

Responsive Web Design

An app is not enough



Joakim Kemeny

@joakimkemeny







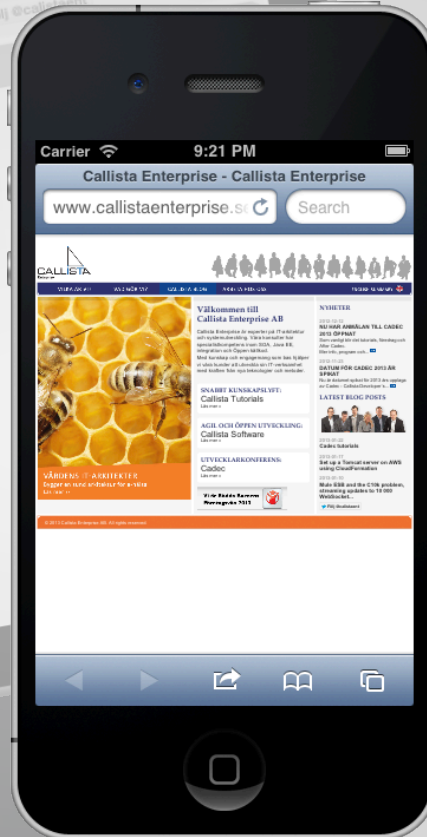


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using Cloud
2013-01-10
Mule ESB and the C10k problem,
streaming updates to 10 000
WebSocket...
Följ @callistaent



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Företagsvän 2013



using Cloud
2013-01-10
Mule ESB and the C10k problem,
streaming updates to 10 000
WebSocket...

Följ @callstend



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Företagsvän 2013



using Cloud...
2013-01-10
Mule ESB and the C10k problem,
streaming updates to 10 000
WebSocket...

Följ @callistaent

Carrier

9:21 PM



Välkommen till Callista Enterprise AB

Callista Enterprise är experter på IT-arkitektur och systemutveckling. Våra konsulter har specialistkompetens inom SOA, Java EE, integration och Öppen källkod. Med kunskap och engagemang som bas hjälper vi våra kunder att utveckla sin IT-verksamhet med kraften från nya teknologier och metoder.

SNABBT KUNSKAPSLYFT: Callista Tutorials

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NYHETER

2012-12-12
**NU HAR ANMÄLAN
2013 ÖPPNAT**
Som vanligt blir det
After Cadec.
Mer info, program...

2012-11-23
**DATUM FÖR
SPIKAT**
Nu är datumet spikat
av Cadec - Callista

LATEST BLOGG



2013-01-22
Cadec tutorial

2013-01-17
**Set up a Tomcat
using CloudFog**

2013-01-10
**Mule ESB and
streaming updates to
WebSocket...**



Ignore mobile

Visitors will use a computer anyway



1

Ignore mobile

Visitors will use a computer anyway

2

Create m.company.com

Mobile visitors are only interested in a subset of the information



1

Ignore mobile

Visitors will use a computer anyway

2

Create m.company.com

Mobile visitors are only interested in a subset of the information

3

Create an app

Redirect all mobile visitors to the app stores

Ignoring mobile is...

Ignoring mobile is...
Stupid!

Get the facts at www.lukew.com



1

Ignore mobile

Visitors will use a computer anyway

2

Create m.company.com

Mobile visitors are only interested in a subset of the information

3

Create an app

Redirect all mobile visitors to the app stores

Creating m.company.com is...





Om du har en äldre telefon kan du använda <http://mini.sverigesradio.se> för att hålla dig uppdaterad med de senaste nyheterna.



More examples at wtfmobileweb.com

Creating m.company.com is...

Creating m.company.com is...

Not great!



1

Ignore mobile

Visitors will use a computer anyway

2

Create m.company.com

Mobile visitors are only interested in a subset of the information

3

Create an app

Redirect all mobile visitors to the app stores

Creating an app is...

Create an App or a Site?

- ☒ Will users use it every day?
- ☐ Should it talk to the users?
- ☐ Does it need device access?

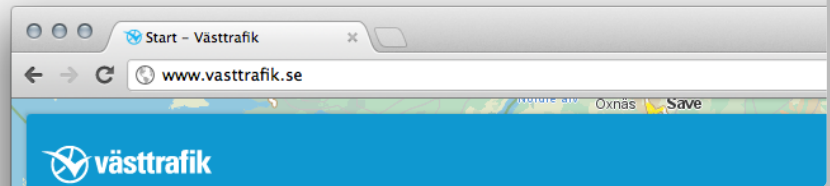
Create an App or a Site?

- ☐ Will users use it every day?
- ☒ Should it talk to the users?
- ☐ Does it need device access?

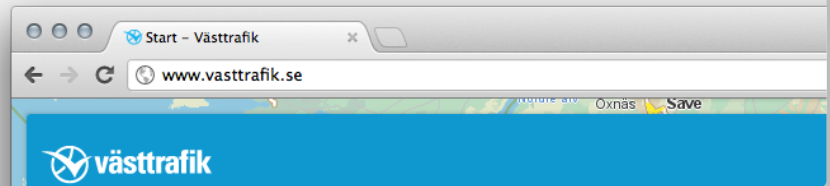
Create an App or a Site?

- ☐ Will users use it every day?
- ☐ Should it talk to the users?
- ☒ Does it need device access?

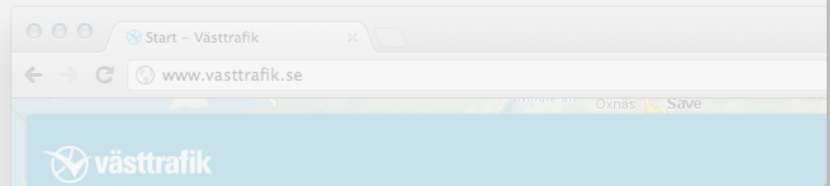
Create an App or a Site?



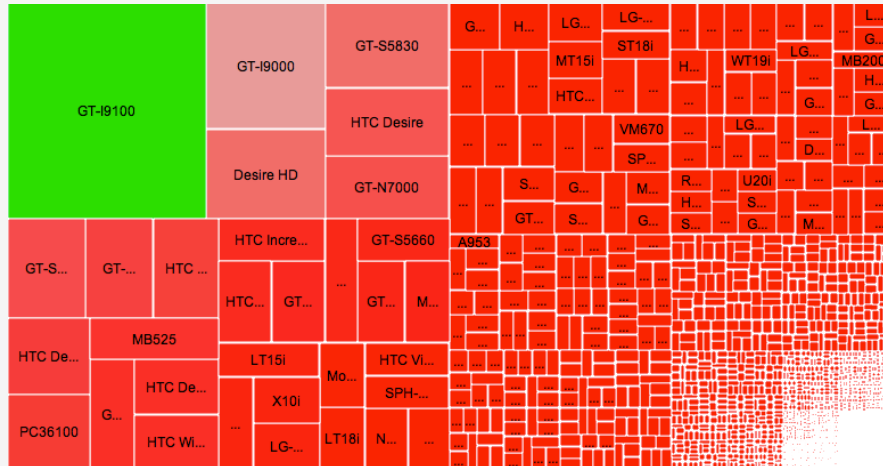
Create an App or a Site?



Create an App or a Site?

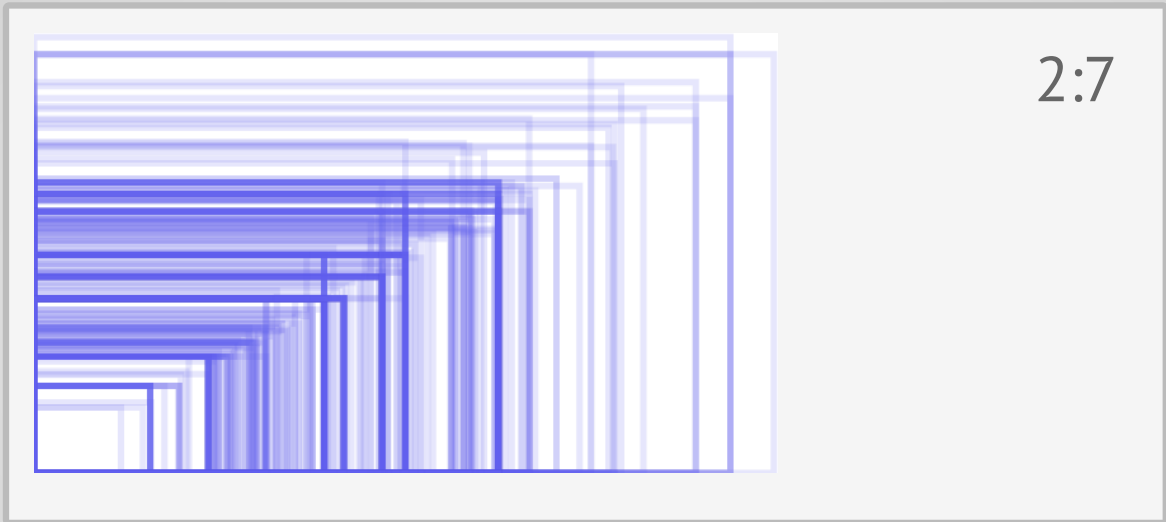


3997 different Android devices



Source opensignalmaps.com/reports/fragmentation.php

Android screen resolutions



Source opensignalmaps.com/reports/fragmentation.php

Pixel density

img.png

img@2x.png

Pixel density

img.png

img@2x.png

Pixel density

ldpi

mdpi

hdpi

xhdpi

img.png

img@2x.png

Pixel density

ldpi

mdpi

hdpi

xhdpi

tvdpi

Creating an app is...

Creating an app is...

Not enough!

Responsive Web Design

Old concept...

Responsive Web Design

Old concept...

Responsive Web Design

...reinvented by Ethan Marcotte

A List Apart, issue 306, 2010

Step 0.1 I know what I'm doing

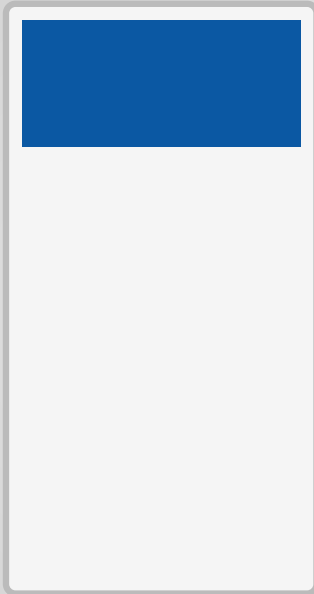
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">

  <!-- Don't zoom out, use the actual width -->
  <meta name="viewport" content="width=device-width">

  ...
```



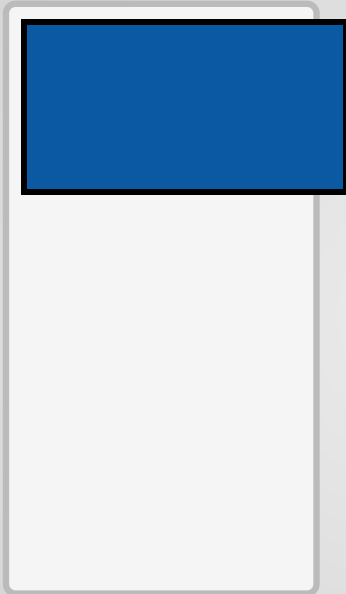
Step 0.2 Travel back in time



```
div {  
  width: 100%;  
}
```



Step 0.2 Travel back in time



```
div {  
  width: 100%;  
  
  border: 4px solid black;  
  padding: 15px;  
}
```



Step 0.2 Travel back in time

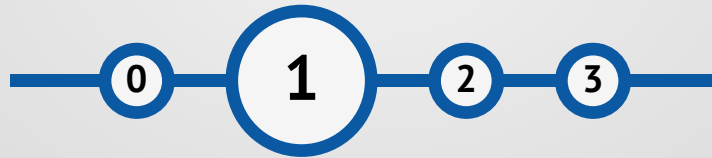


```
div {  
    width: 100%;  
  
    border: 4px solid black;  
    padding: 15px;  
}  
  
* {  
    -webkit-box-sizing: border-box;  
    -moz-box-sizing: border-box;  
    box-sizing: border-box;  
}
```

See paulirish.com/2012/box-sizing-border-box-ftw



Flexible Grid





http://responsive.joakimkemeny.se/demo/demo1/index.html



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Information

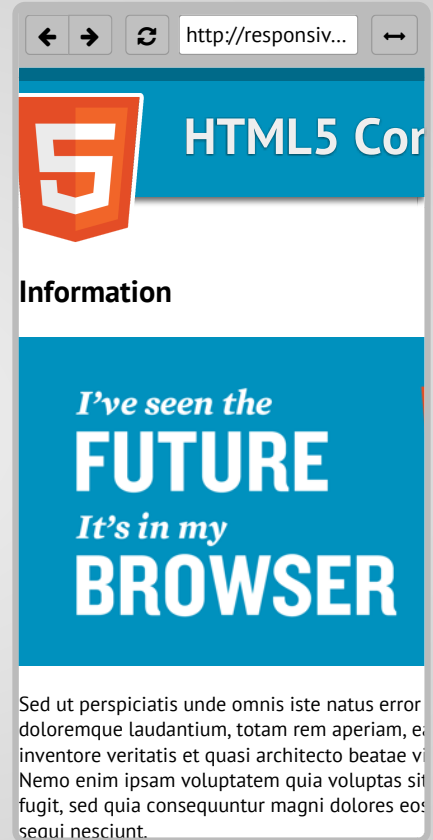
I've seen the
FUTURE
It's in my
BROWSER



Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt.

Register

Name	Time
Maria Olsson	15:01:01
Johan Svensson	15:52:01
Elin Boo	15:54:01



Creating a flexible grid

```
.wrapper {  
  
    width: 880px;  
}  
  
.content {  
    width: 546px;  
}  
  
aside {  
    width: 334px;  
}
```



Creating a flexible grid

```
.wrapper {  
  max-width: 880px;  
  width: 95%; /* 880px */  
}  
  
.content {  
  width: 62.0454545%; /* 546px / 880px */  
}  
  
aside {  
  width: 37.9545455%; /* 334px / 880px */  
}
```



Step 0.3 Use a CSS preprocessor

Variables

Functions

Operations

Nesting

Mixins

```
$blue: #3bbfce;
$border: 1px solid $blue;
$margin: 20px;

nav {
  color: darken($blue,
10%);

  margin: $margin / 2;
}
```

```
ul {
  li {
    border-left: $border;
    &:first-child {
      border-left: 0;
    }
  }
}
```

Sass

sass-lang.com

LESS

lesscss.org

Step 0.3 Use a CSS preprocessor

Variables

Functions

Operations

Nesting

Mixins

```
$blue: #3bbfce;  
$border: 1px solid $blue;  
$margin: 20px;
```

```
nav {
```

```
ul {  
  li {  
    border-left: $border;  
    &:first-child {  
      border-left: 0;
```

Creating a flexible grid

```
.wrapper {  
  max-width: 880px;  
  width: 95%; /* 880px */  
  
  .content {  
    width: percentage(546px / 880px);  
  }  
  
  aside {  
    width: percentage(334px / 880px);  
  }  
}
```





http://responsive.joakimkemeny.se/demo/demo3/index.html



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



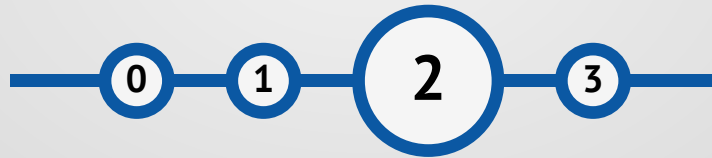
Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt.

Register

Name	Time
Maria Olsson	15:01:01
Johan Svensson	15:52:01
Elin Boo	15:54:01



Flexible images



Creating flexible images

```
img, embed, object, video {  
    max-width: 100%;  
}  
  
.ie6 {  
    img, object {  
        width: 100%;  
    }  
}
```



http://responsive.joakimkemeny.se/demo/demo4/index.html



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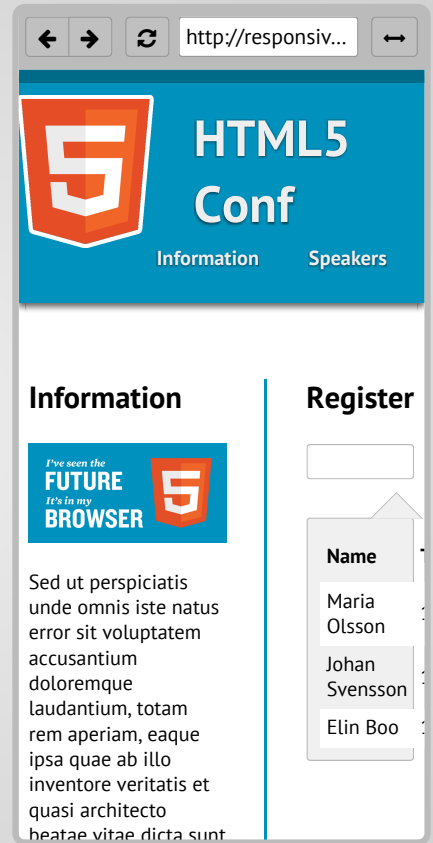
I've seen the
FUTURE
It's in my
BROWSER



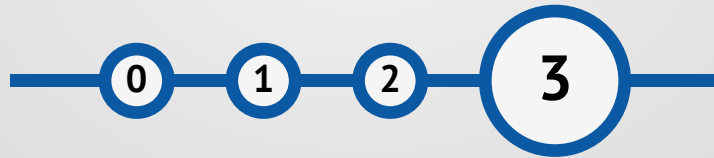
Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt.

Register

Name	Time
Maria Olsson	15:01:01
Johan Svensson	15:52:01
Elin Boo	15:54:01



Media Queries



Using Media Queries

```
@media screen and (max-width: 480px) {  
  body {  
    background-color: red;  
  }  
}
```

```
@media screen and (orientation: landscape) ...
```

```
@media screen and (-webkit-min-device-pixel-ratio: 2) ...
```



Where are the breakpoints?

320px	Phones in portrait mode
480px	Phones in landscape mode
600px	Smaller tablets in portrait mode
768px	Larger tablets in portrait mode
1024px	Larger tablets in landscape mode & smaller laptops
1200px	Widescreen displays

Where are the breakpoints?

200 – 4096



Using Media Queries

```
#content {  
  .content {  
    float: left;  
    padding-right: 30px;  
    width: percentage(546px / 880px);  
  }  
  aside {  
    float: right;  
    padding-left: 30px;  
    width: percentage(334px / 880px);  
  }  
}
```

```
@media screen and (max-width: 599px) {  
  .content {  
    float: none;  
    padding: 0 0 20px 0;  
    width: 100%;  
  }  
  aside {  
    float: none;
```

```
width: percentage(334px / 880px);
}

@media screen and (max-width: 599px) {
  .content {
    float: none;
    padding: 0 0 20px 0;
    width: 100%;
  }
  aside {
    float: none;
    padding: 20px 0 0 0;
    width: 100%;
  }
}
}
```



http://responsive.joakimkemeny.se/demo/demo5/index.html



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

Name	Time
Maria Olsson	15:01:01
Johan Svensson	15:52:01
Elin Boo	15:54:01



Using Media Queries

```
#header {  
  h1 {  
    float: left;  
    margin-left: 130px;  
  
    @media screen and (max-width: 767px) {  
      margin-left: 160px;  
    }  
  
    @media screen and (max-width: 479px) {  
      float: none;  
      margin-left: 0;  
    }  
  }  
}  
  
nav {  
  float: right;  
  
  @media screen and (max-width: 767px) {  
    clear: left;
```

```
margin-left: 0;
}
}

nav {
  float: right;

  @media screen and (max-width: 767px) {
    clear: left;
    float: left;
    margin-left: 160px;
    a {
      background: rgba(255, 255, 255, 0.40);
    }
  }

  @media screen and (max-width: 479px) {
    float: none;
    margin-left: 0;
  }
}
}
```



http://responsive.joakimkemeny.se/demo/demo6/index.html



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Information

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



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Register

Name	Time
Maria Olsson	15:01:01
Johan Svensson	15:52:01
Elin Boo	15:54:01





http://responsive.joakimkemeny.se/demo/demo7/index.html



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Information

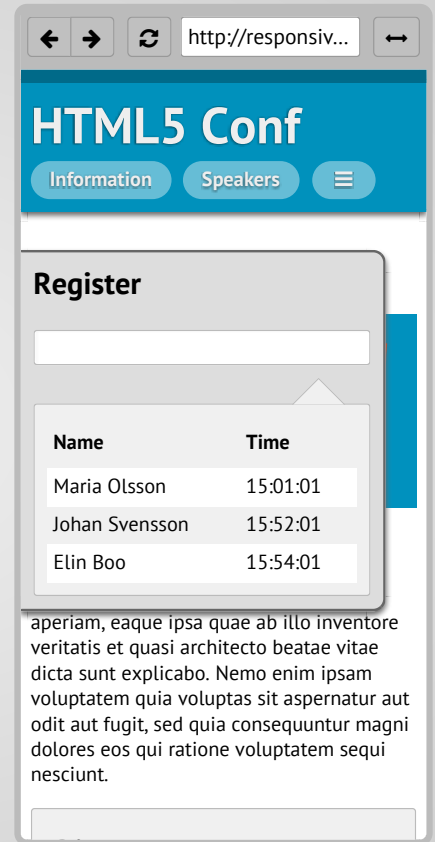


Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt.

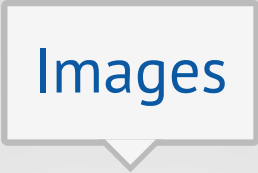
Register

Name	Time
Maria Olsson	15:01:01
Johan Svensson	15:52:01
Elin Boo	15:54:01





Challenges



Images

Challenges

Great guide css-tricks.com/which-responsive-images-solution-should-you-use

Images

Ads

Challenges

Performance

Get the data lukew.com/ff/entry.asp?1681

Conclusions

THE way to create sites 2013...

Conclusions

THE way to create sites 2013...

Conclusions

...but it doesn't always replace apps

We are back in 1997

Conclusions

We are back in 1997

Conclusions

Framework

Twitter

You should checkout twitter.github.com/bootstrap and follow [@brad_frost](https://twitter.com/brad_frost)

Responsive Web Design

Thank you for coming!



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github.com/joakimkemeny

