



# Progressive Web Apps

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# PWA

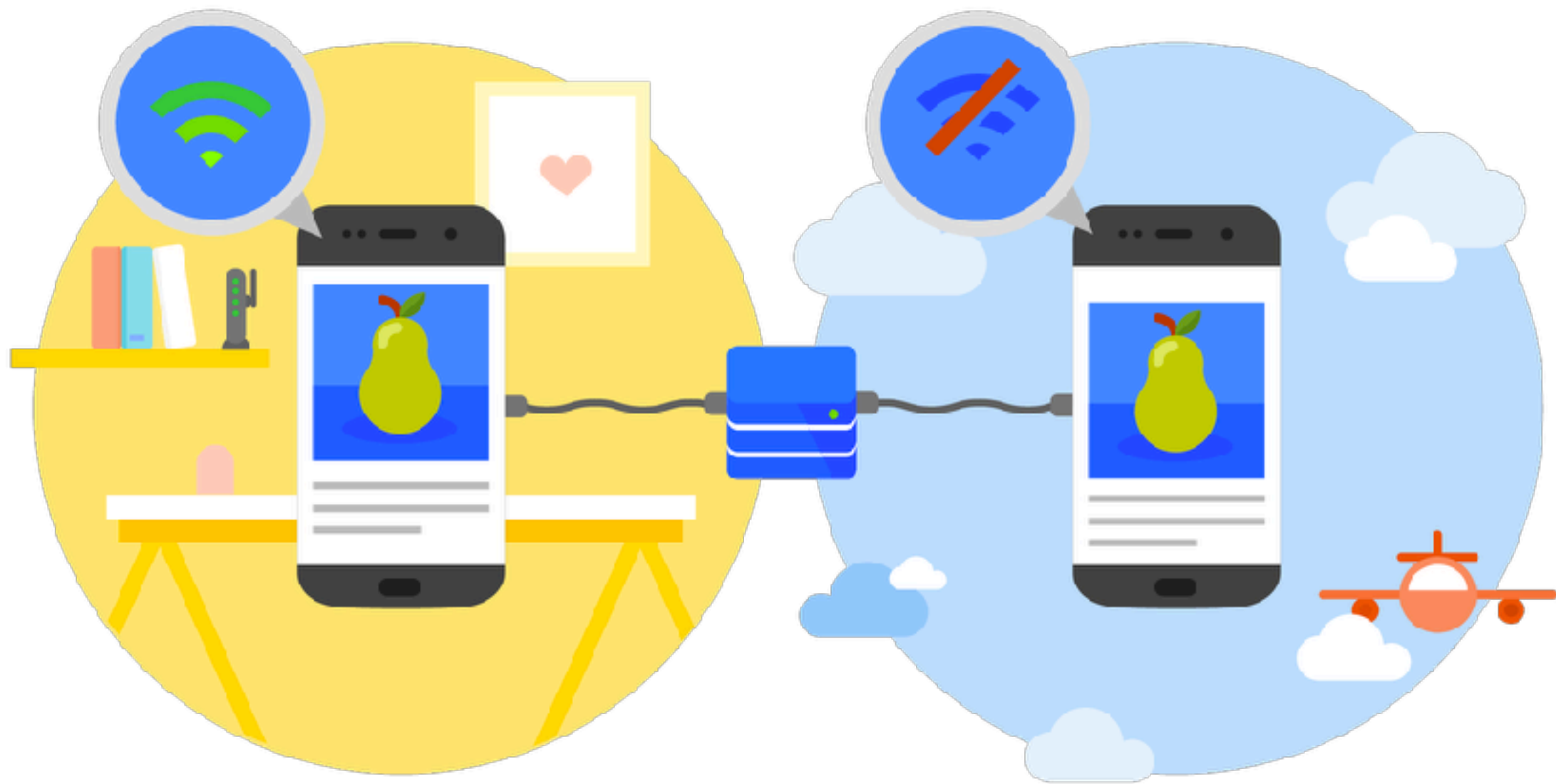




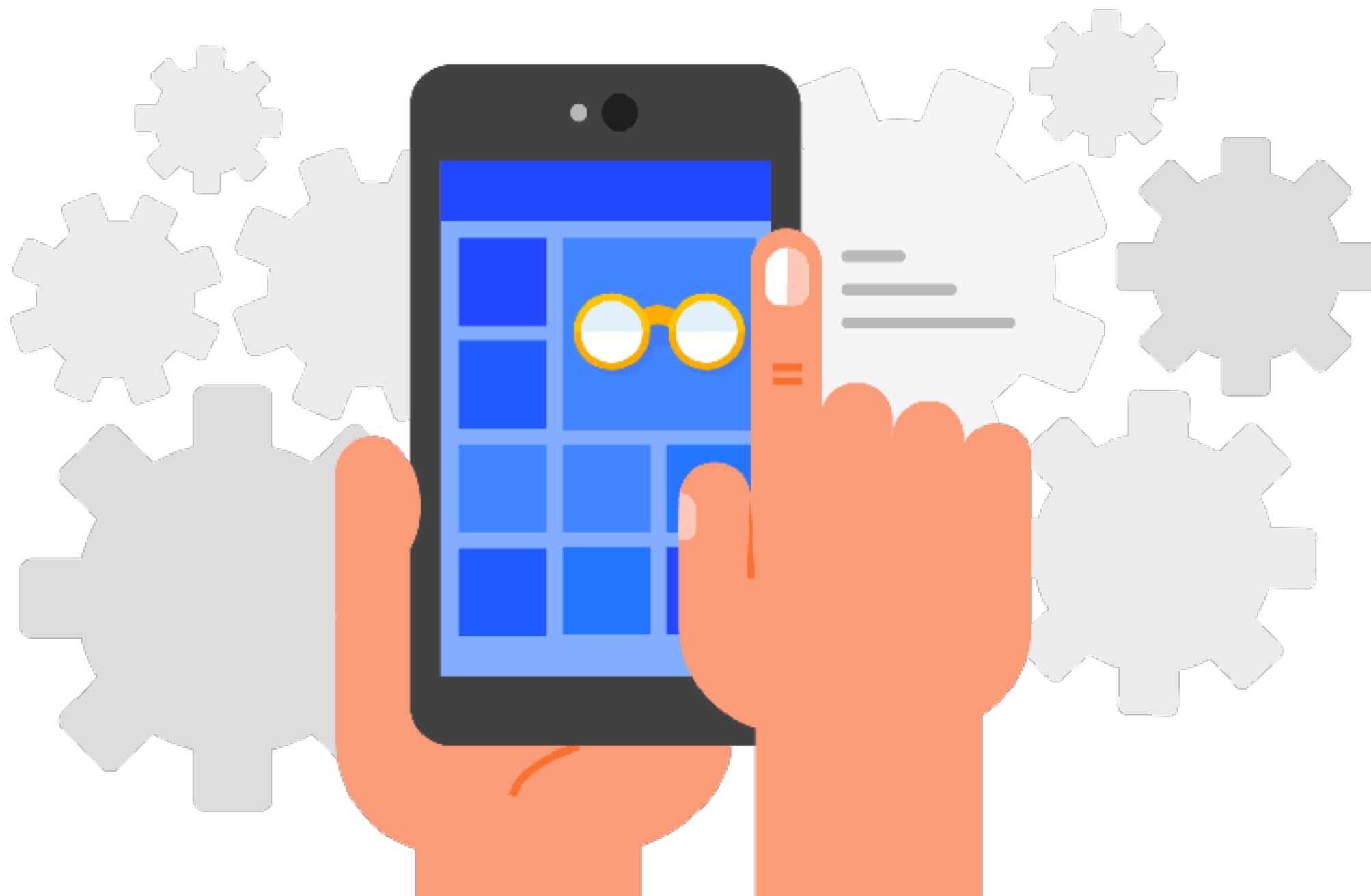
# ¿Qué son?

- Experiencias de usuario con el **poder** de la **web** y que son:
- Reliable (confiable)
- Fast (rápida)
- Engaging (atractivo)

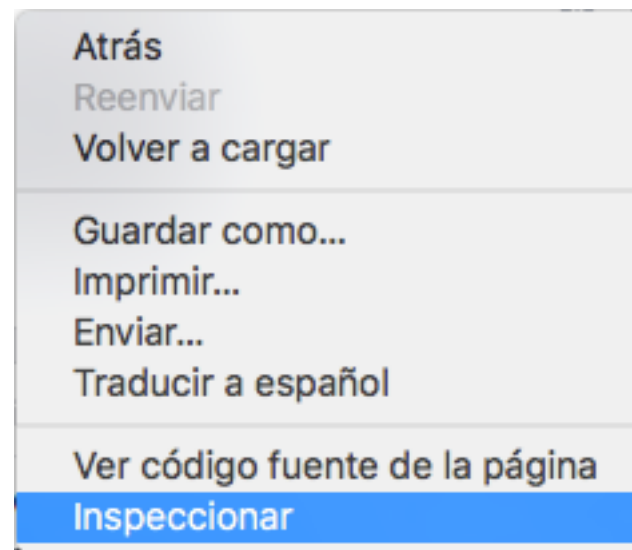
# Reliable



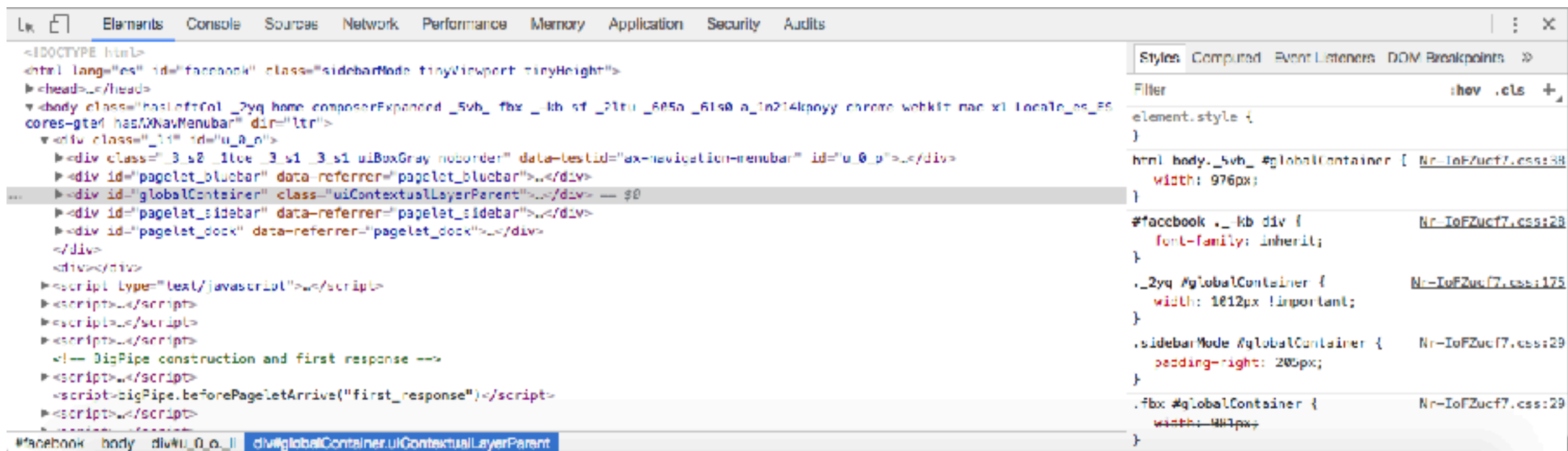
# Fast



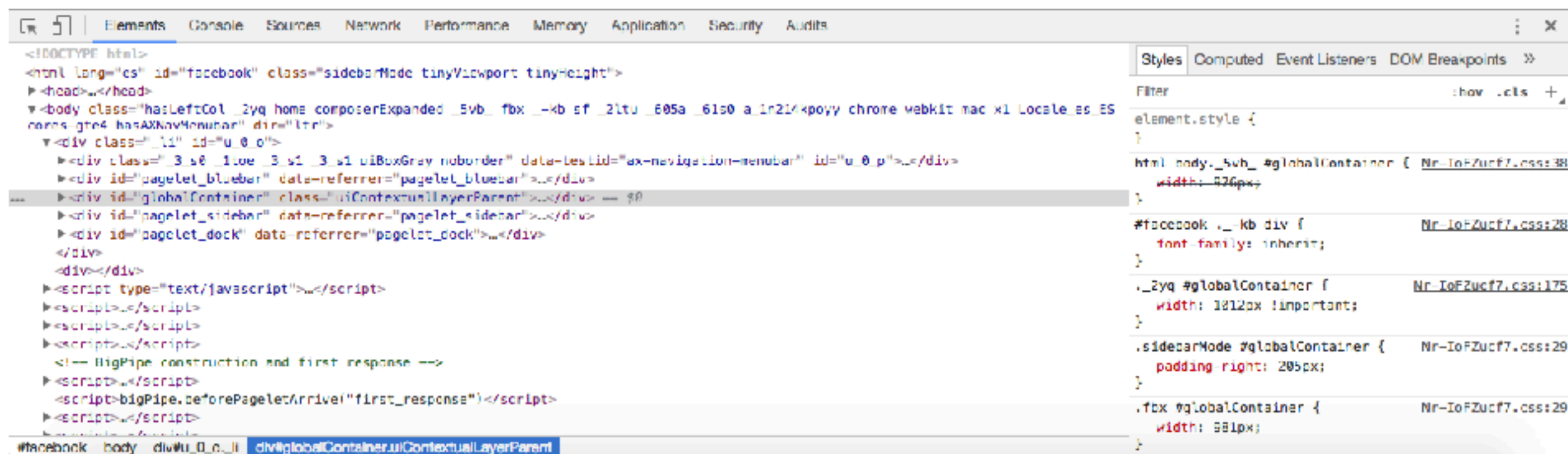
# Fast



# Fast



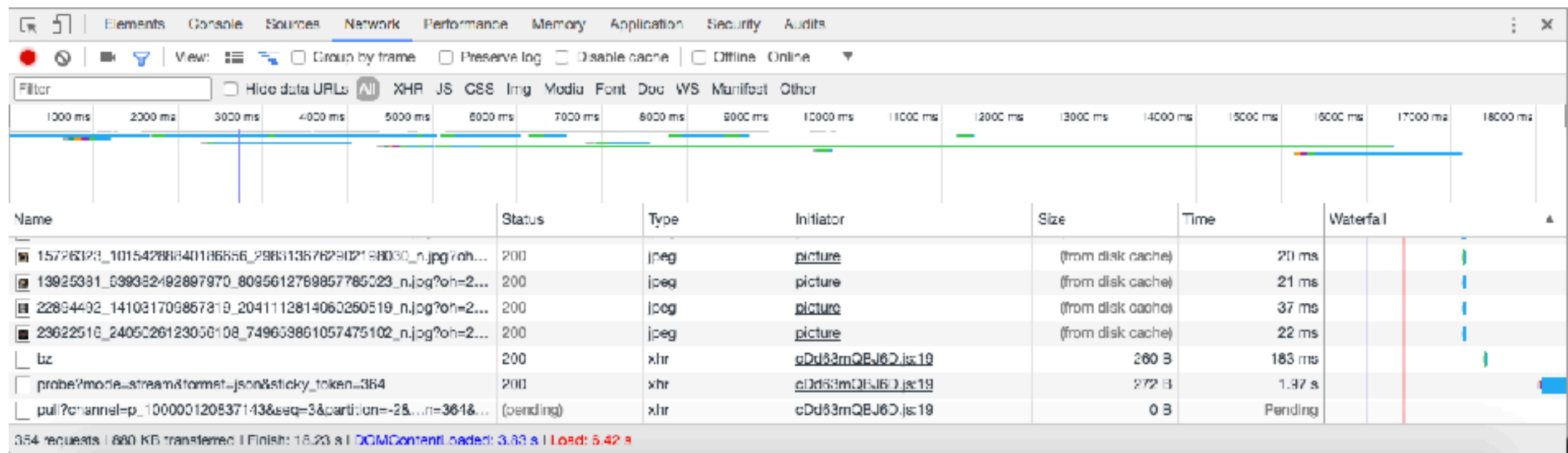
# Fast



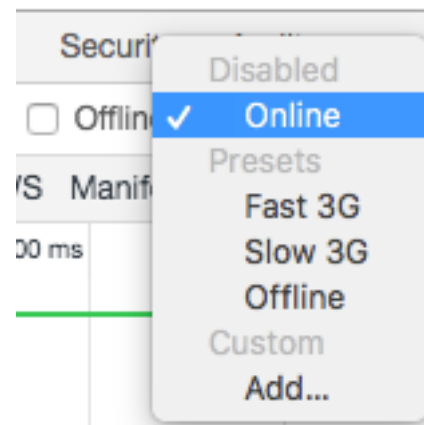
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# Fast



# Fast



# Fast

**Settings**  
Preferences  
Workspace  
Blackboxing  
Devices  
**Throttling**  
Shortcuts

## Network Throttling Profiles

Add custom profile...

Profile Name	Download	Upload	Latency
<input type="text"/>	<div>kb/s</div> <div>optional</div>	<div>kb/s</div> <div>optional</div>	<div>ms</div> <div>optional</div>

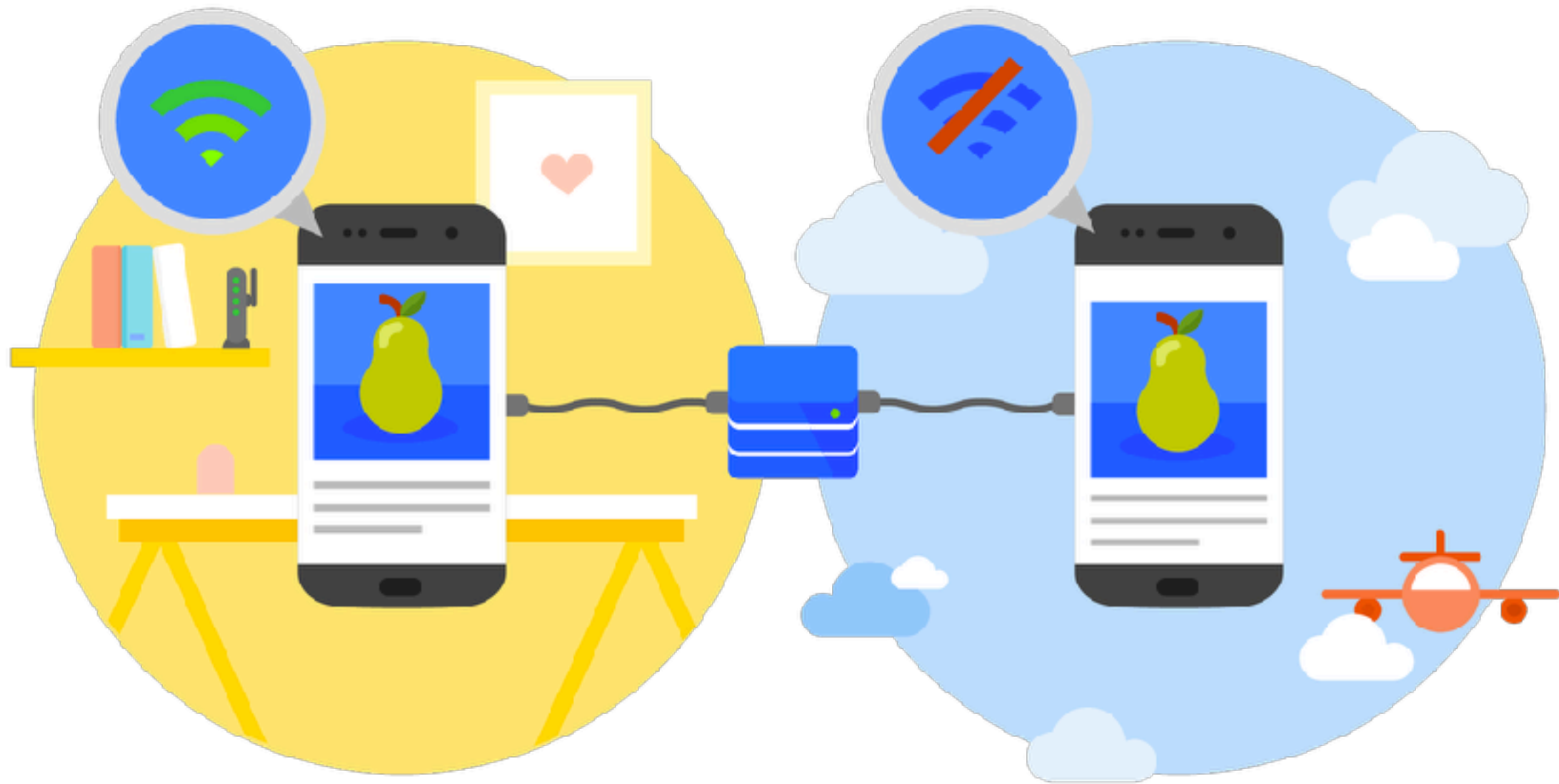
Add

Cancel



# Optimizar

# Engaging





# Otras Características



# Progresiva

- Todos los usuarios
- Todos los navegadores
- Mejoras progresivas

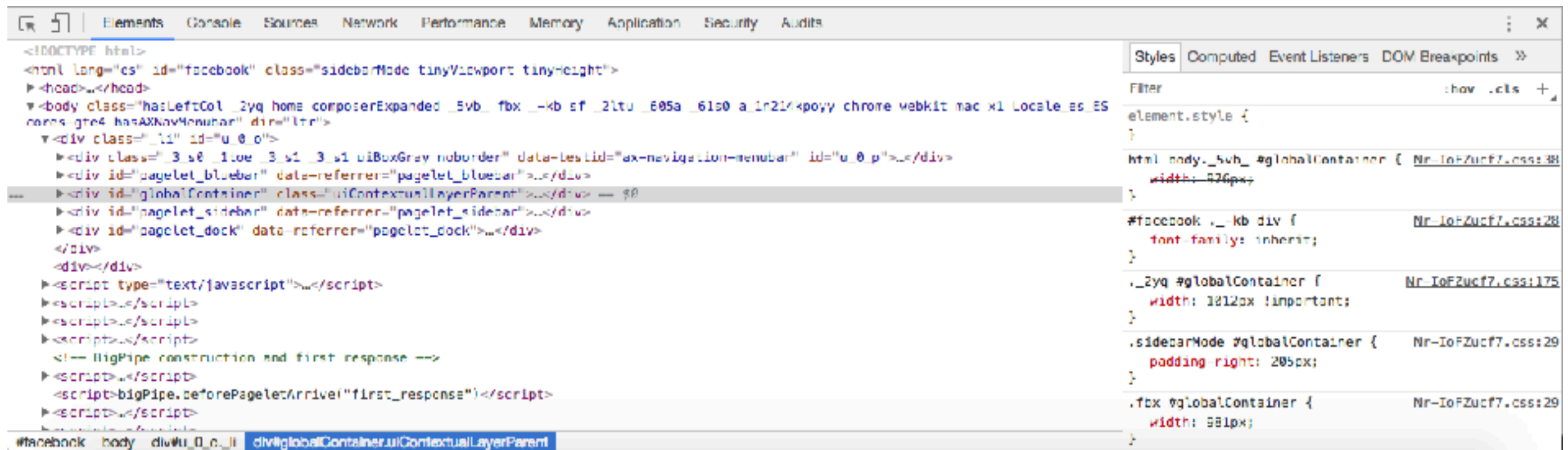


# Adaptable

- *Responsive*
- Para escritorio, móvil, tablet o lo que sea



# Adaptable



The screenshot displays the Chrome DevTools interface. The 'Elements' panel on the left shows the DOM tree with the following structure:

```
<!DOCTYPE html>
<html lang="es" id="facebook" class="sidebarMode tinyViewport tinyHeight">
  <head>...</head>
  <body class="hasLeftCol _2yq home composerExpanded _5vb_fbx _-kb sf _2ltu _605a _6ls0 a_1n2l4kpoxy chrome webkit mac x1 Locale_es_ES
  cerns_gte4 hasAXNavMenuBar" dir="ltr">
    <div class="_1i" id="u_0">
      <div class="_3 s0 _1ue _3 s1 _3 s1 uiBoxGray noborder" data-testid="ax-navigation-menubar" id="u_0_p">...</div>
      <div id="pagelet_bluebar" data-referrer="pagelet_bluebar">...</div>
      <div id="globalContainer" class="uiContextualLayerParent">...</div>
      <div id="pagelet_sidebar" data-referrer="pagelet_sidebar">...</div>
      <div id="pagelet_dock" data-referrer="pagelet_dock">...</div>
    </div>
    <script type="text/javascript">...</script>
    <script>...</script>
    <script>...</script>
    <script>...</script>
    <!-- BigPipe construction and first response -->
    <script>...</script>
    <script>bigPipe.beforePageletArrive("first_response")</script>
    <script>...</script>
  </body>
</html>
```

The 'Styles' panel on the right shows the CSS rules for the selected element, `div#globalContainer.uiContextualLayerParent`:

```
element.style {
}

html body._5vb_ #globalContainer {
  width: 876px;
}

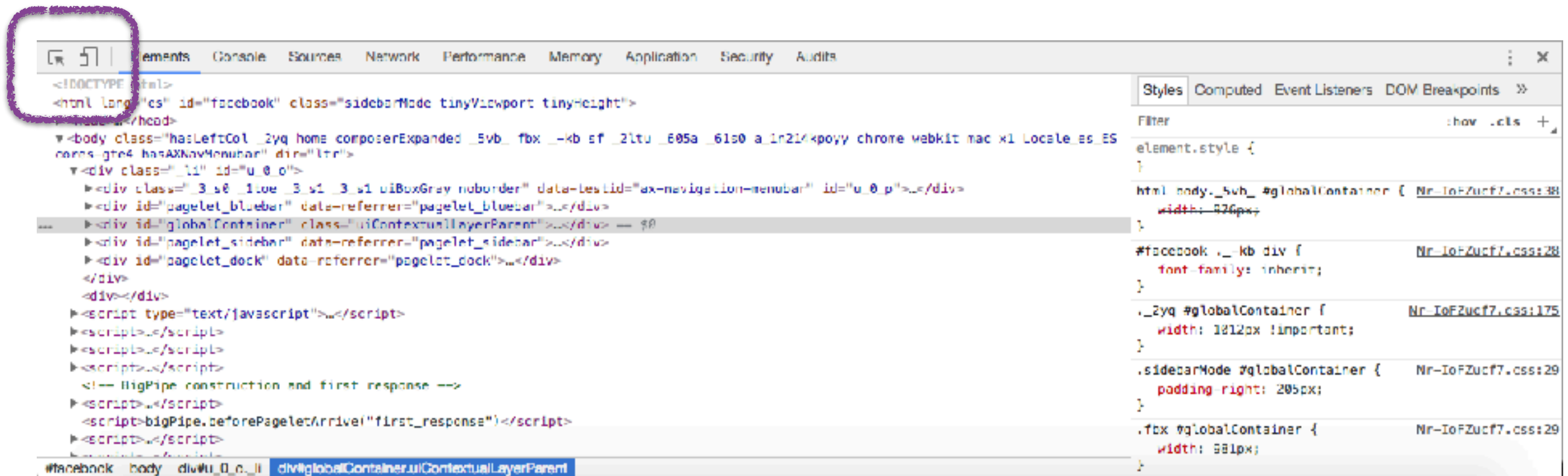
#facebook ._-kb div {
  font-family: inherit;
}

._2yq #globalContainer {
  width: 1812px !important;
}

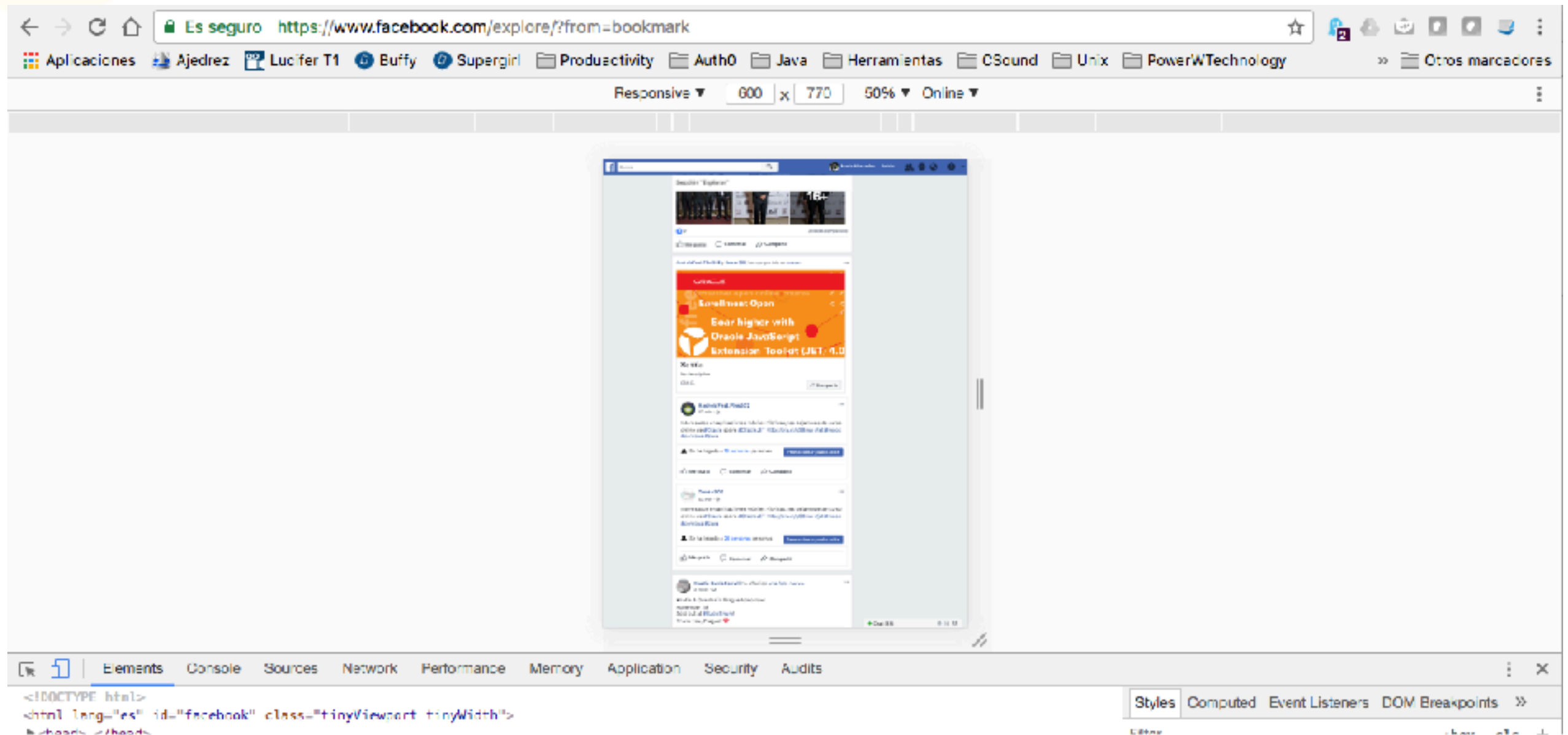
.sidebarMode #globalContainer {
  padding-right: 205px;
}

.fbx #globalContainer {
  width: 881px;
}
```

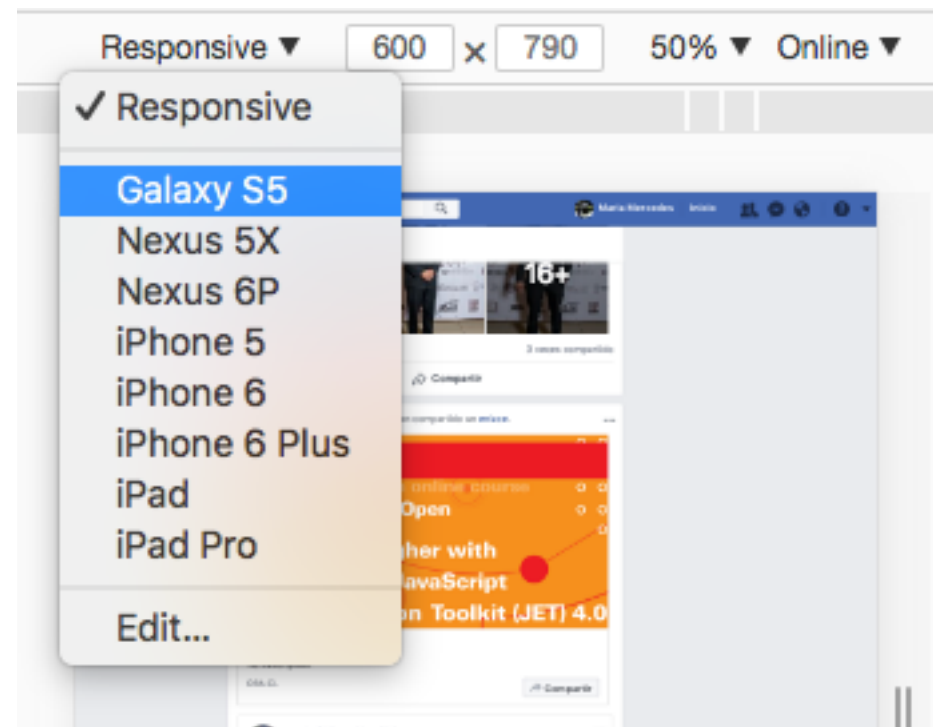
# Adaptable



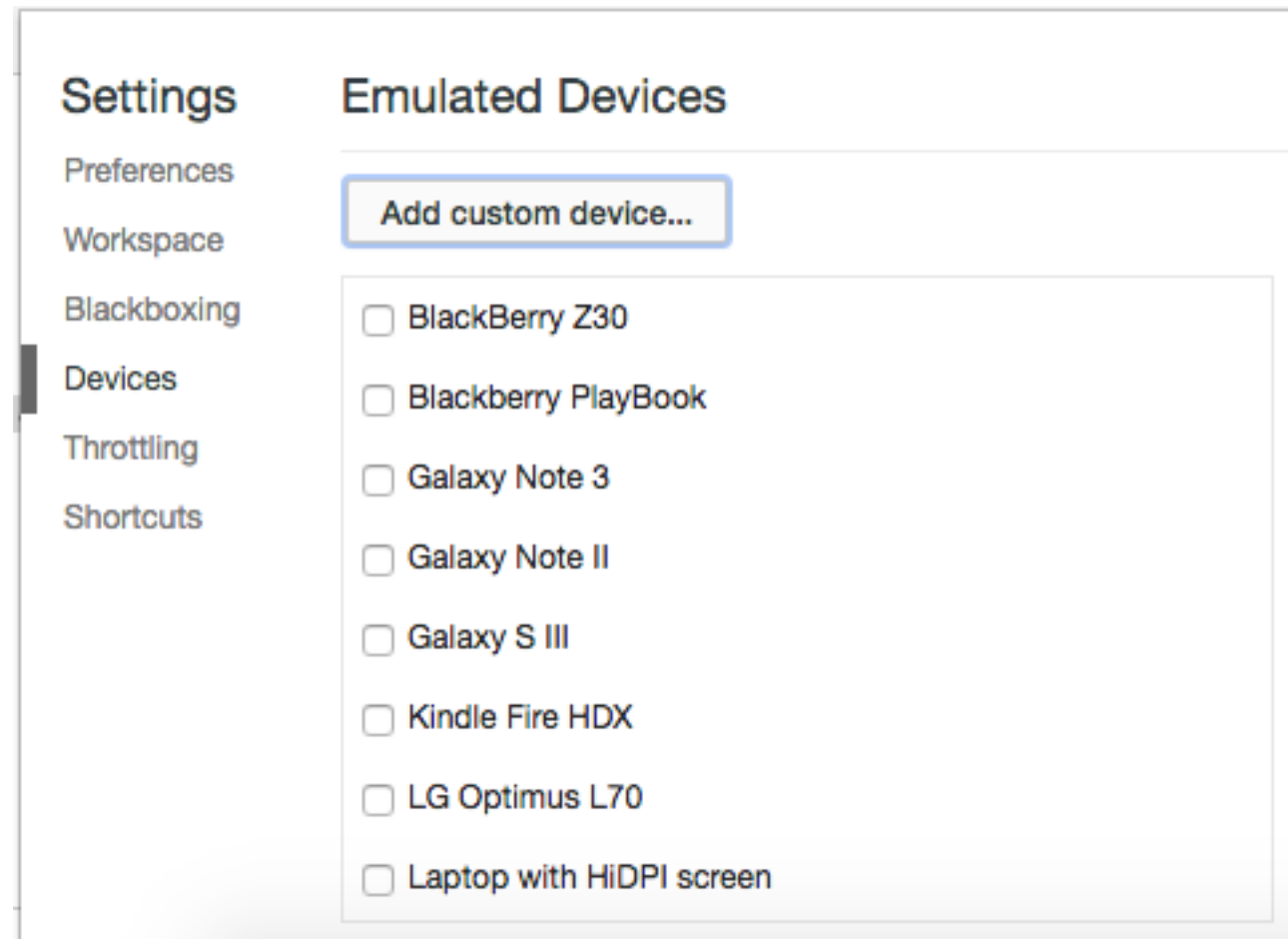
# Adaptable



# Adaptable



# Adaptable





# off-line

- Independiente de la conectividad
- sin conexión o con redes de mala calidad
- Utilizan ***service workers***



# Estilo app

- Experiencia de Usuario
- Modelo de *shell de app*
- Utilizan *service workers*

# Beneficios shell app

- Rendimiento confiable y rápido en todo momento
- Interacciones similares a las apps nativas
- Uso económico de datos





# otras

- Descubrible
- Posibilidad de volver a interactuar
- Instalable
- Vinculable




¿Qué necesitamos  
para el Hands-on-Lab?

# Chrome 52+



# Servidor Web




## Web Server for Chrome

ofrecido por [chromebeat.com](https://chromebeat.com)

★★★★★ (943) | [Herramientas para desarrolladores](#) | 164.2GB usuarios

[↑ INICIAR APLICACIÓN](#)

DESCRIPCIÓN GENERALOPINIONESAYUDARELACIONADOS



### Web Server for Chrome

Funciona sin conexión

Compatible con tu dispositivo

A Web Server for Chrome, serves web pages from a local folder over the network, using HTTP. Runs offline.

Web Server for Chrome is an open source (MIT) HTTP server for Chrome.

It runs anywhere that you have Chrome installed, so you can take it anywhere. It even works on ARM chromebooks.

It now has the option to listen on the local network, so other computers can access your files. Additionally, it can be used as a

[Sitio web](#)

[Notificar uso inadecuado](#)

**Información adicional**

Versión: 0.4.8

Última actualización: 22 de septiembre de 2017

Tamaño: 450KIB

# Visual Studio Code



VS Code



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# Código del Codelab

<https://goo.gl/phKkhn>



# Web Server

<https://goo.gl/HuztVV>



# Codelab

<https://goo.gl/zNpRQY>





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google.com/