

Mobil Arayüz Geliştirme

21 Şubat / Mobil İstanbul - Geliştirici Günü

Bilal Çınarlı

Front-end Architect

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github.com/bcinarli

htmlmag.com

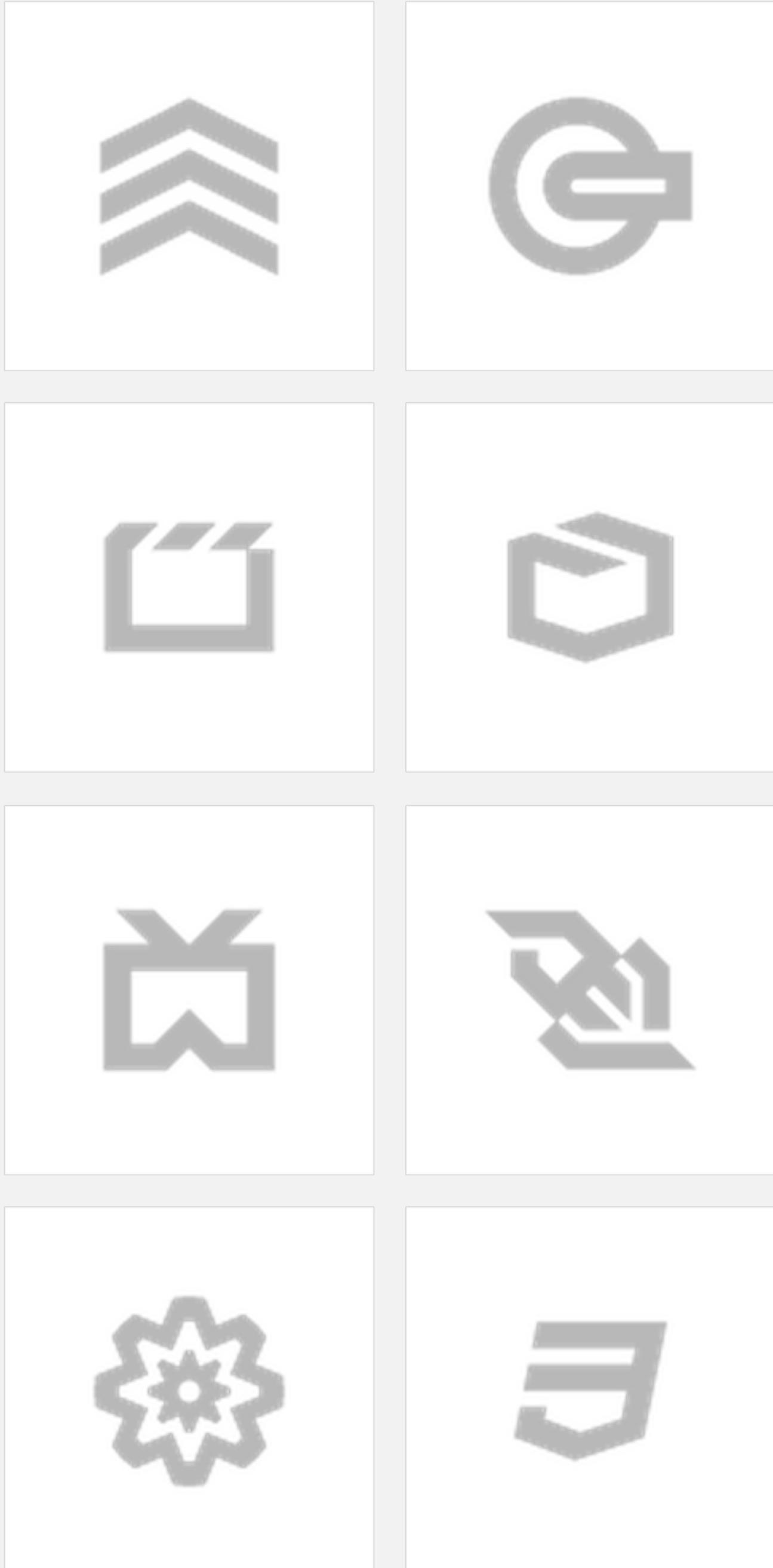
I've seen the
FUTURE
It's in my
BROWSER



Neden Böyle Düşünüyoruz?

- Cihazların performanslarının artması
- HTML kapsamının genişlemesi
- JavaScript'te gelinen nokta

- Semantic
- Offline & Storage
- Multimedia
- 3D, Grafik, Efekt
- Cihazlara Erişim
- Connectivity
- Performans & Entegrasyon
- CSS3



Dünya'da Bakış Nasıl?

Compare

Search terms ▾

html5 app
Search term

hybrid app
Search term

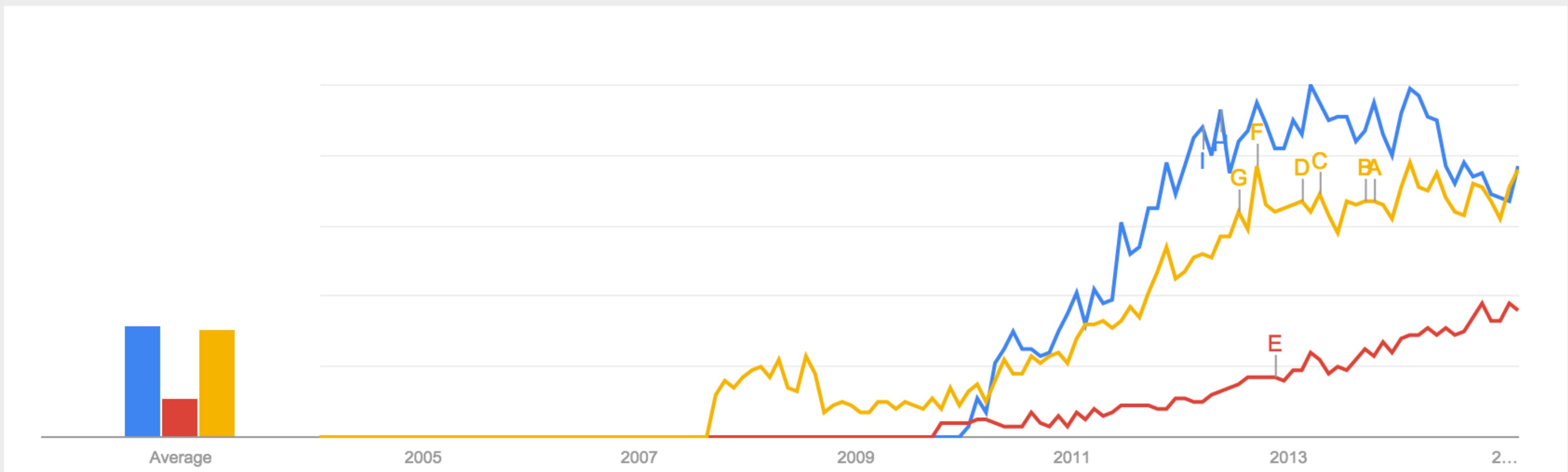
native app
Search term

+ Add term

Interest over time



News headlines Forecast



Türkiye'de Bakış Nasıl?

Compare

Search terms ▾

html5 app
Search term

hybrid app
Search term

native app
Search term

mobil uyg...
Search term

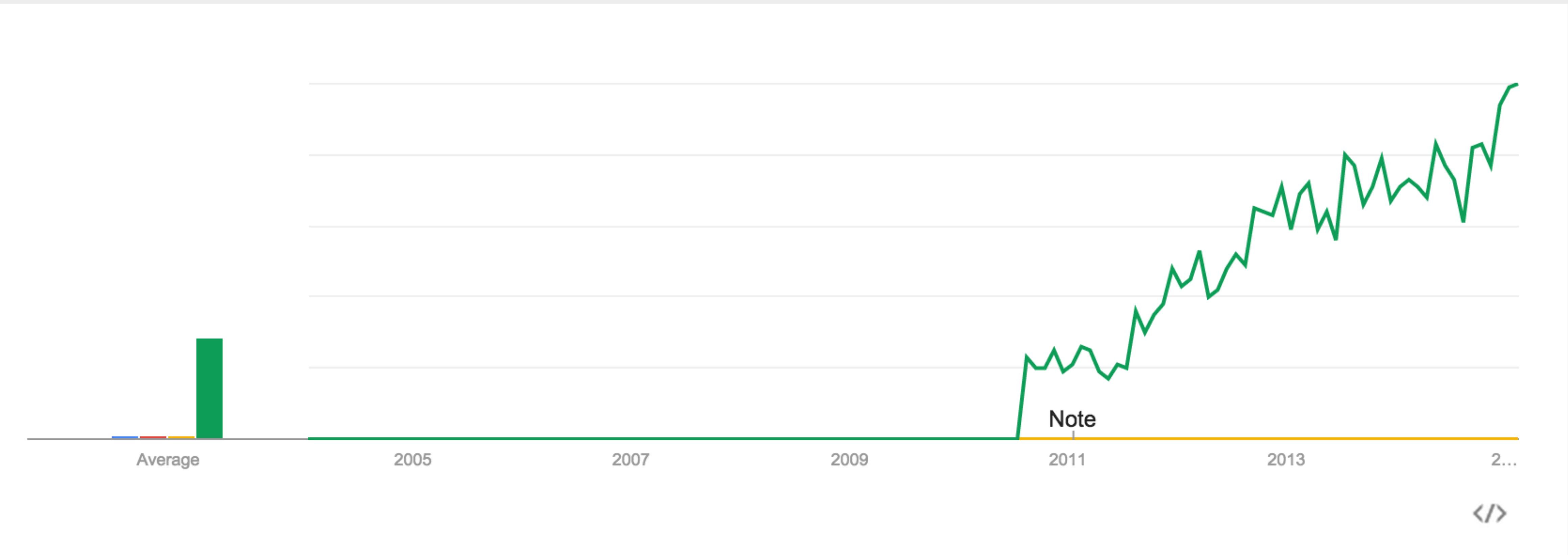
+ Add term

Interest over time



News headlines

Forecast



Neyse Biz İşimize Bakalım

Mobil için Arayüz Geliştirme



- Yetişmiş iş gücüne kolay erişim
- Bir defa geliştirip, bütün ortamlarda uygulayabilme

Hangi Metodu Seçmeli?

Compare

Search terms ▾

responsi...

Search term

responsi...

Search term

adaptive ...

Search term

adaptive ...

Search term

mobile w...

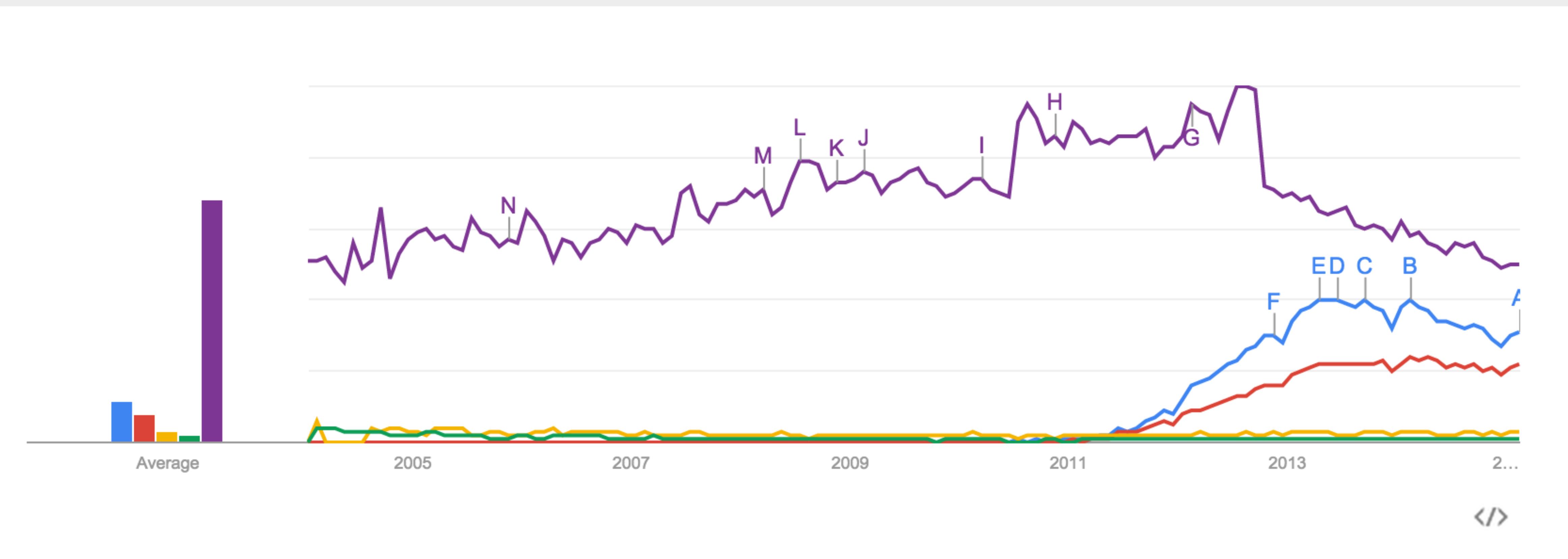
Search term

Interest over time



News headlines

Forecast



Tercihler Süreci Doğrudan Etkiler

- Responsive vs Adaptive
- Desktop First vs Mobile First*

*Büyük ekran öncelikli kodlama - Mobil cihaz öncelikli kodlama

Responsive vs Adaptive

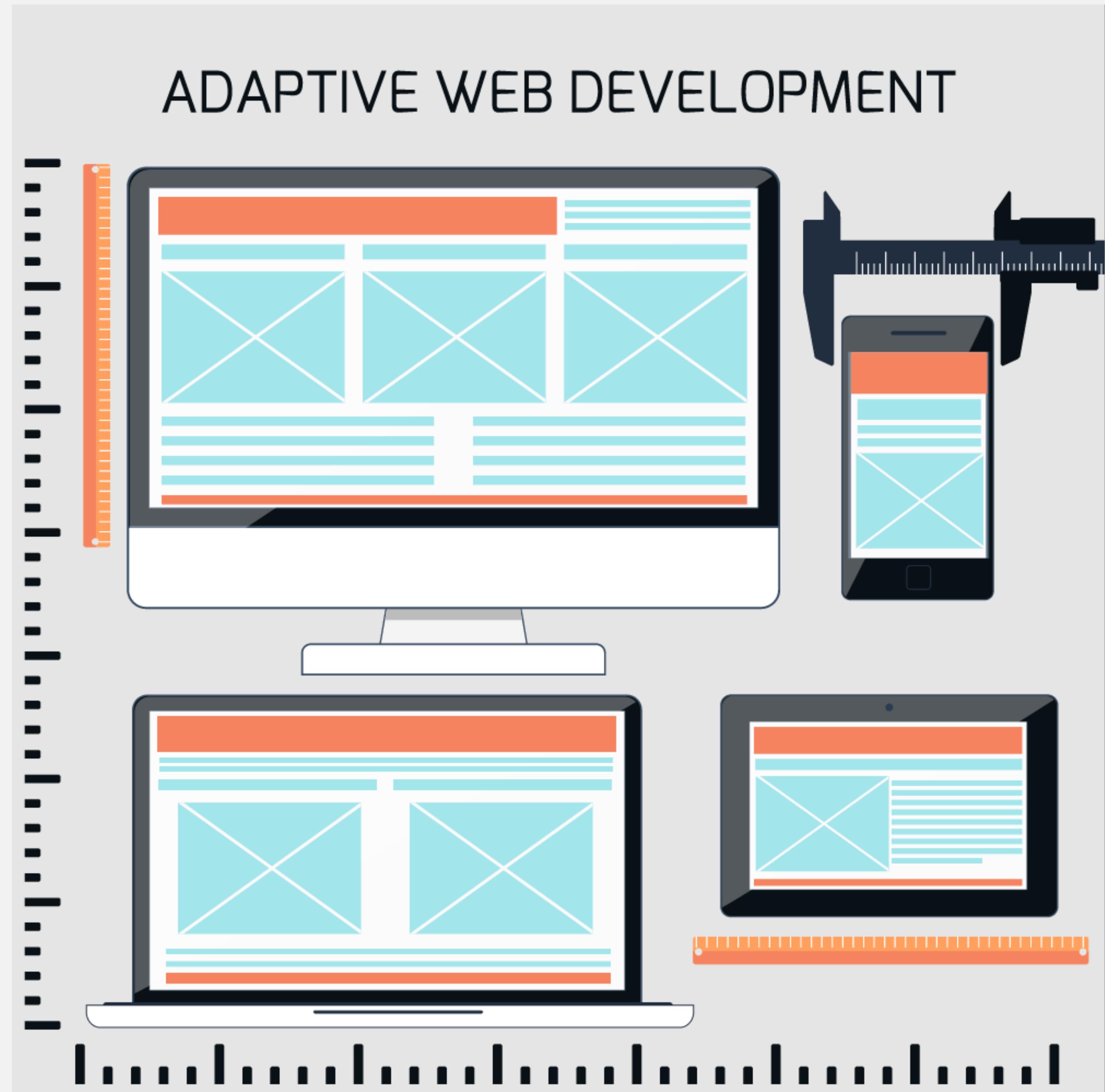
Responsive

- Ekran çözünürlüğüne göre elastik tasarım
- Aynı tema ve stillerin genişliğe göre yönetimi
- Kolay geliştirme
- Büyük dosya boyutları

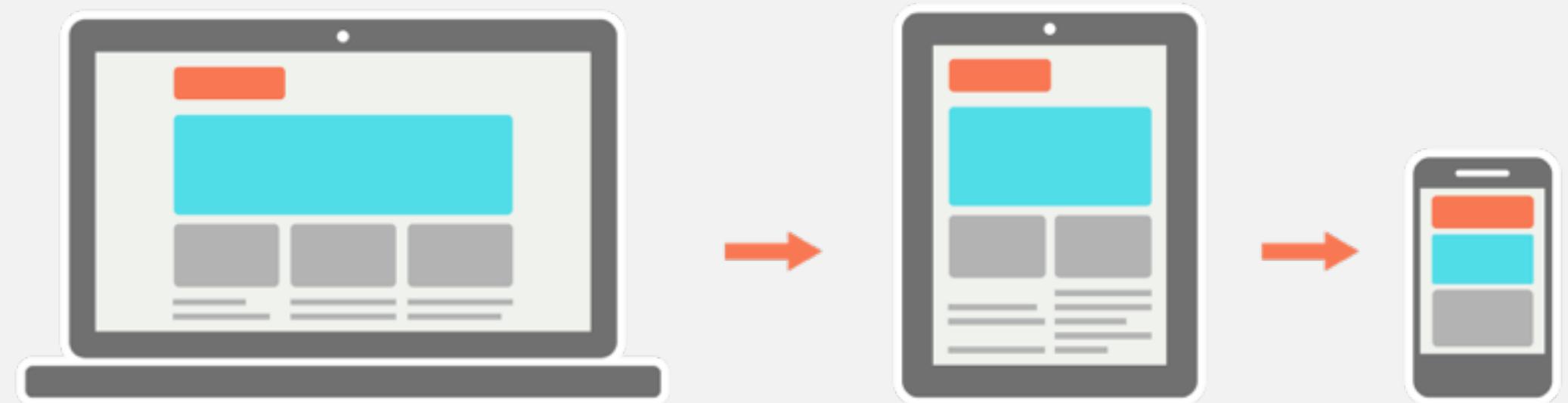


Adaptive

- Önceden belirlenen genişliklere çalışma
- Farklı genişlik için farklı tema ve stil yönetimi
- Kısmen uzun geliştirme süreci
- Küçük dosya boyutu

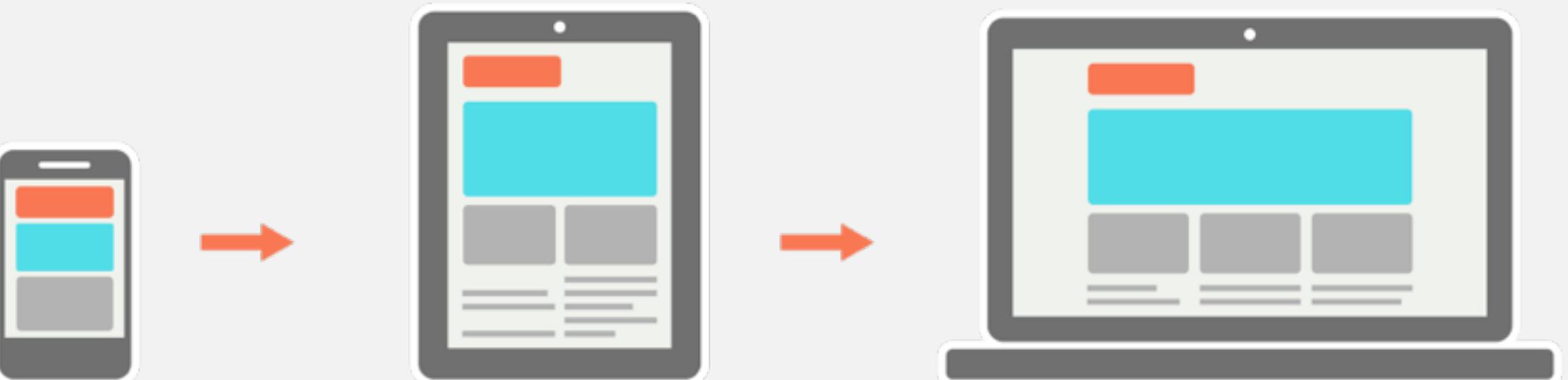


Desktop First vs Mobile First



- İçeriği yoğun siteler
- Kurumsal siteler, (belki) e-ticaret
- Mobil önceliği az olan

- Sürekli etkileşim beklenisi
- Çoğunlukla okunacak içeriği olan
- Blog, liste, haber siteleri



Tercihimizi Yaptık, Peki Sonra?

- Kod kurgusu
- Touch Events*

* Dokumatik ekran etkileşimi

Code Smart*

*Akıllıca Kod Yazın

```
<table width="100%" border="0" cellpadding="0" cellspacing="1" background="http://www.w3schools.com/images/w3schools_green.gif">
</tr>
<td height="50" width="600" colspan="2"><a href="http://www.w3schools.com">www.w3schools.com</a>
<td width="200" height="60" bgcolor="blue"> <table width="200" border="1" background="http://www.w3schools.com/images/w3schools_blue.gif">
<tr>
<td><form name="login" method="post" action="">
<input type="hidden" name="action" value="login">
<table width="120" border="0" align="center" cellpadding="1" cellspacing="1">
<tr>
<td width="40" align="right">email:</td>
<td colspan="2"><input name="login_name" type="text" size="15" value="w3schools">
</tr>
<tr>
<td align="right">pass:</td>
<td align="right"><input name="login_password" type="password" size="15" value="w3schools">
</tr>
</table>
</td>
</tr>
</table>
```

Overwrite edeceğiniz kodu baştan yazmayın

```
.article-footer .share-widget {  
    position: absolute;  
    top: 50%;  
    transform: translateY(-50%);  
    padding-bottom: 0;  
}  
  
@media screen and (max-width: 768px) {  
    .article-footer .share-widget {  
        position: relative;  
        top: auto;  
        transform: none;  
    }  
}
```

```
.article-footer .share-widget {  
    padding-bottom: 0;  
}  
  
@media screen and (min-width: 769px) {  
    .article-footer .share-widget {  
        position: absolute;  
        top: 50%;  
        transform: translateY(-50%);  
    }  
}
```

```
.main-content {
  float: left;
  width: 900px;
}

.supplementary {
  float: right;
  width: 380px;
}

@media screen and (min-width: 769px) and (max-width: 1024px) {
  .main-content {
    width: 644px;
  }
}

@media screen and (max-width: 768px) {
  .main-content,
  .supplementary {
    float: none;
    width: 100%;
  }
}
```

```
@media screen and (min-width: 769px) {
  .main-content {
    float: left;
    width: calc(100% - 380px);
  }

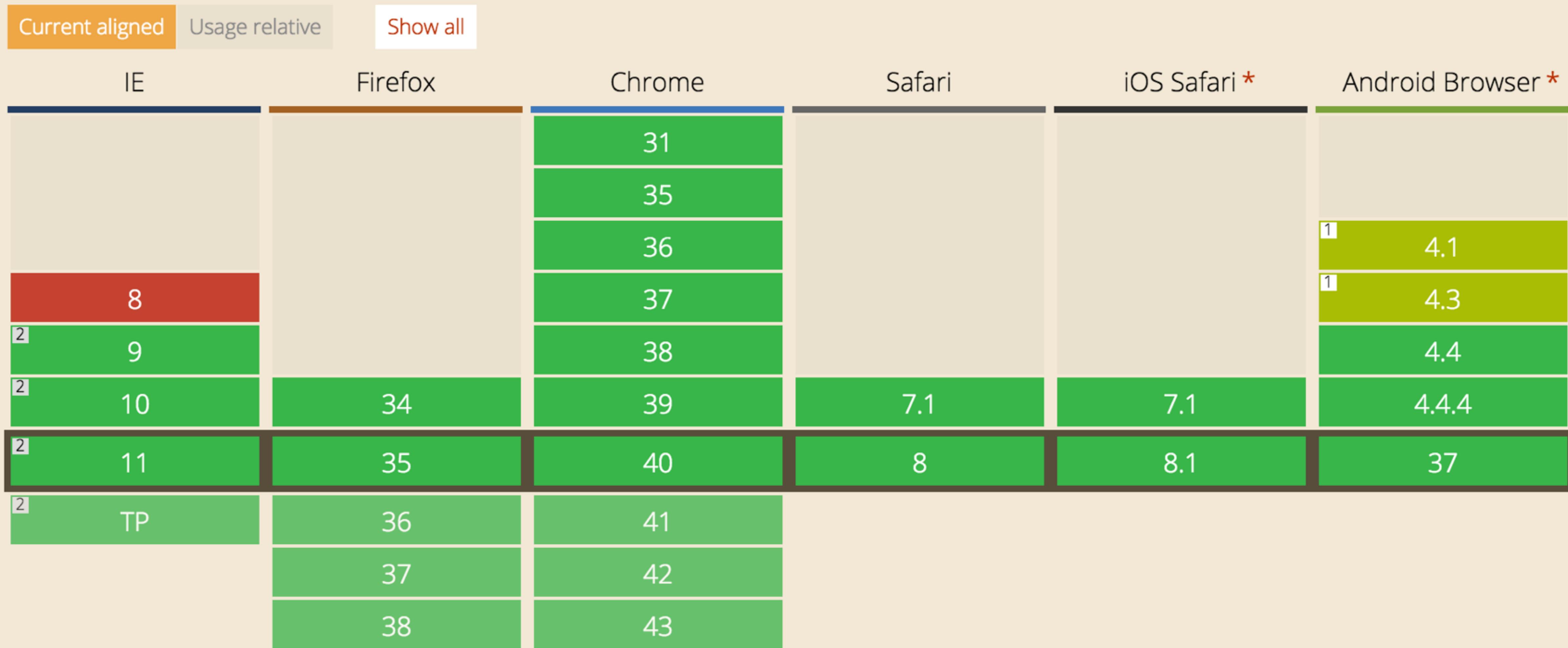
  .supplementary {
    float: right;
    width: 380px;
  }
}
```

Vektör ve SVG Kullanın

- Çözünürlük ve retina gibi etkenler
- Küçük dosya boyutu
- Font-icon

SVG (basic support) - REC

Method of displaying basic Vector Graphics features using the embed or object elements. Refers to the SVG 1.1 spec.



WOFF - Web Open Font Format - REC

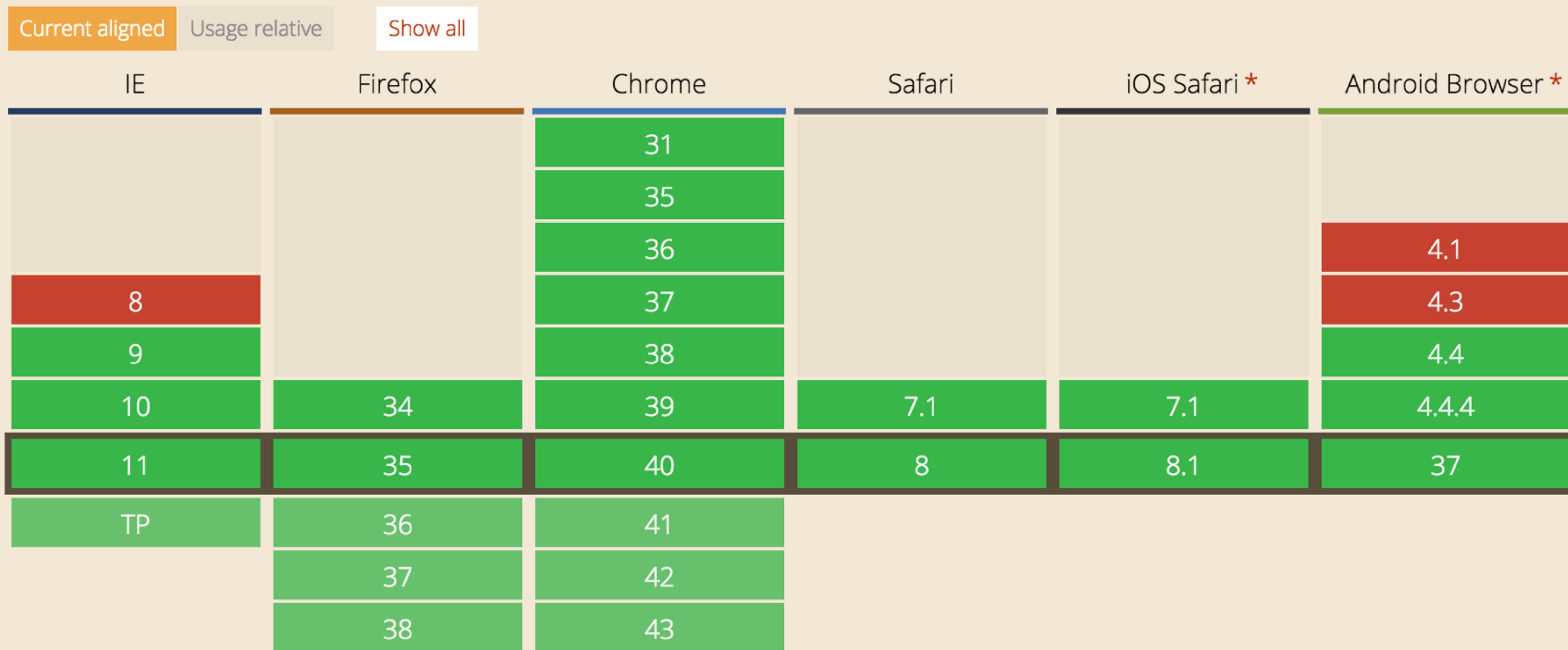
Global

87.81%

Turkey

88.8%

Compressed TrueType/OpenType font that contains information about the font's source.



Touch Eventler

- Dokunmaktik ekranda “hover” yok
- Farklı tarayıcıların aynı iş için farklı eventleri bulunuyor
- Ek kontrol kurgusu ihtiyacı

Dokunmatik Destekli Menü

```
<nav role="navigation">
  <ul>
    <li><a href="#">About</a></li>
    <li><a href="#">Services</a>
      <ul>
        <li><a href="#">Digital</a></li>
        <li><a href="#">Print</a></li>
        <li><a href="#">Outdoor</a></li>
      </ul>
    </li>
    <li><a href="#">Portfolio</a></li>
    <li><a href="#">Contact</a></li>
  </ul>
</nav>
```

```
<nav role="navigation">
  <ul>
    <li><a href="#">About</a></li>
    <li><a href="#" aria-haspopup="true">Services</a>
      <ul>
        <li><a href="#">Digital</a></li>
        <li><a href="#">Print</a></li>
        <li><a href="#">Outdoor</a></li>
      </ul>
    </li>
    <li><a href="#">Portfolio</a></li>
    <li><a href="#">Contact</a></li>
  </ul>
</nav>
```

Ek ihtiyaçlar

- Sayfa swipe durumunun kontrolü
- İçeriklerin canvas dışına çıkma ihtimali (uzun menüler vs)
- Tablet arayüzünün, masa üstü ile aynı olduğu durumlar

Farklı Tarayıcı, Farklı Event

- W3C Dokunma Eventleri
 - touchstart, touchmove, touchend
- Eski dostumuz IE'nin Dokunma Eventleri
 - pointerdown, pointermove, pointerup
- Bitmedi (IE'nin Win 8 desktop modu)
 - MSPointerDown, MSPointerMove, MSPointerUp

Farklı Tarayıcı, Farklı Event

```
$(document)
  .on('touchmove pointermove MSPointerMove', function(e){
    touchmoved = true;
  })
  .on('touchstart pointerdown MSPointerDown', function(e){
    // ilgili kodlar
  })
  .on('touchend pointerup MSPointerUp', function(e){
    if(touchmoved === true){
      // ilgili kodlar

      touchmoved = false;
    }
  });
});
```

Performans ve Optimizasyon Sıkıntıları

- JavaScript Frameworkler işimizi kolaylaştırırken, baş ağrıtabilir
- Benzer durumda UI Kitler, stil ve html konusunda baş ağrıtabilir
- Bozuk HTML Semantiği, Native elemanlarının kullanılmaması
- Mobil bağlantı hızları (3G, Wireless vs)

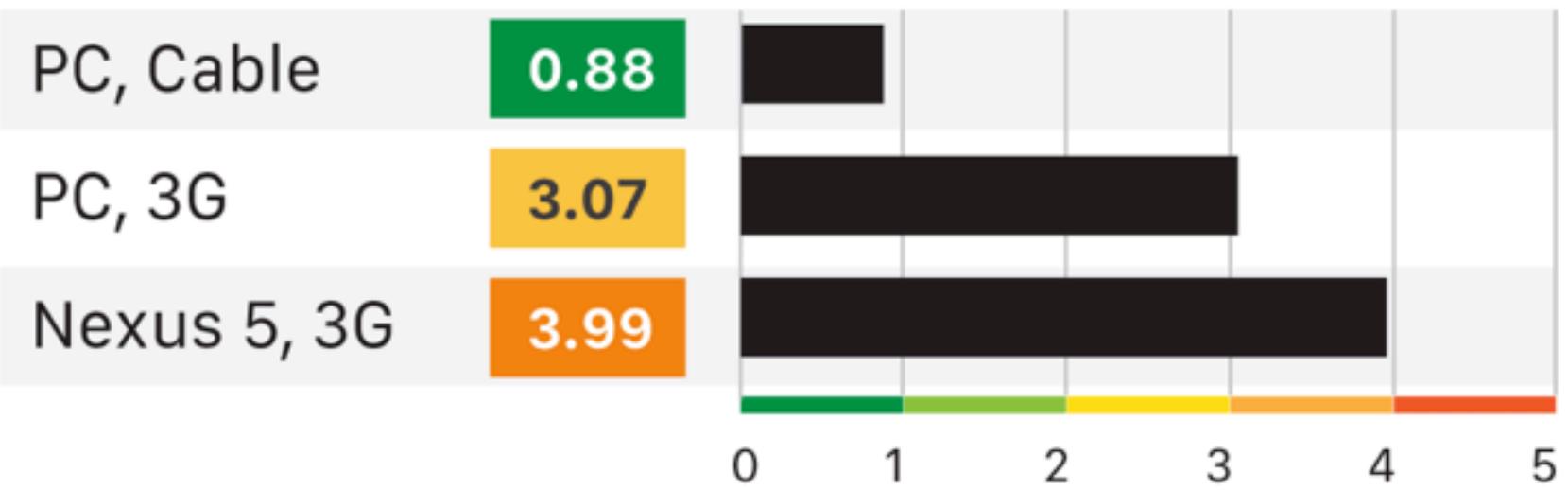
JavaScript

- Yüklenme süreleri yavaş olabilir
- Dosya boyutunu gereksiz artırabilir
- Yanlış kullanımı çok fazla
(<https://github.com/bcinarli/frontend-horror/tree/master/js>)

Avg. first render times (seconds)

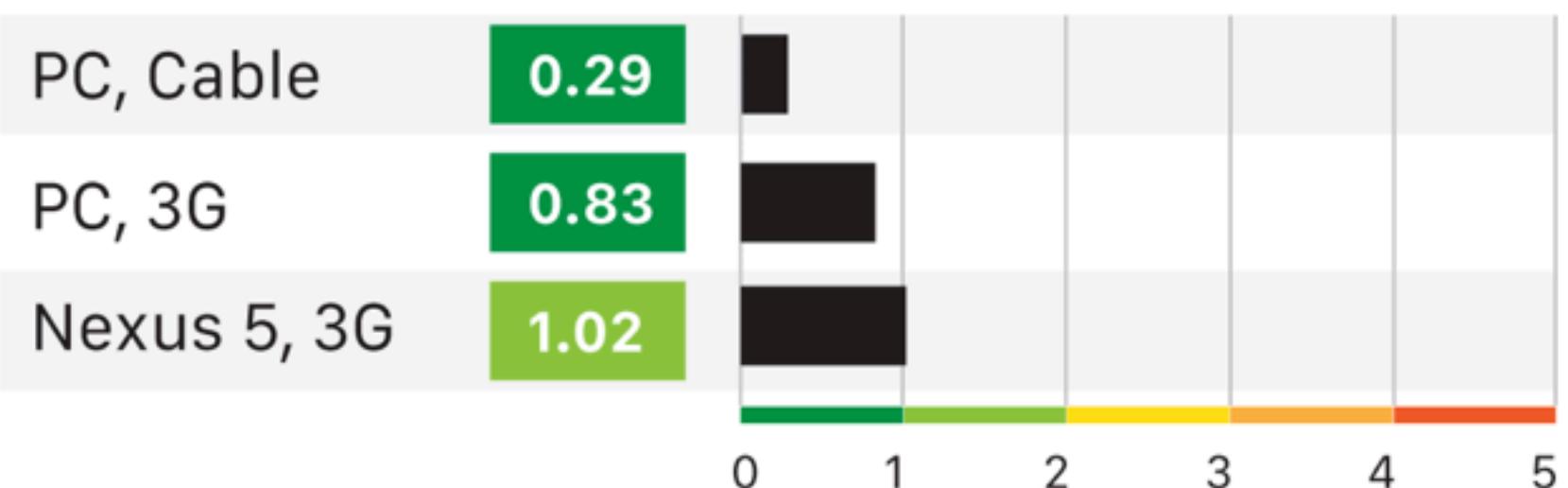
Angular

51k script size



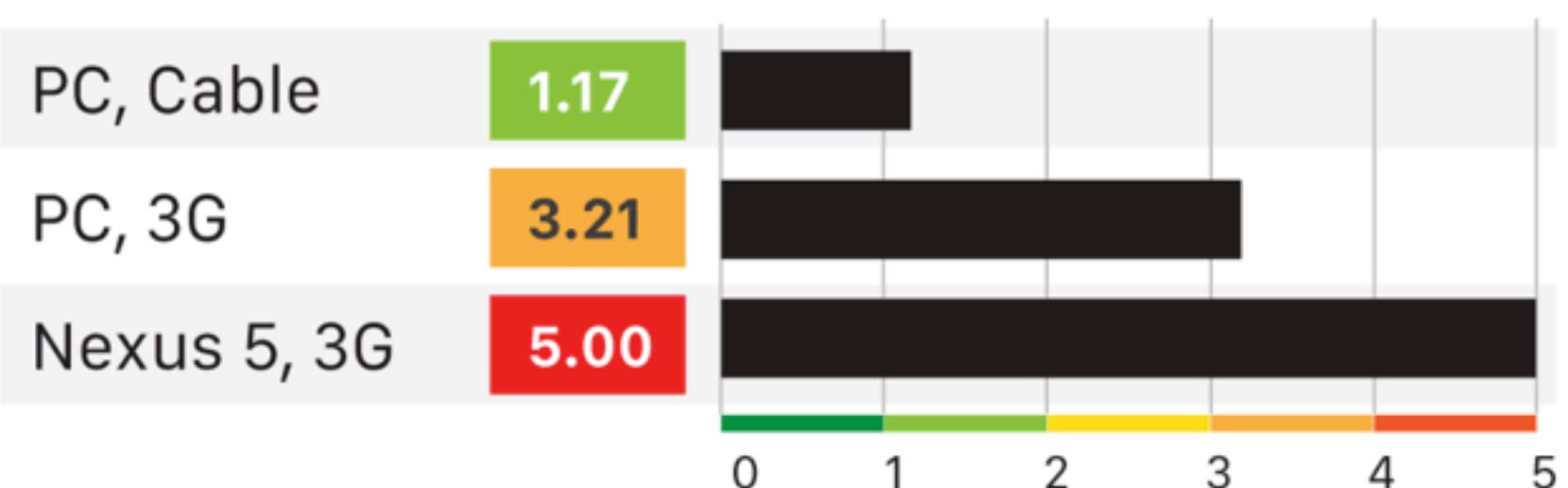
Backbone

43k script size



Ember

165k script size



UI Kitler

- Bootstrap, Foundation, PureCSS vs.
- Rapid prototype*
- Genel kullanım ve form bazlı arayüzler
- Gridler her tasarıma uymuyor
- Overwrite çok fazla yapılıyor



Bilal Çınarlı
@bcinarli

Just a rough est: , 80% of developers do not know they can customise #Bootstrap before download, instead, they use full package #overkill



Bilal Çınarlı
@bcinarli

Remember before downloading #Bootstrap:
"Ain't gonna use it? Don't load it"

* Hızlı prototipleme, çalışmala hızlı başlama

HTML Semantiği ve Native Elemanlar

- Yanlış HTML kurguları (<https://github.com/bcinarli/frontend-horror/tree/master/html>)
- Form elemanları ve aksiyonlarda, bilinçsiz JavaScript eklentileri
- Tekrar kullanılabilirliği göz ardı etme (<http://jsfiddle.net/bcinarli/fr6Lyapb/>)

Bağlantı Hızı

- **Kullanıcılar genel olarak ilk 2 saniyede birşey görmeye başlamadığında sayfayı kapatıyor**
- Bazı durumlarda, Edge ve yavaş 3G hızları
- İçerik ve resimlerin optimizasyonu
- Sayfa yüklenme sürelerinin optimizasyonu

Geliştirmeyi Kolaylaştıran Araçlar

- [caniuse.com](#)
- Modernizr
- icomoon font generator
- Chrome DevTools Mobile Mod

CSS

- @font-face Web fonts
- Blending of HTML/SVG elements
- calc() as CSS unit value
- 2.1 selectors
- background-blend-mode
- background-position edge offsets
- Counters
- Feature Queries
- Filter Effects
- Generated content for pseudo-elements
- Gradients
- Grid Layout
- Hyphenation
- inline-block
- Masks
- min/max-width/height
- outline
- position:fixed
- Regions
- Repeating Gradients
- resize property
- Shapes Level 1
- Table display
- text-size-adjust
- touch-action property
- Variables
- will-change property
- 3D Transforms
- Animation
- Background-image options
- Border images
- Border-radius (rounded corners)
- Box-shadow
- Box-sizing
- Colors
- Cursors (original values)
- image orientation

HTML5

- Audio element
- Canvas (basic support)
- Canvas blend modes
- Color input type
- contenteditable attribute (basic support)
- Custom Elements
- Datalist element
- dataset & data-* attributes
- Date/time input types
- Details & Summary elements
- Dialog element
- Download attribute
- Drag and Drop
- Form validation
- getElementsByClassName
- HTML Imports
- HTML5 form features
- input placeholder attribute
- Multiple file selection
- New semantic elements
- Number input type
- Offline web applications
- Picture element
- Progress & Meter
- Range input type
- Ruby annotation
- sandbox attribute for iframes
- seamless attribute for iframes
- Session history management
- Shadow DOM
- Spellcheck attribute
- Srcset attribute
- Text API for Canvas
- Toolbar/context menu
- Video element
- WebGL - 3D Canvas graphics

SVG

- Inline SVG in HTML5
- SVG (basic support)
- SVG effects for HTML
- SVG filters
- SVG fonts
- SVG fragment identifiers
- SVG in CSS backgrounds
- SVG in HTML img element
- SVG SMIL animation
- **All SVG features**

Other

- async attribute for external scripts
- classList (DOMTokenList)
- Content Security Policy
- Data URIs
- defer attribute for external scripts
- DOMContentLoaded
- ECMAScript 5 Strict Mode
- getComputedStyle
- HTML templates
- JPEG XR image format
- MathML
- MPEG-4/H.264 video format
- Mutation Observer
- Ogg/Theora video format
- Opus
- PNG alpha transparency
- Pointer events
- Promises
- querySelector/querySelectorAll
- relList (DOMTokenList)
- Strict Transport Security
- Touch events
- WAI-ARIA Accessibility features

Download Modernizr 2.8.3

Use the [Development version](#) to develop with and learn from. Then, when you're ready for production, use the build tool below to pick only the tests you need.

CSS3

TOGGLE

- @font-face
- background-size
- border-image
- border-radius
- box-shadow
- Flexible Box Model (flexbox)
- Flexbox Legacy
- hsla()
- multiple backgrounds
- opacity
- rgba()
- text-shadow
- CSS Animations
- CSS Columns
- CSS Generated Content (:before/:after)
- CSS Gradients
- CSS Reflections
- CSS 2D Transforms
- CSS 3D Transforms
- CSS Transitions

HTML5

TOGGLE

- applicationCache
- Canvas
- Canvas Text
- Drag 'n Drop
- hashchange
- History (pushState)
- HTML5 Audio
- HTML5 Video
- IndexedDB
- Input Attributes
 - Note: does not add classes*
- Input Types
 - Note: does not add classes*
- localStorage
- postMessage
- sessionStorage
- Web Sockets
- Web SQL Database
- Web Workers

Misc.

TOGGLE

- Geolocation API
- Inline SVG
- SMIL
- SVG
- SVG clip paths
- Touch Events
- WebGL

Extra

- html5shiv v3.7
- html5shiv v3.7.1 w/ printshiv
- Modernizr.load ([yepnope.js](#))
- Media Queries
- Add CSS Classes

className prefix:

► Extensibility

► Non-core detects



GENERATE!



DOWNLOAD

Custom Build

```
/* Modernizr 2.8.3 (Custom Build) | MIT & BSD
 * Build: http://modernizr.com/download/#-shiv-cssclasses-load
 */
>window.Modernizr=function(a,b,c){function u(a){j.cssText=a}function v(a,b){return u(prefixes.join(a+","+(b||"")))}function w(a,b){return typeof a==b}function x(a,b){return!~(""+a).indexOf(b)}function y(a,b,d){for(var e in a){var f=b[a[e]];if(f!=c){return d==e?1:a[e].w(f,"function")?f.bind(d):f}}return!1}var d="2.8.3",e={},f=!0,g=b.documentElement,h="modernizr",i=b.createElement(h),j=i.style,k,l={}.toString,m={},n={},o={},p=[],q=p.slice,r,s={}.hasOwnProperty,t!w(s,"undefined")&&!w(s.call,"undefined")?t=function(a,b){return s.call(a,b)}:t=function(a,b){return b in a&&w(a.constructor.prototype[b],"undefined")?Function.prototype.bind.call(t,a):Function.prototype.bind.call(t,[a])}var e=this;if(typeof c=="function")throw
```

Don't Minify Source

[Import Icons](#)

search...



HTML Mag

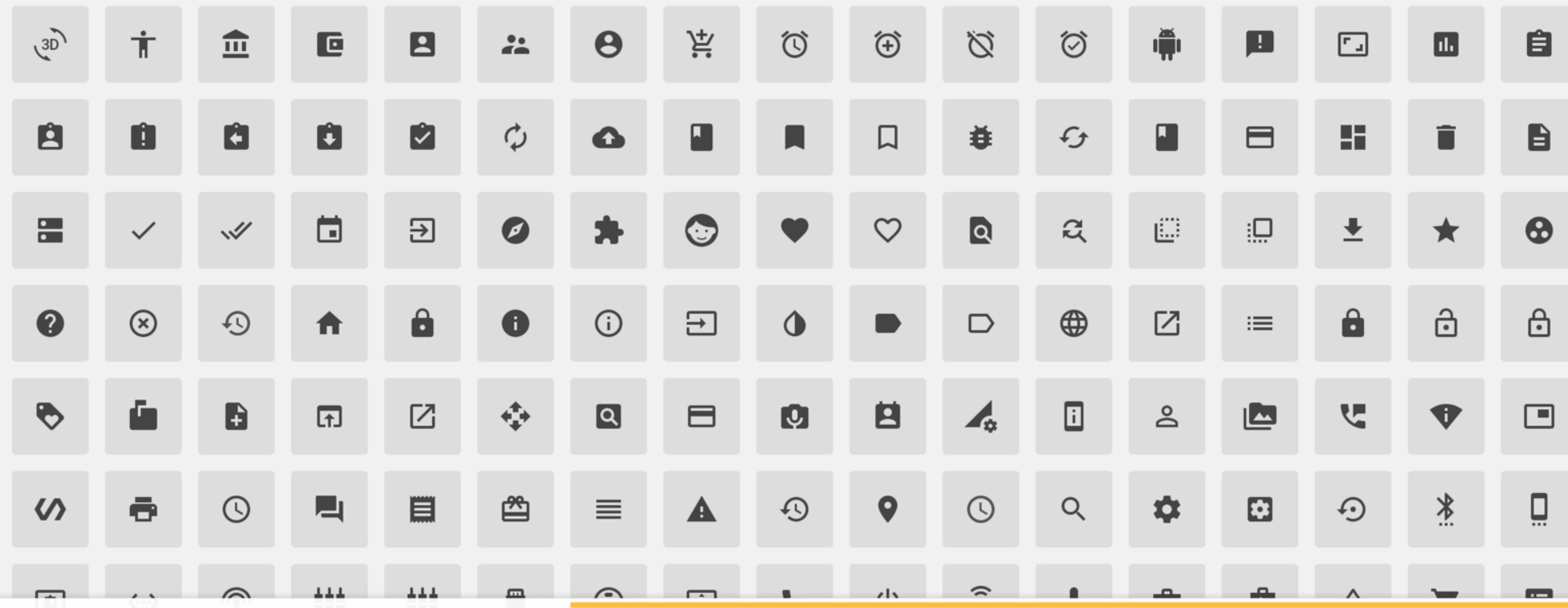
HTML Mag

24



Material Design Icons

24

 Generate SVG / PNG

Selection (8)

Generate Font **F**

The screenshot shows a tablet device interface with the following details:

- Device:** <Select model>
- Network:** No throttling
- Resolution:** 768 x 1024
- Orientation:** 2 (Portrait)
- User Agent:** Mozilla/5.0 (iPad; CPU OS 7_0 like ...)

The website has a red header with the logo "HTML MAG" and navigation links for "ANA SAYFA" and "HAKKIMIZDA". The main content area displays three articles:

- Gizli Cevherler: Widows & Orphans**

CSS yazan çoğu kişinin otomatik tamamlamalardan aşina olduğu şeylerden birisi `widows` 'dur. `width` yazmak isterken defalarca `widows` yazılmış ama asla nedir bu `widows` bakılmamış, kullanılmamıştır.

[Devam](#)

Nesrin Kalender | 10 Şubat 2015 | Yorum Yapılmamış
- Namespace Your Events with the help of jQuery**

In daily coding, binding an event to an element is simply and autonomous routine. Most of time developers select the element with jQuery, attach the event with `on` method or event's keyword and never think about if any other methods are also attached to same element with the very same event.

[Devam](#)

Bilal Cinarli | 14 Ocak 2015 | Yorum Yapılmamış
- Hidden Gems: Fixed Table Layout**

There some features that are unknown or very little known to most developers. These features in most cases, save you writing tons of code and hours of work. `table-layout: fixed` is one of these gems.

[Devam](#)

Bilal Cinarli | 6 Ocak 2015 | Yorum Yapılmamış

The screenshot shows the Chrome DevTools interface with the 'Elements' tab selected. The left pane displays the DOM tree of the webpage, with the 'header.page-header' element highlighted. The right pane shows the 'Styles' panel for the selected element, listing the following CSS rules:

```
element.style {  
}  
.page-header {  
    height: 150px;  
    background-color: #c54846;  
}  
article, aside, details, figcaption, figure, footer, header, hgroup, main, nav, section, summary {  
    display: block;  
}  
*, *:after, *:before {  
    box-sizing: inherit;  
}  
Pseudo ::before element  
*, *:after, *:before {  
    box-sizing: inherit;  
}
```

The 'Properties' tab is also visible in the Styles panel. A visual representation of the element's bounding box is shown on the right, with dimensions 768 x 150. The 'Show inherited properties' checkbox is checked at the bottom.

Toparlarsak

- Bundan sonra artık herşey HTML tabanlı
- JavaScript ve performans önemli bir aktör
- HTML içinde yönetilebilir mimari kurguları tasarlanmalı
- Tercihler doğru yapılmalı ve en optimal kodlama/kurgu tasarlanmalı

Sorularınız?

Merak ettikleriniz, detaylandırmak istedikleriniz...

Teşekkürler

Bilal Çınarlı
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