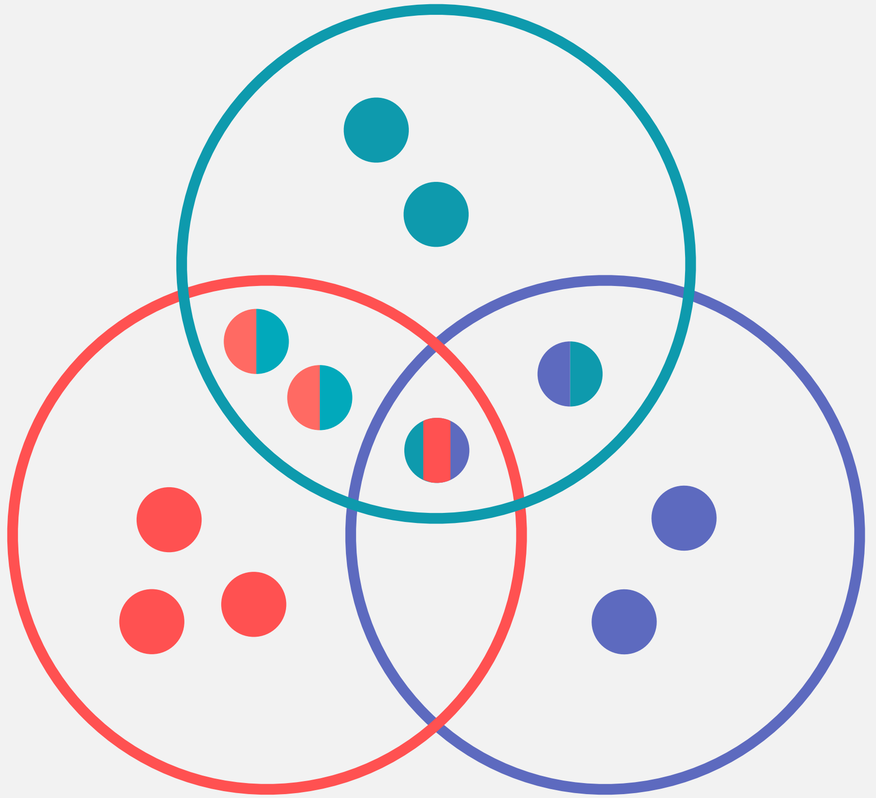
/

/items

/cart



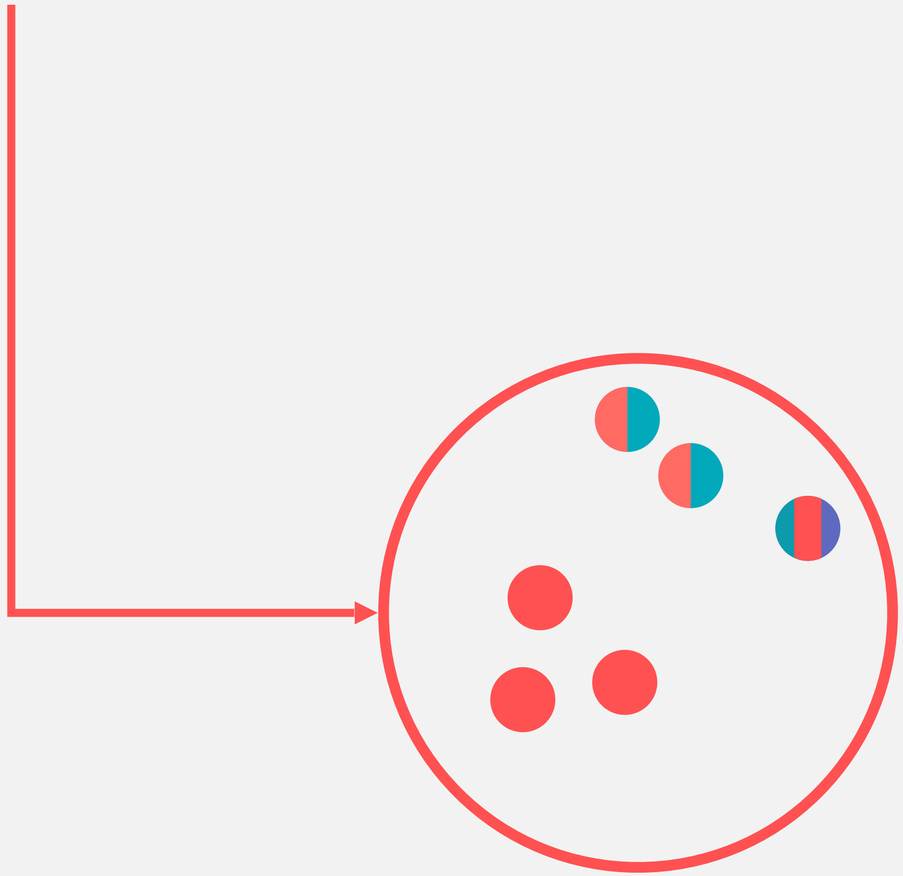
/ /items /cart



/

/items

/cart



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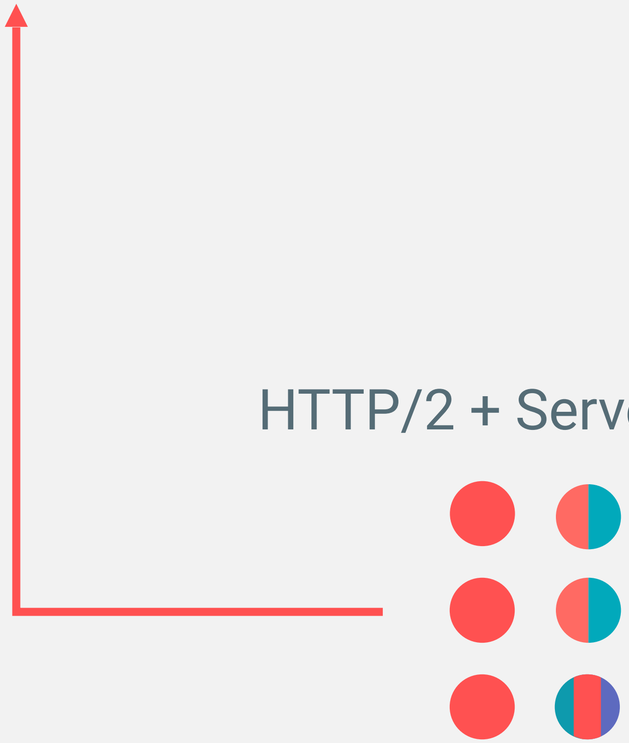
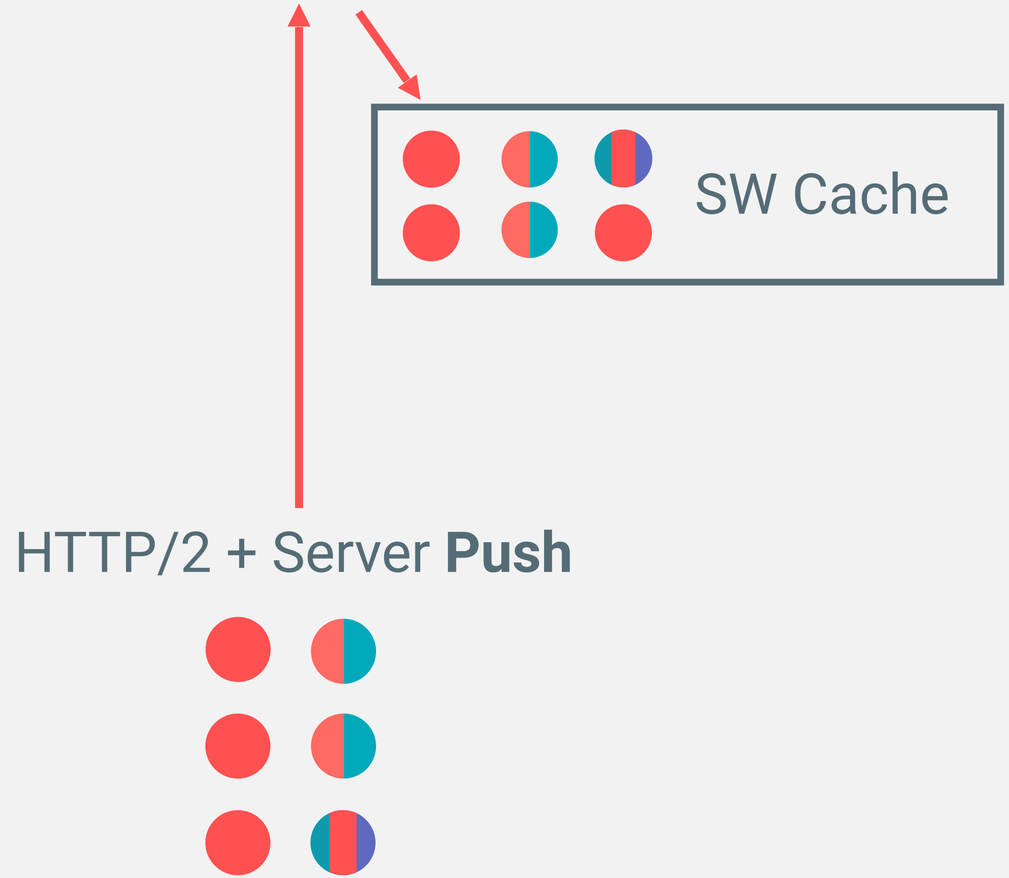


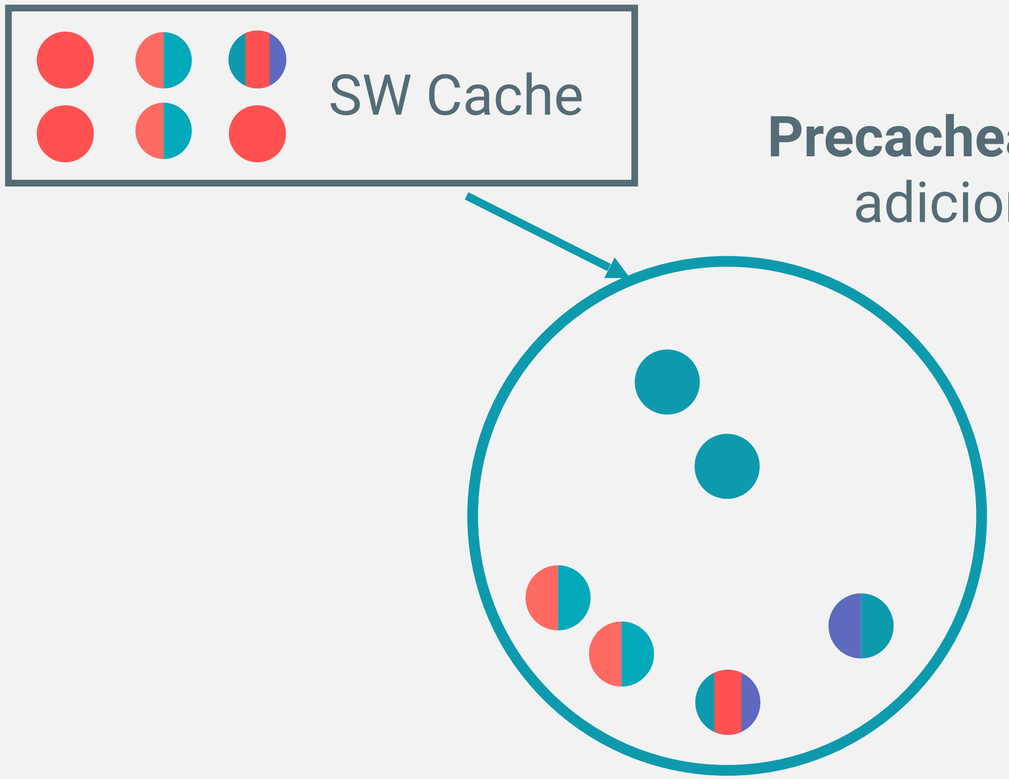
HTTP/2 + Server **Push**

Rendereado e Interactivo

/ /items /cart

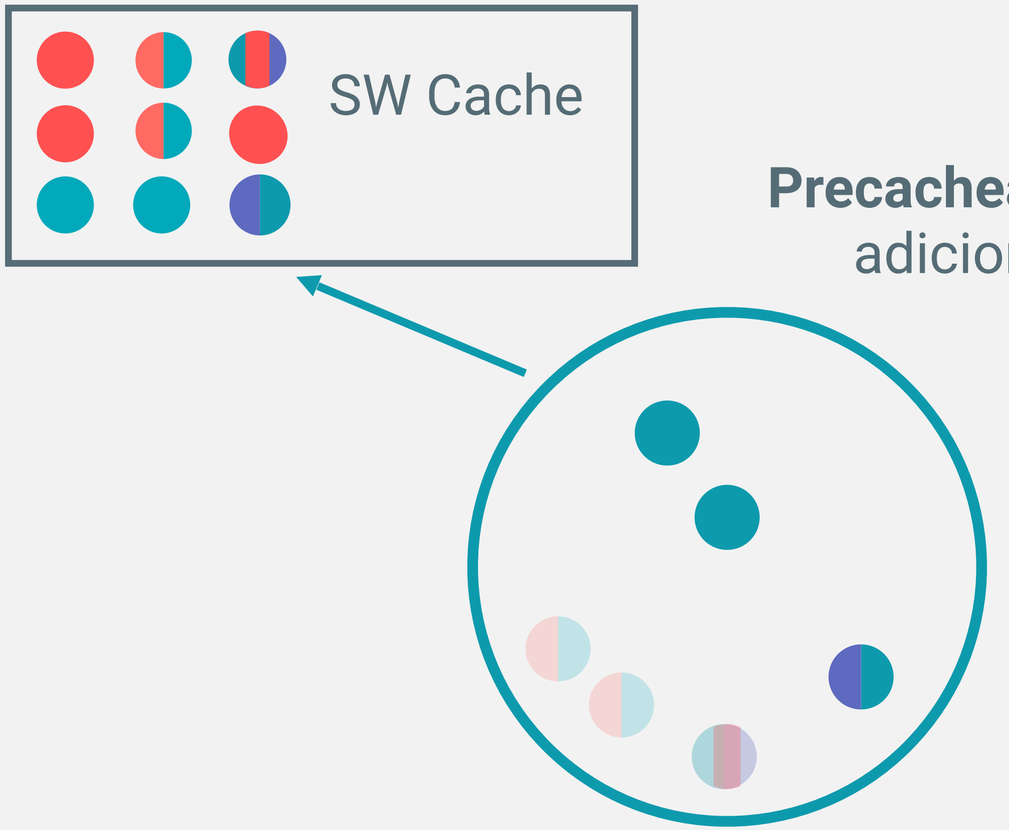


/ /items /cart



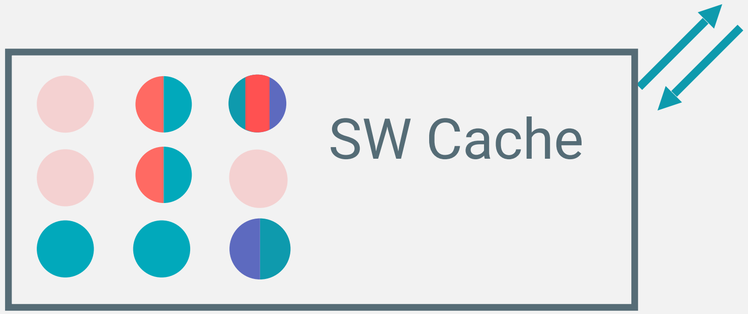
Precacheamos componentes adiciones de otra vista

/ /items /cart



Precacheamos componentes adiciones de otra vista

/ /items /cart

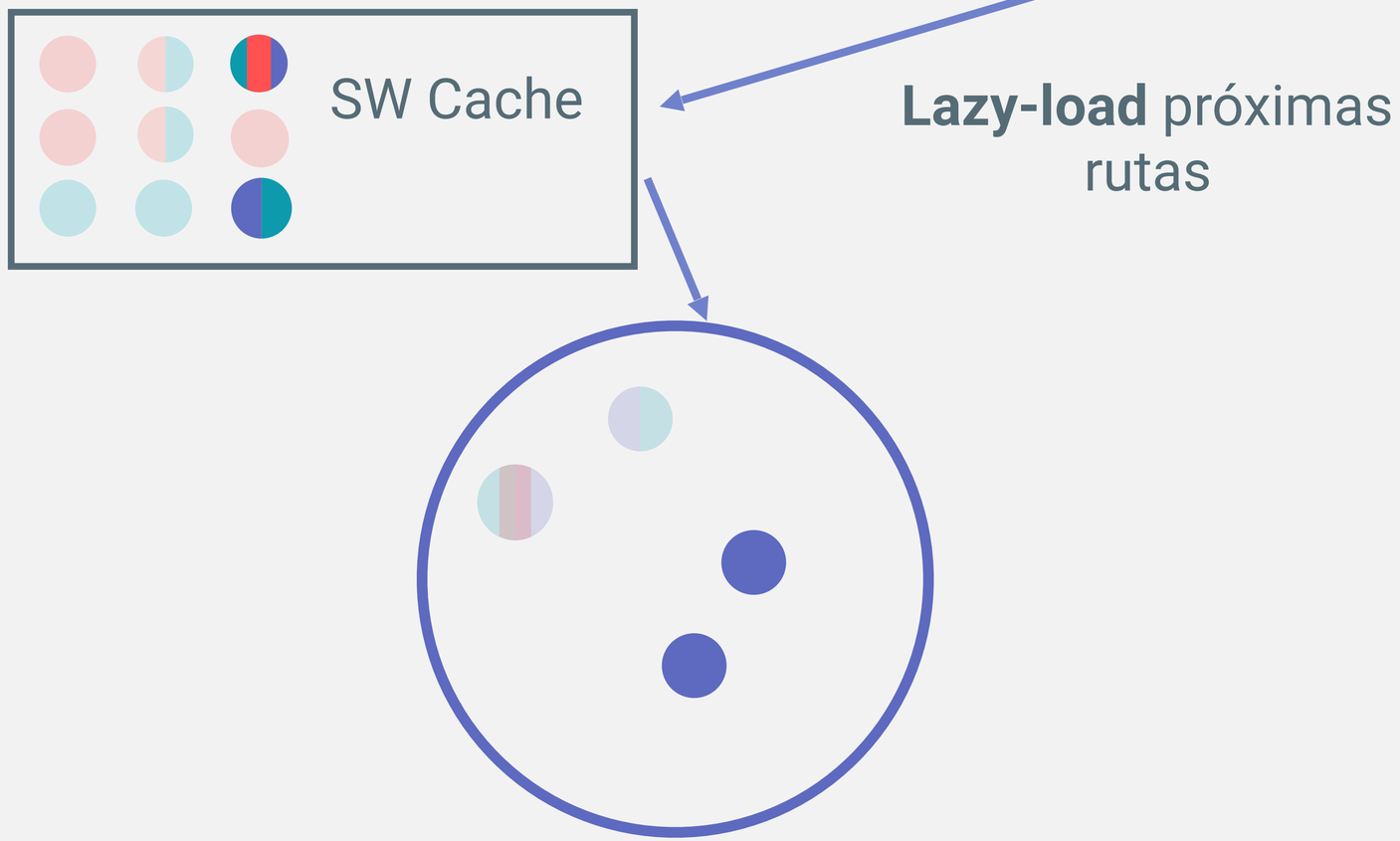


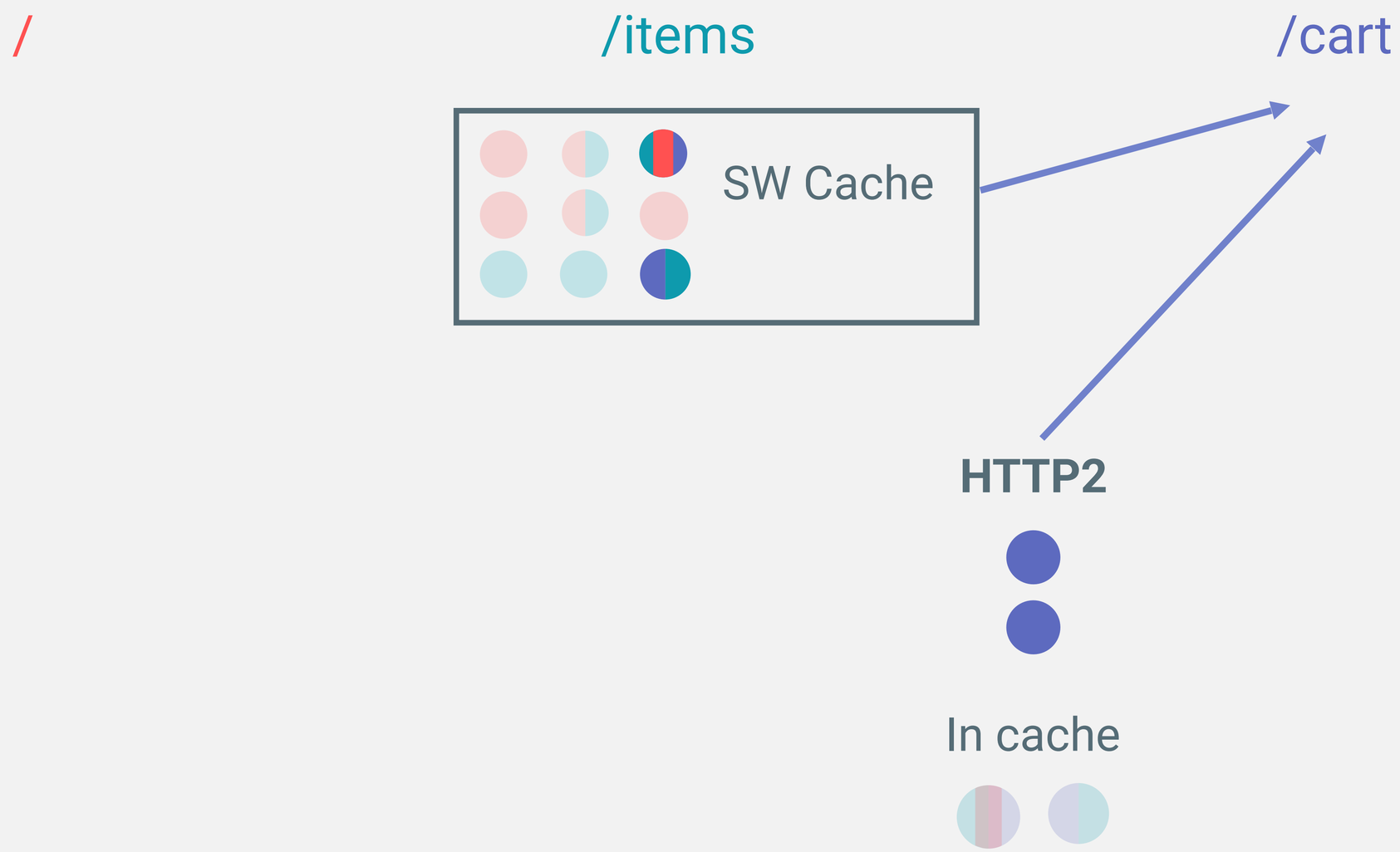
In cache

/

/items

/cart



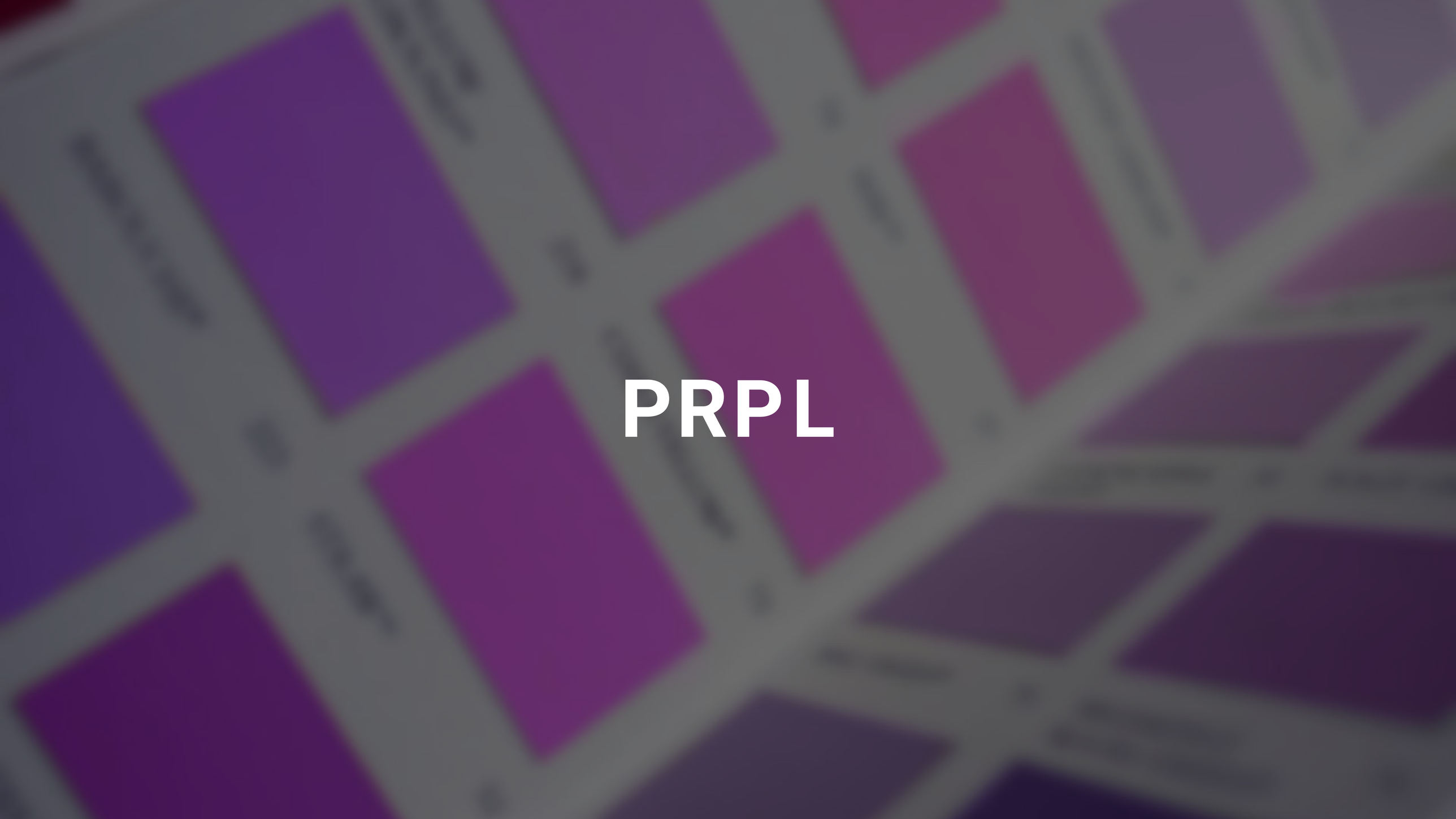

/
/items
/cart
SW Cache
HTTP2
In cache

Push componentes para la ruta inicial

Render la ruta inicial asap

Pre-cache componentes para las otras vistas

Lazy-load & para crear rutas on-demand


PRPL

Usando la Plataforma con **PRPL**

Web Components
HTTP2 + Server Push
Service Worker

Minima carga

Minimos recursos

Optima experiencia de usuario

Construir, Desplegar, **Servir**

Polymer App **Toolbox**

Layout

Routing

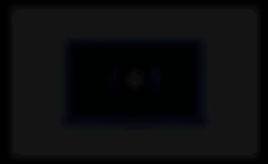
Localization

Storage

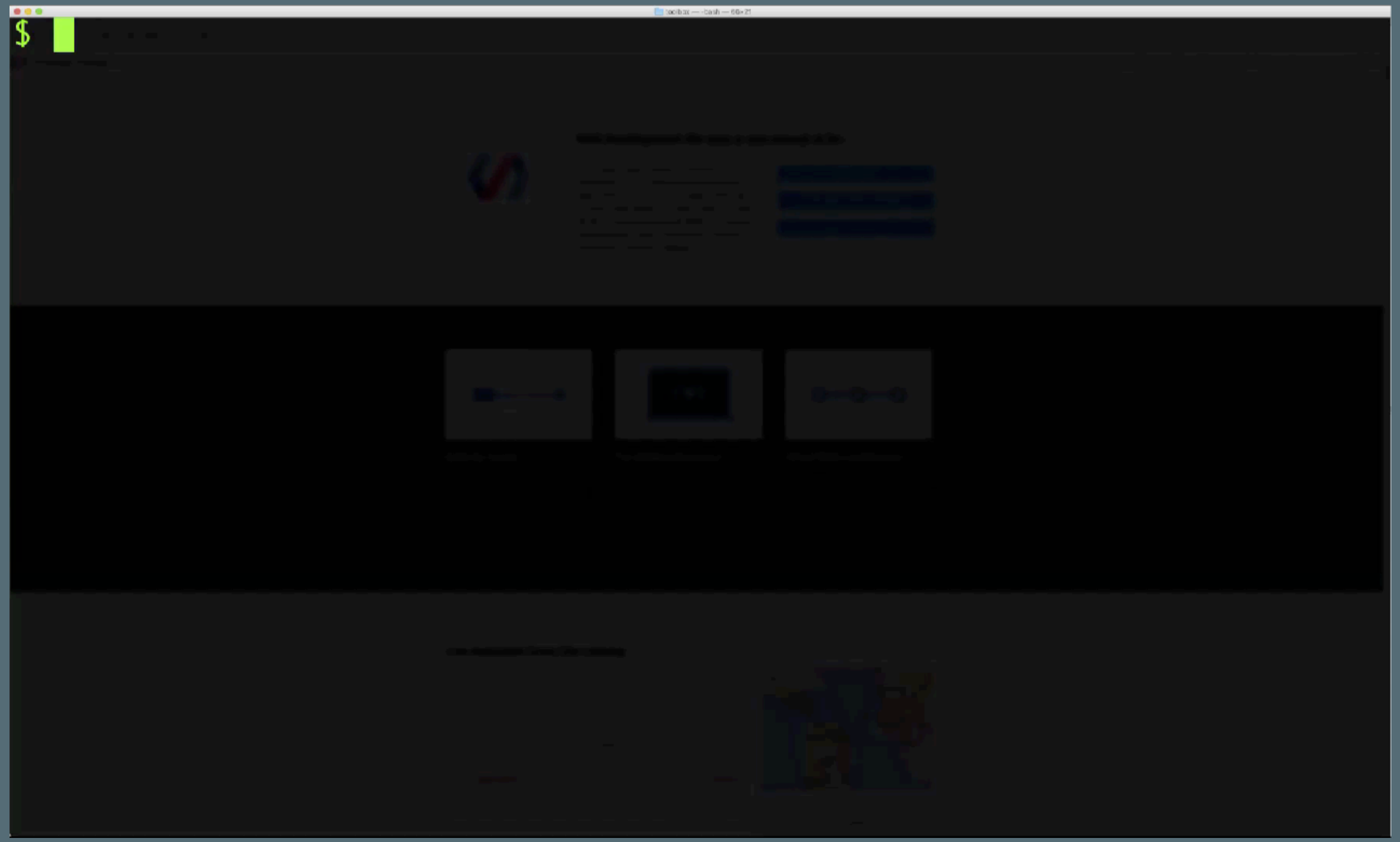
CLI

toolbox — -bash — 119×39

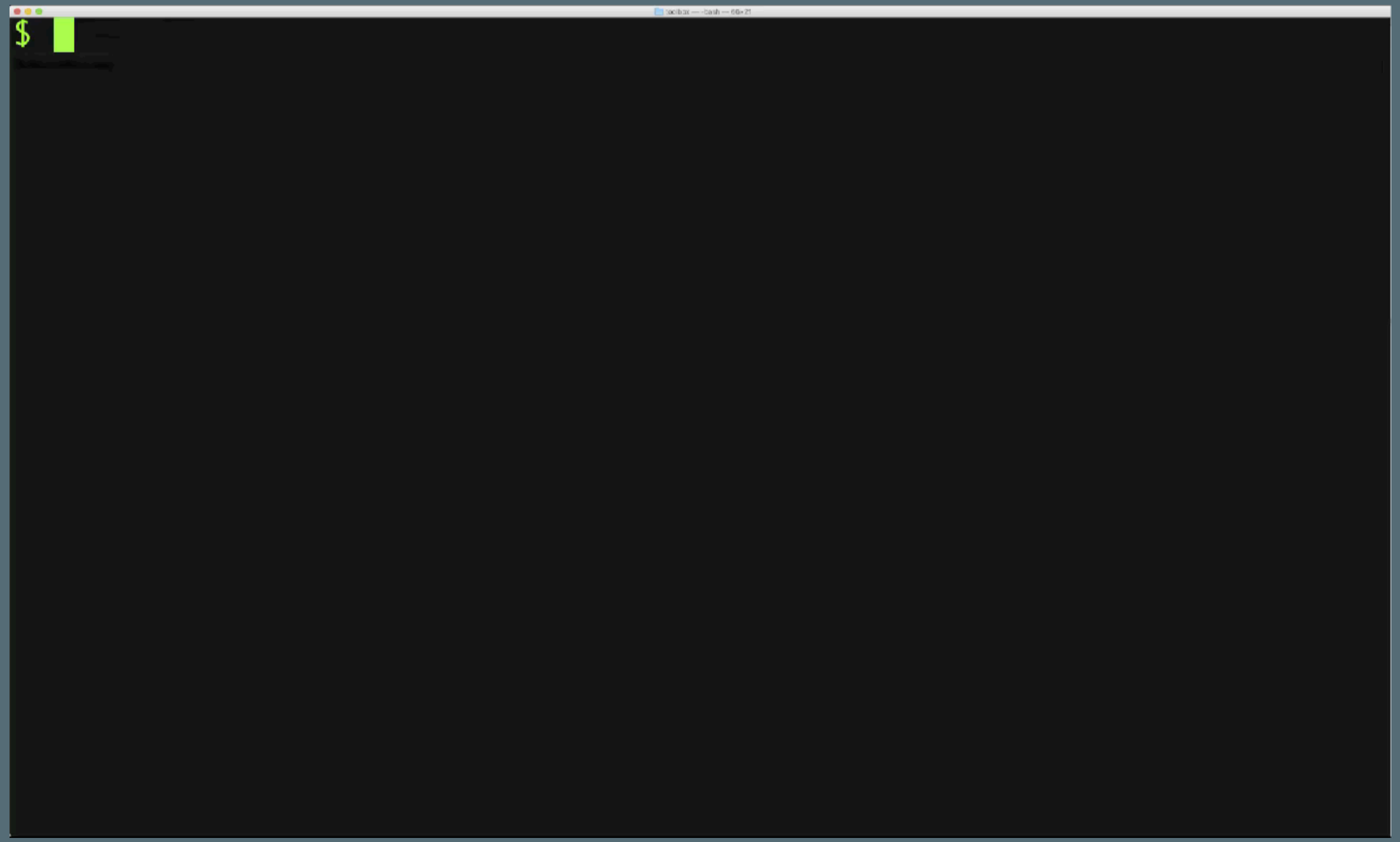
$



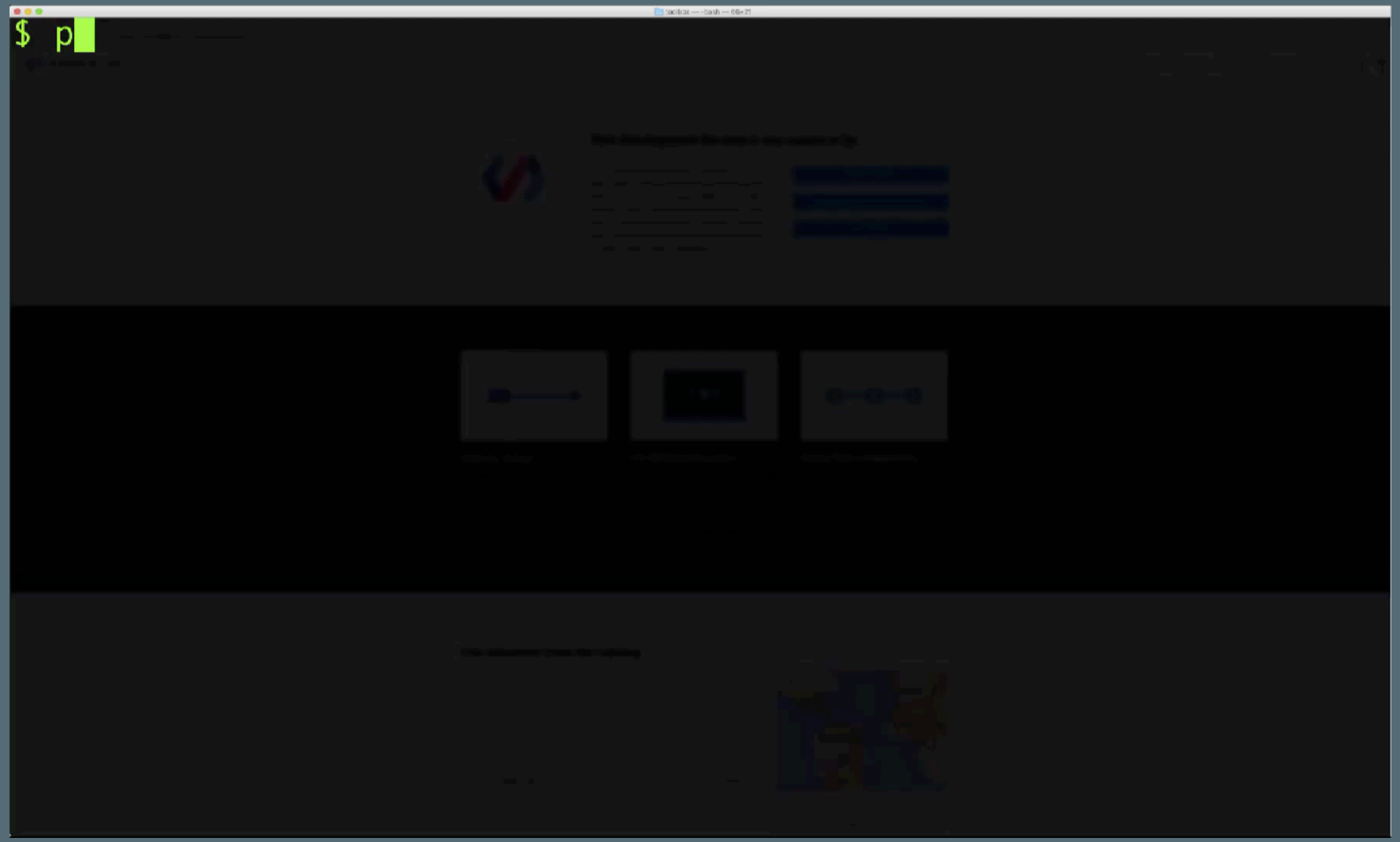
polymer init



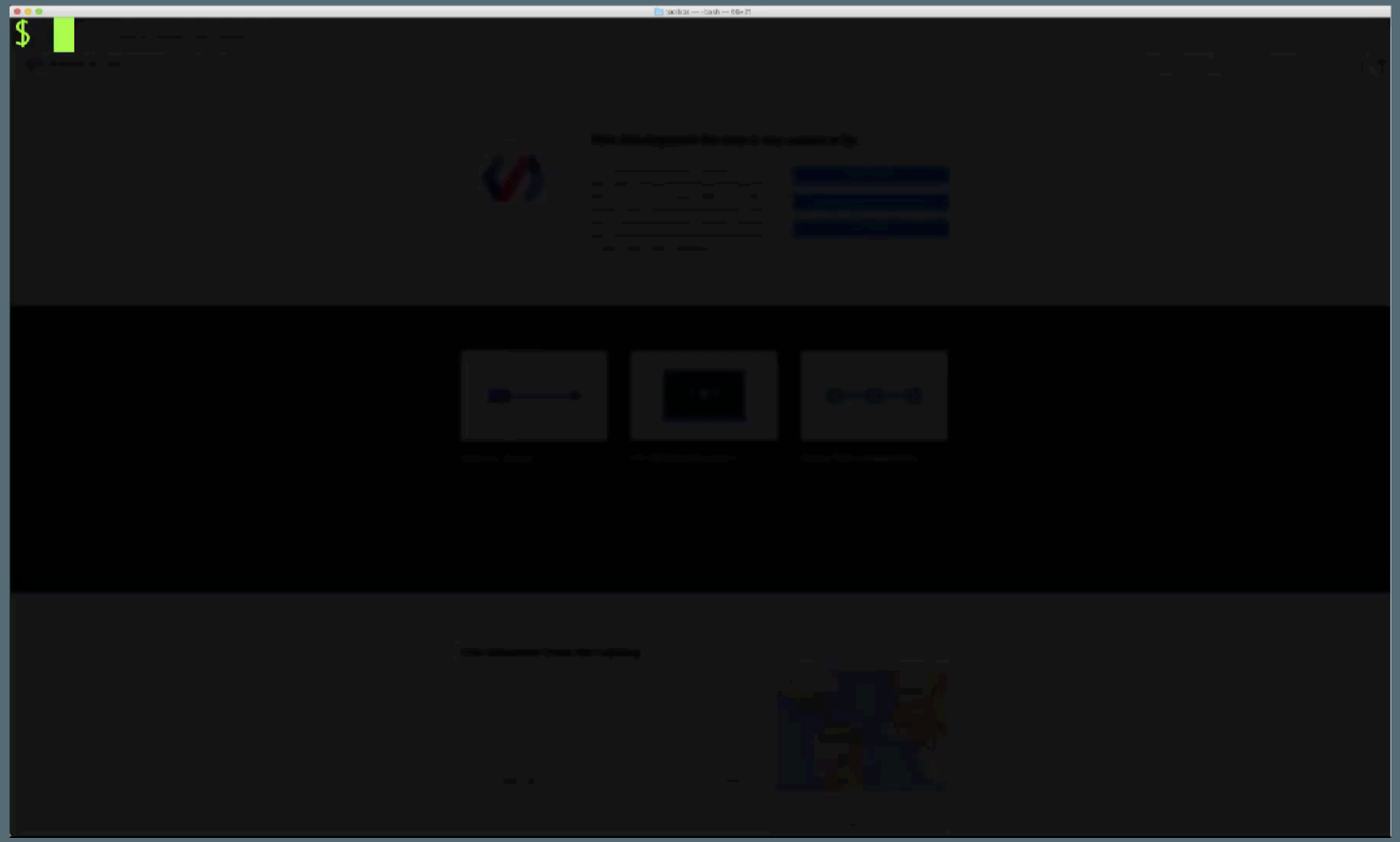
polymer serve



polymer lint



polymer build



Polymer App **Toolbox**

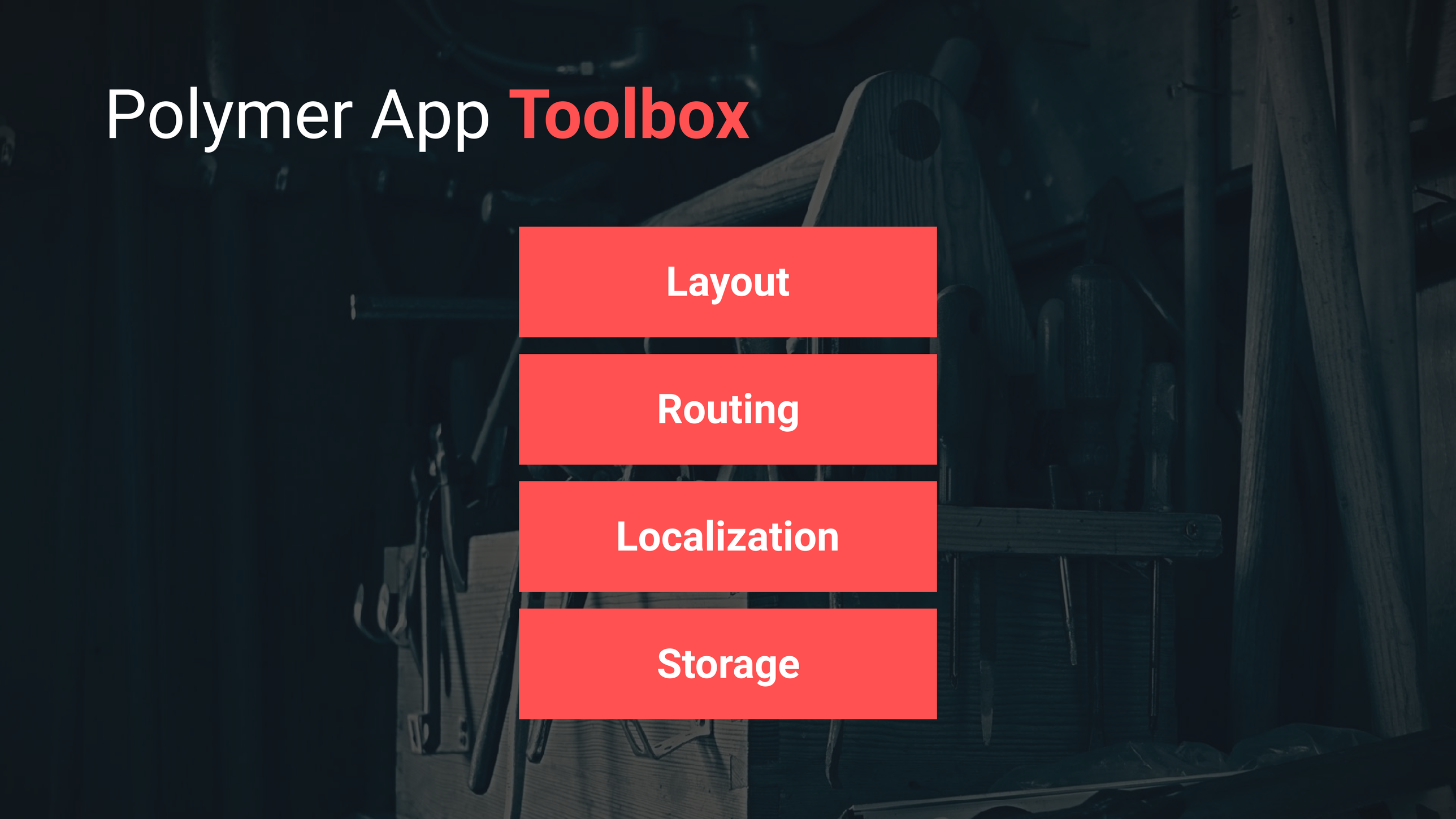
Layout

Routing

Localization

Storage

CLI


Polymer App Toolbox
Layout
Routing
Localization
Storage

Polymer App **Toolbox**

app-localize-behavior

A behavior for localizing strings in your element's template

App app-elements

translation, localization

app-route

Declarative URL routing

App app-elements

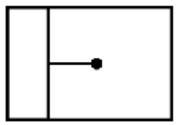
routing

app-storage

Turn-key integration with Polymer's data binding system

App app-elements

data, storage



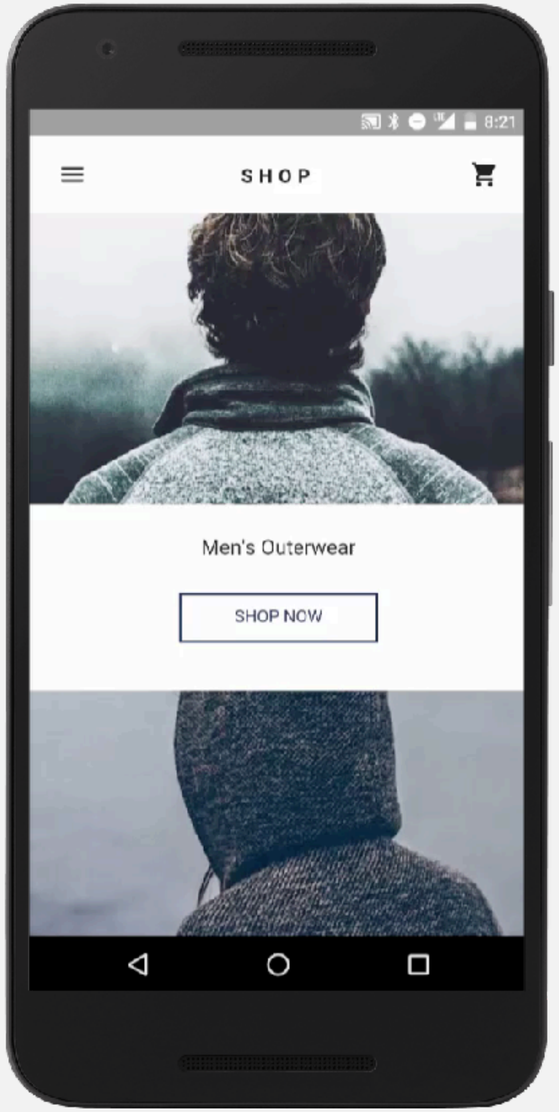
app-layout

Components for a responsive layout

App app-elements

drawer, responsive, layout

Polymer App Toolbox
Usá la plataforma



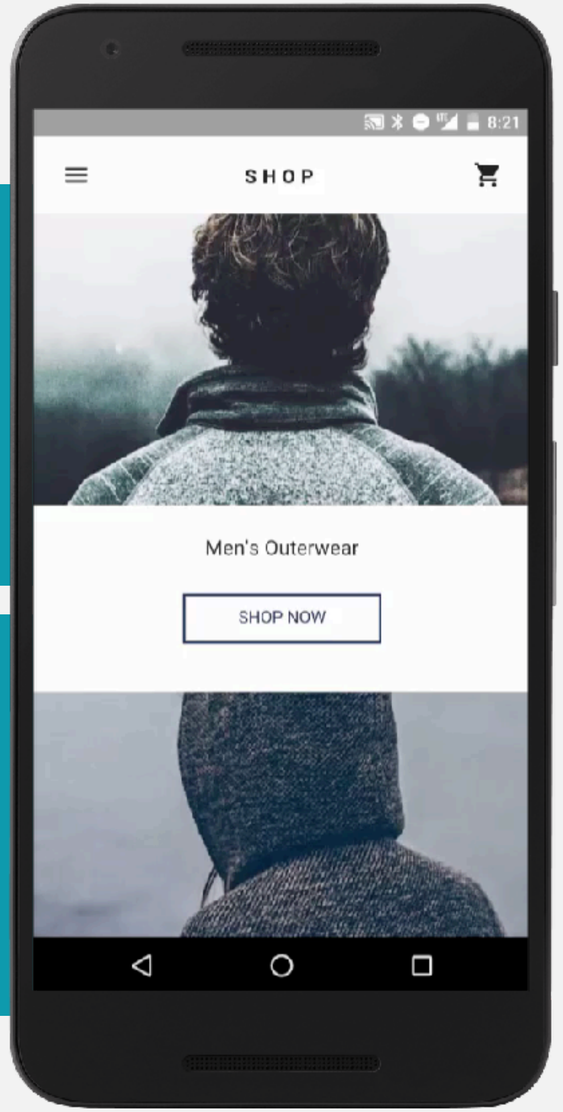
https://shop.polymer-project.org

Caracteristicas de la Plataforma Web

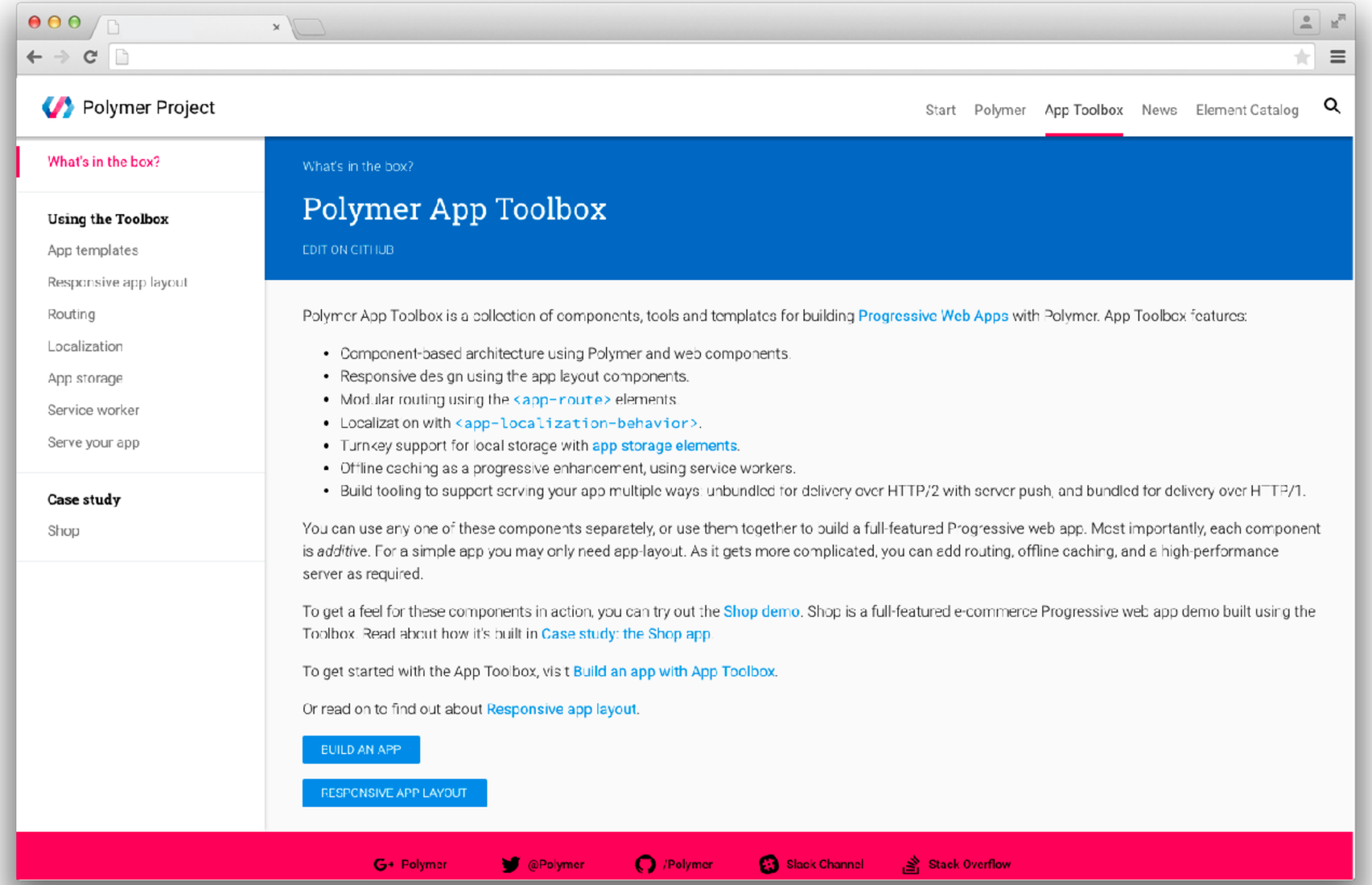
Web Components
Service Worker
HTTP/2

Herramientas & Librerias

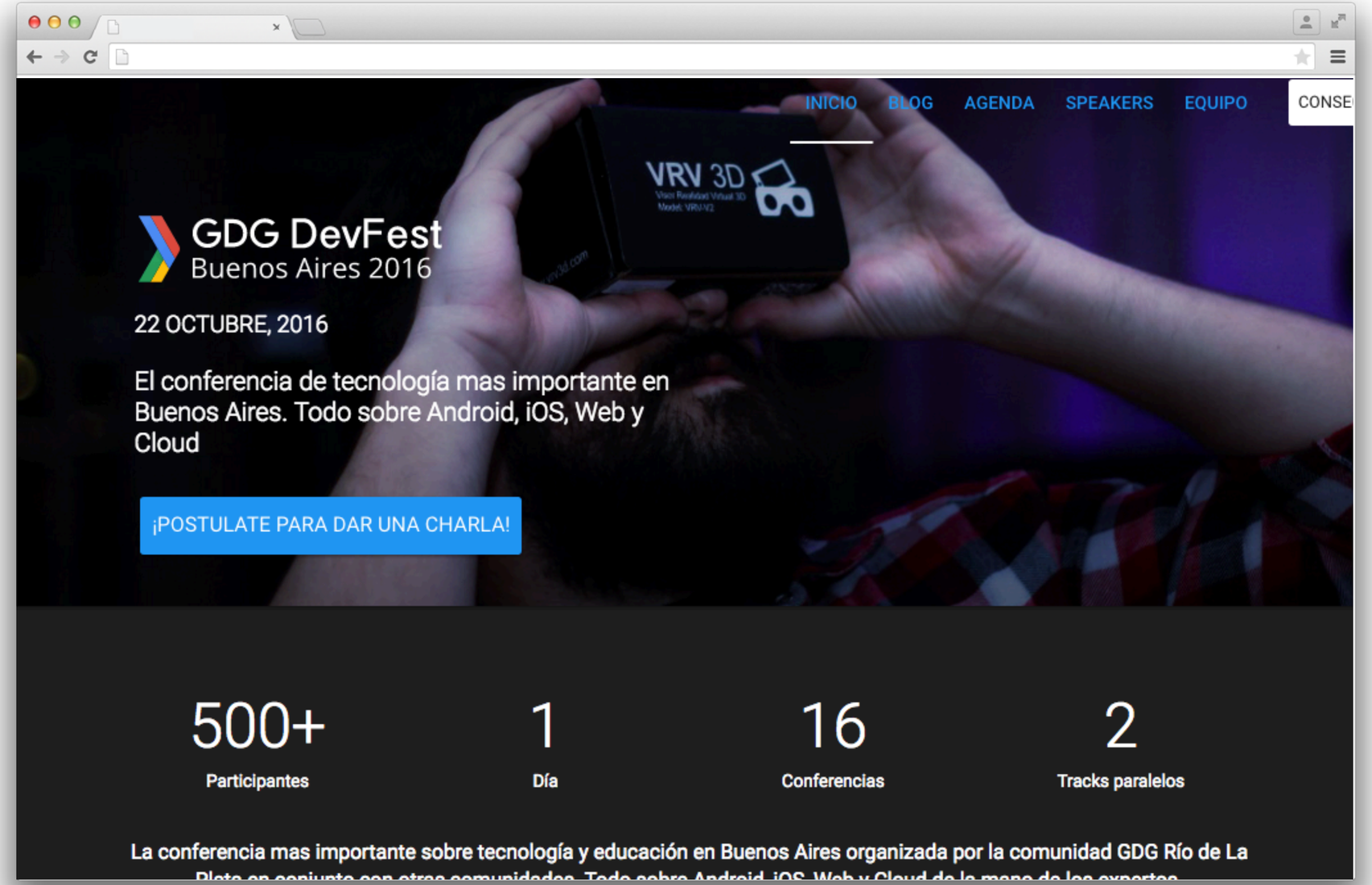
Polymer
App Elements
Polymer CLI



https://shop.polymer-project.org



www.polymer-project.org/1.0/toolbox



https://devrockers.com

Polymer

Web Components & Polymer App Toolbox

- El objetivo de Polymer es **diferente** al del tipico framework de JS, porque **usa la plataforma** en vez de crear abstracciones.
- Por qué usar la plataforma? **Performance en mobile.**
- ¿Cómo? **Nuevos primitivos & patrones de la plataforma.**
- El resultado es una **super Progressive Web App** construida con web components interoperables.

¡Muchas gracias!

GDG Rio de la Plata

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#usetheplatform

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