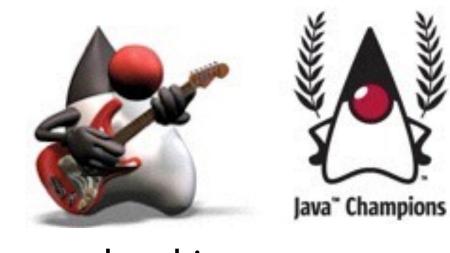
# Mission Impossible

I'm working as Java EE/SE developer, consultant, sometimes author, speaker and trainer with Java since 1995...

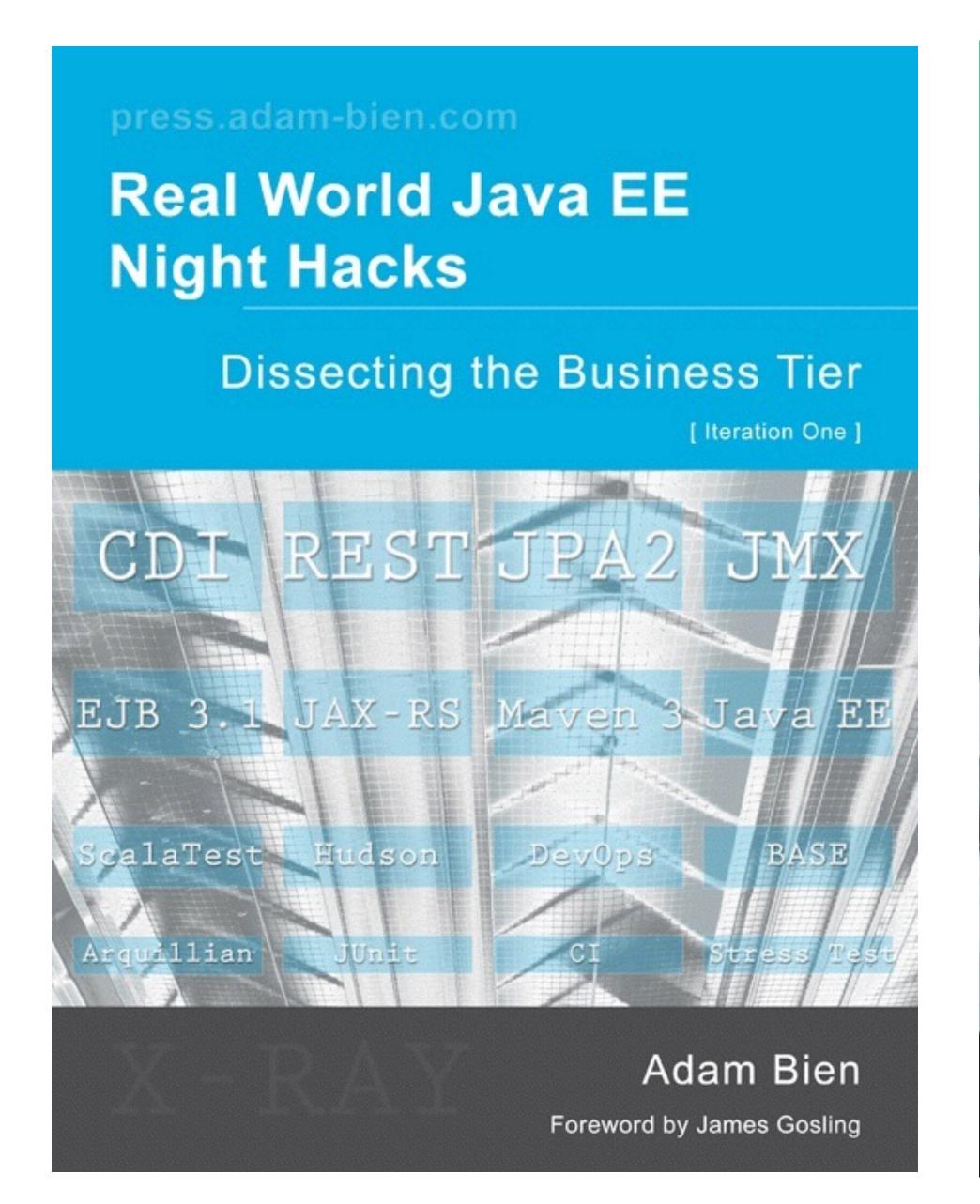
...and still really enjoying it!

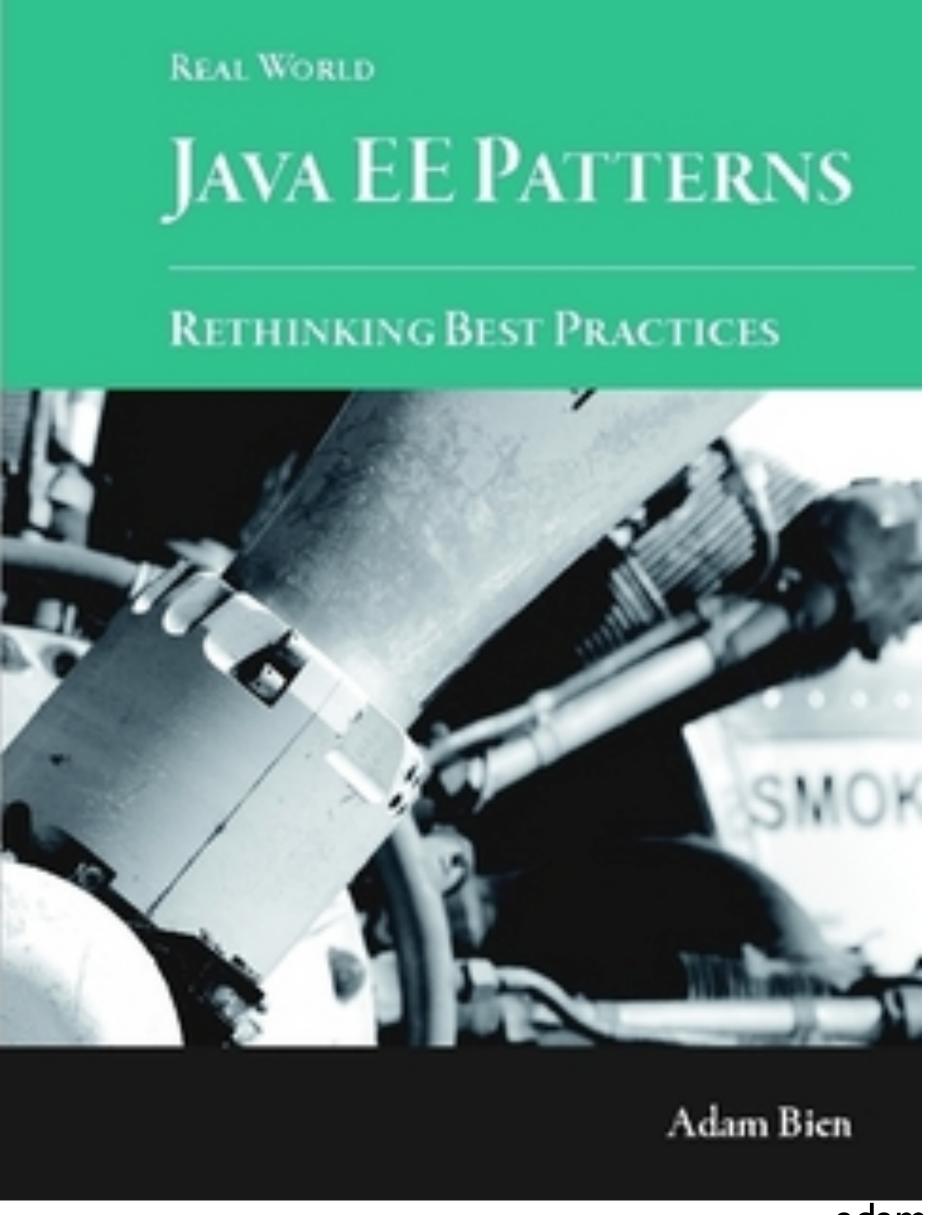
Java Programming Language rocks!

workshops.adam-bien.com



adam-bien.com





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December 16th, 2016

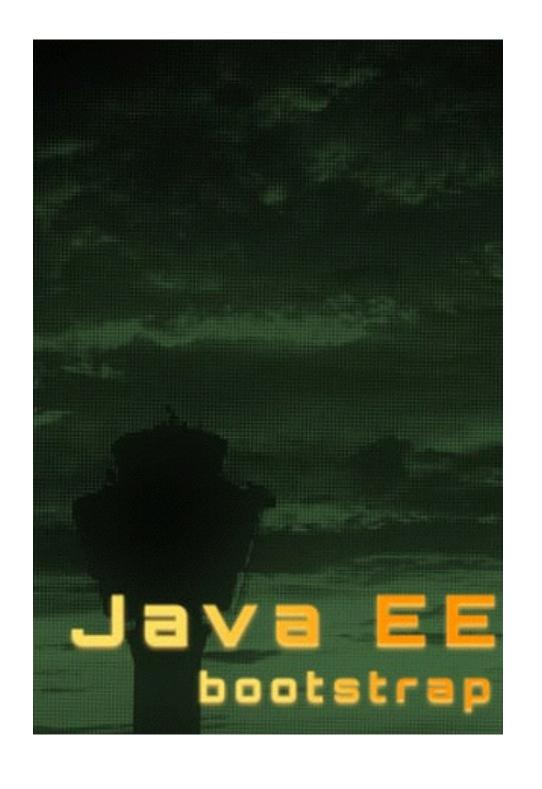
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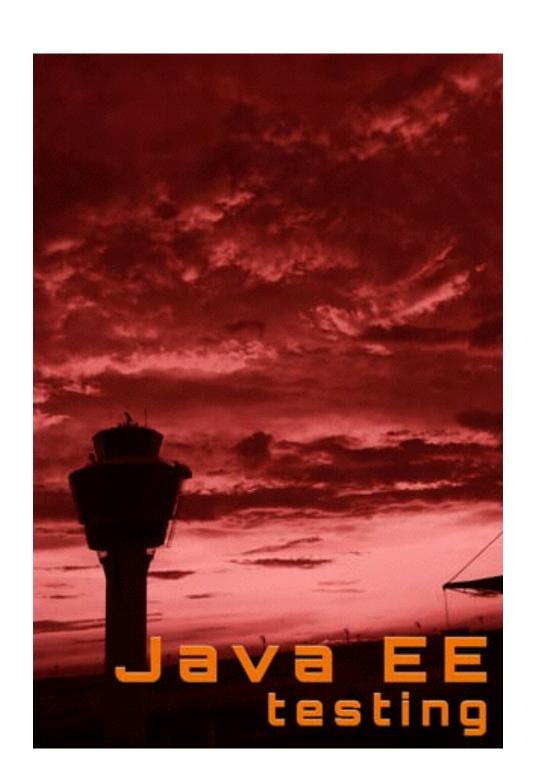
NEW:

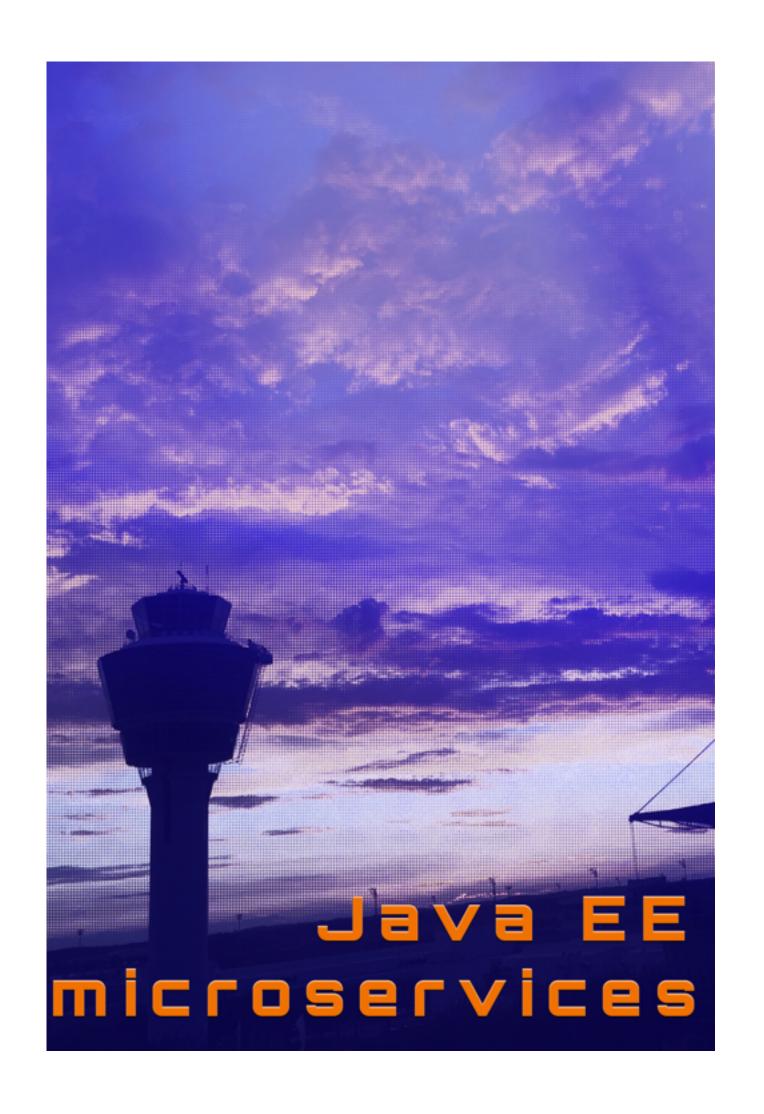
Building HTML 5 Applications With React, October 24th, 2016

Building HTML 5 Applications With Angular 2, October 25th, 2016









airhacks.io

# airhacks.TV

# Dynamic HTML, JavaScript, CSS?

# Document Object Model (DOM) Level 3 Core Specification

#### What is HTML 5?

# Semantics / New Elements

#### Microdata

## New Input Types

# Webstorage

#### Geolocation

#### WebSockets

#### Offline

#### Canvas

### Web Components

#### What Is CSS 3?

## display

- block (<div>)
- inline (<span>)
- inline-block
- none

#### box model

- margin
- padding
- box-sizing (no math)

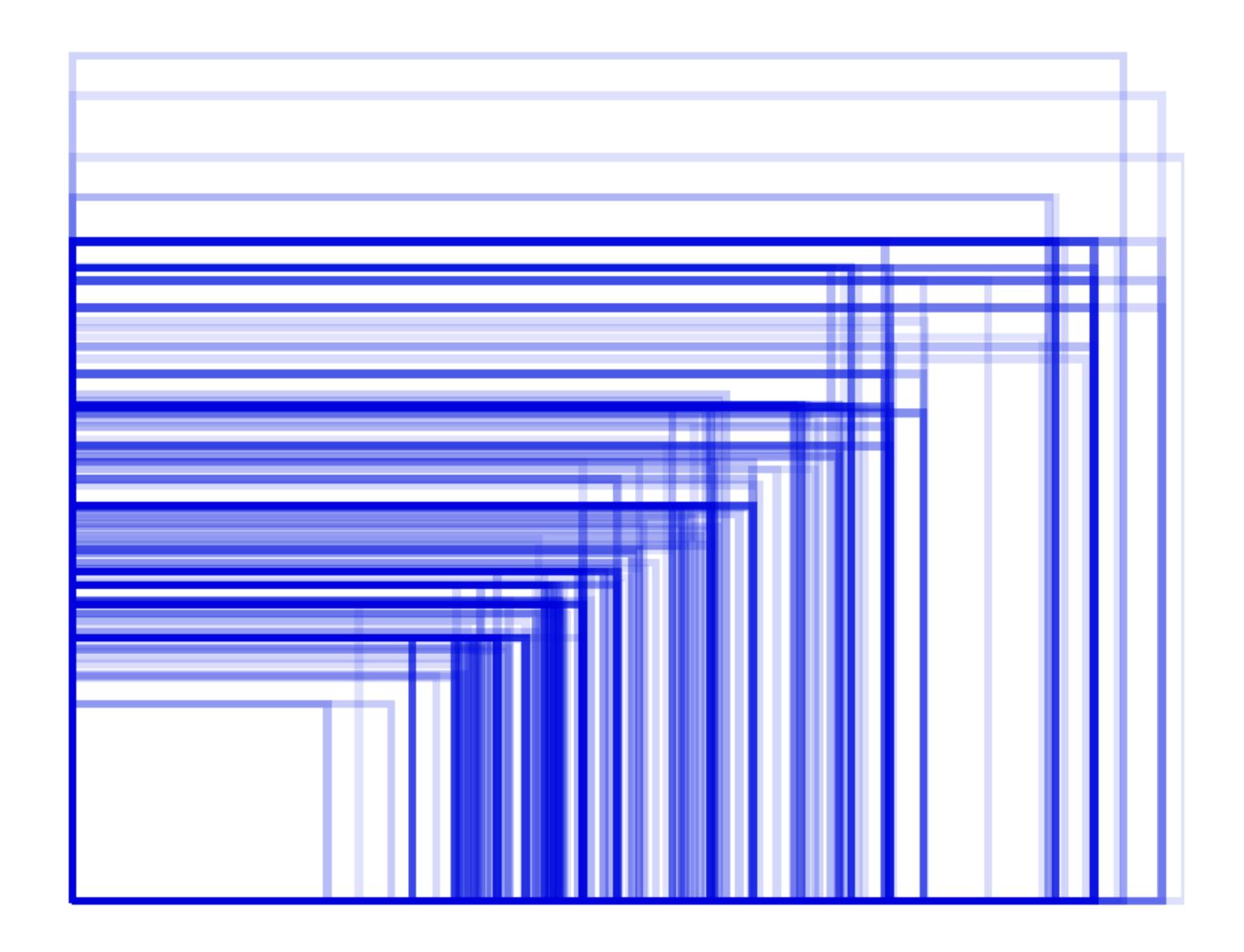
#### position

- static (default, not positioned)
- fixed (stays at the same place)
- absolute (fixed and relative to the nearest positioned ancestor)
- relative (top, left, right, bottom)

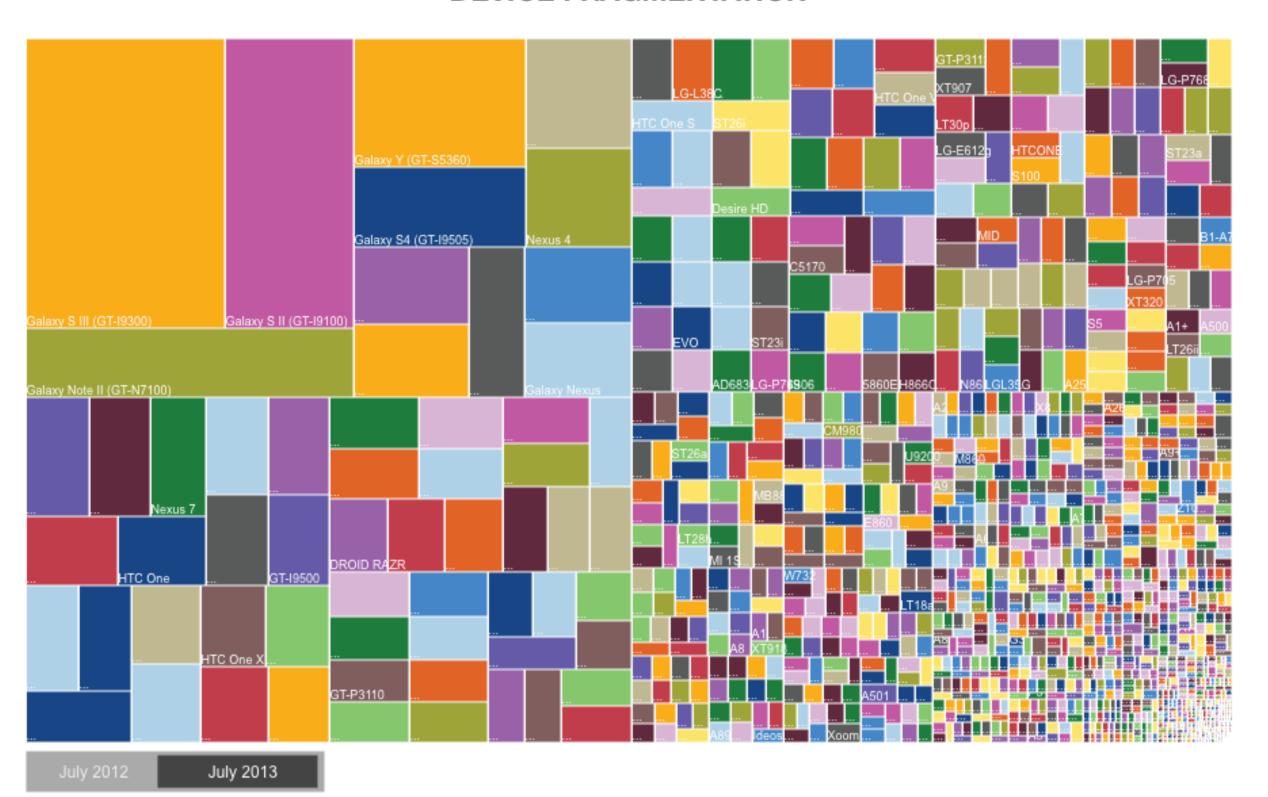
#### float

- left, right
- clear: left, right, both

## The Gadget Trouble



#### **DEVICE FRAGMENTATION**



11,868

Distinct Android devices seen this year

3,997

Distinct Android devices seen last year

682,000

Devices surveyed for this report.

47.5%

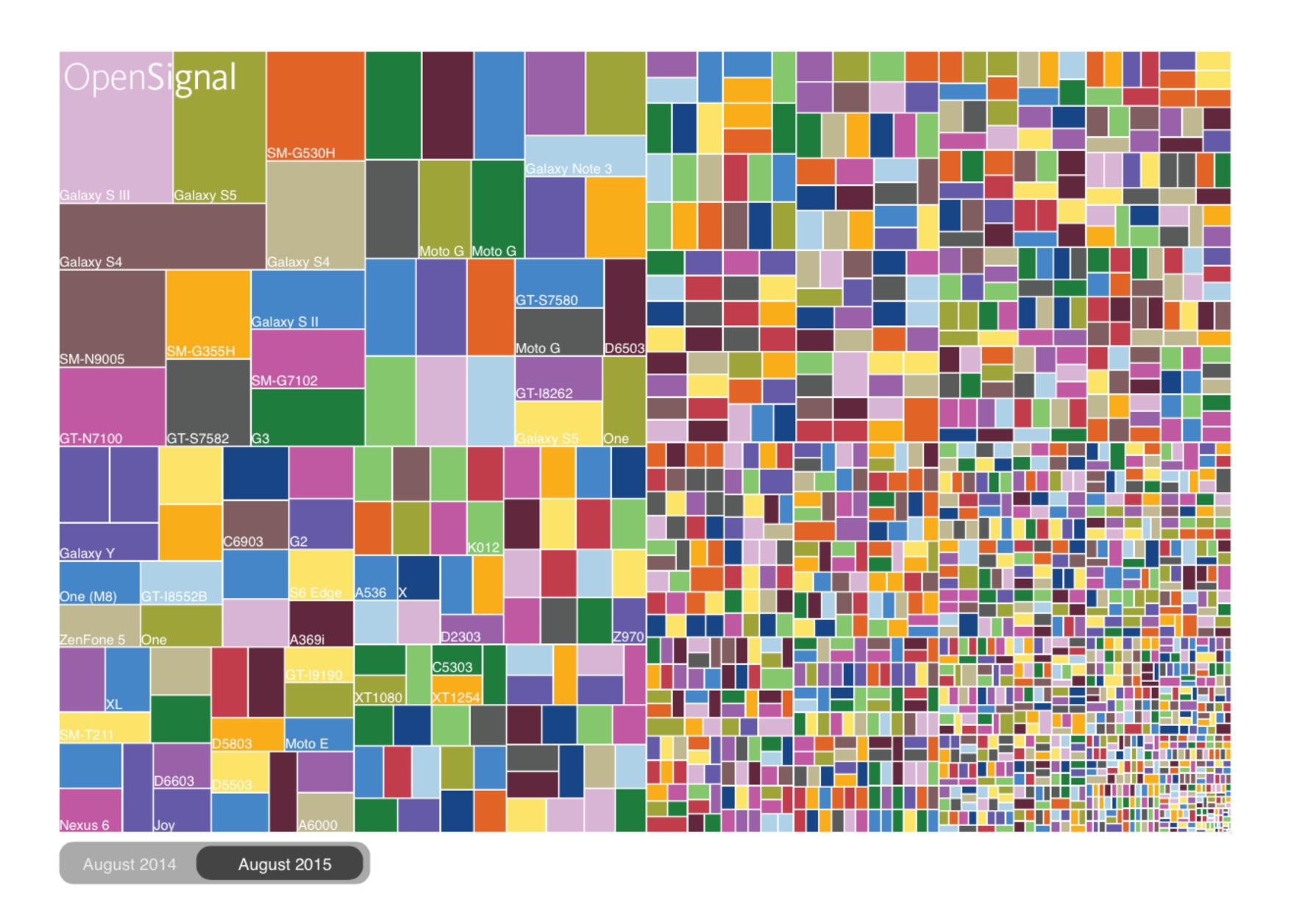
Samsung's share of those devices.

8

Android versions still in use

37.9%

Android users on Jelly Bean



24,093

Distinct Android devices seen this year

18,796

Distinct Android devices seen last year

682,000

Devices surveyed for this report.

37.8%

Samsung's share of those devices.

1,294

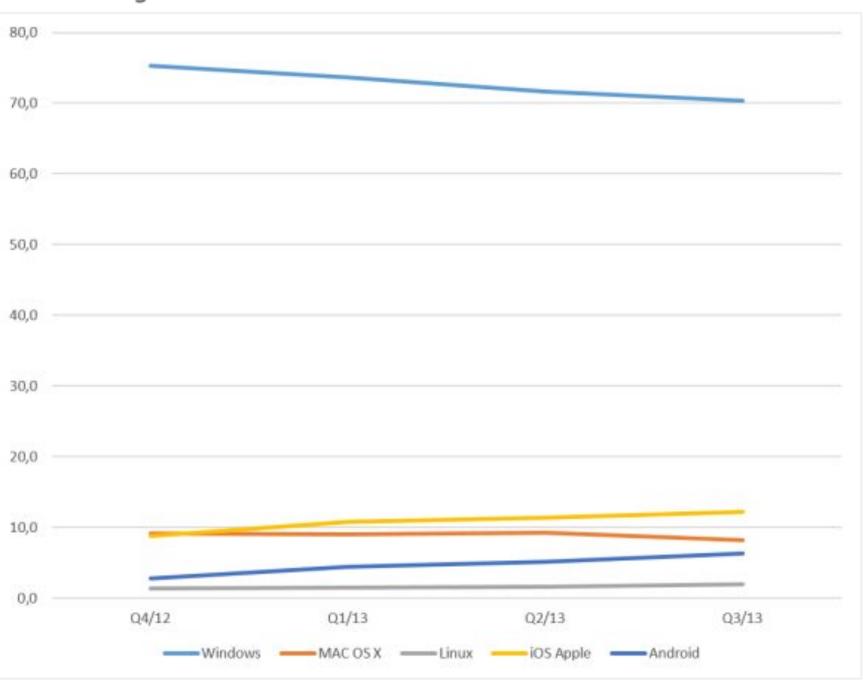
Device brands seen this year

#### Betriebssystem

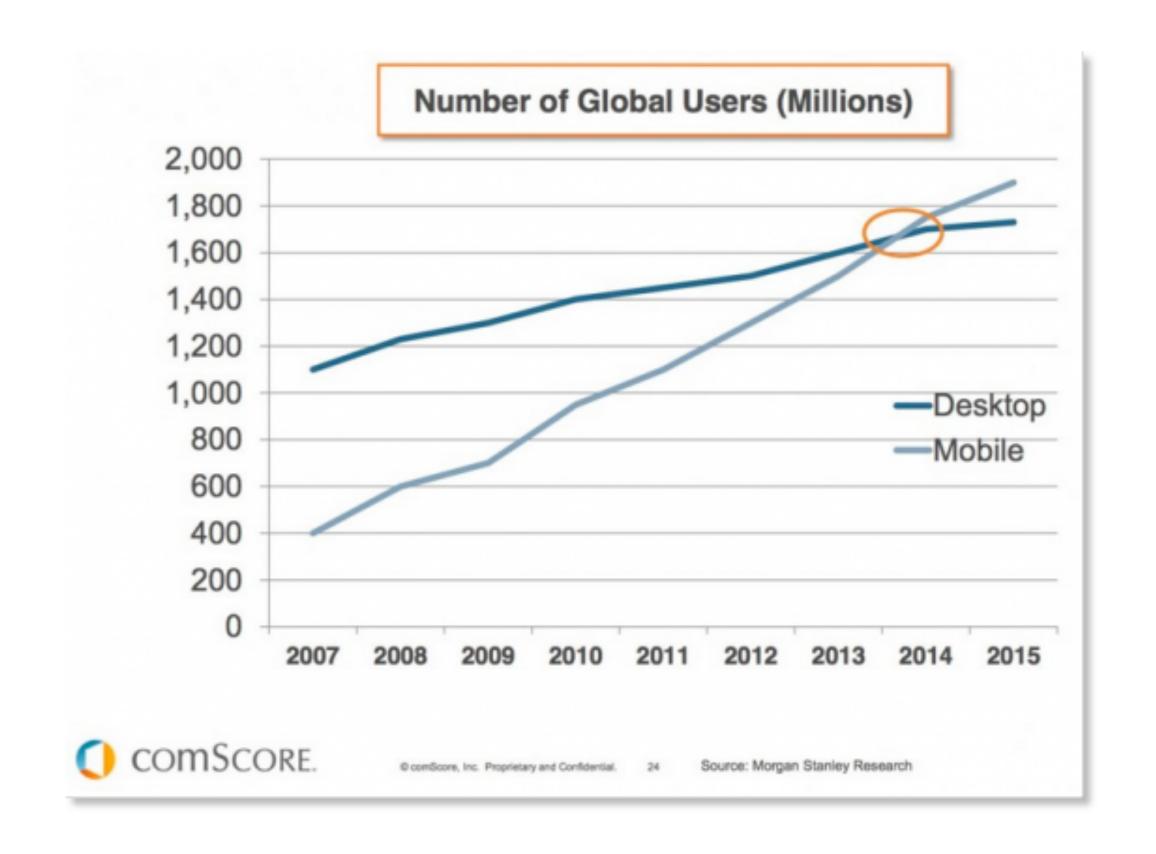
#### 3. Quartal 2013

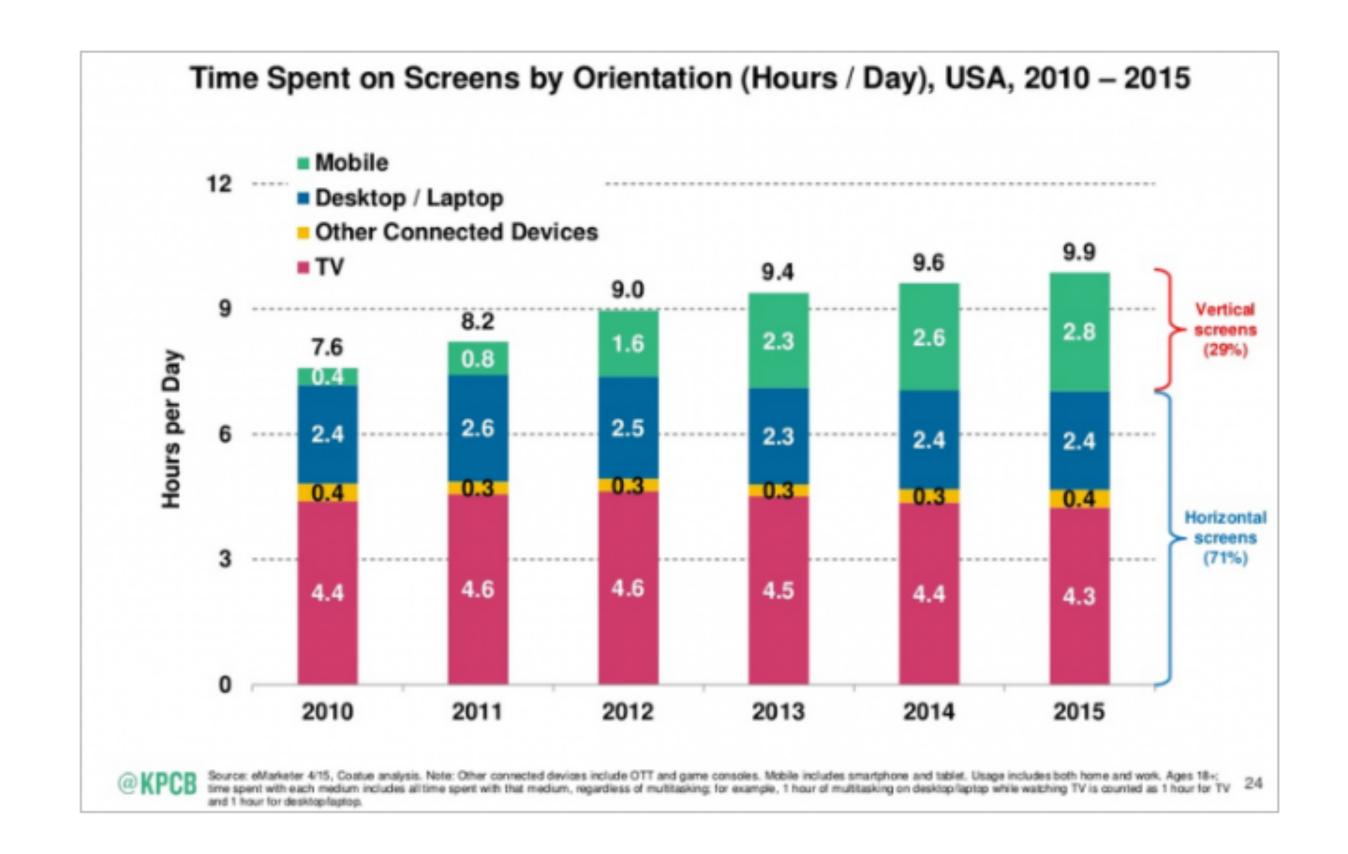
70,3% der Benutzer verwenden Windows als Betriebssystem, 8,2% MAC OS X und 2,0% Linux. Das Mobile Betriebssystem iOS von Apple wird von 12,2% der Benutzer verwendet und Android von 6,3%. Insgesamt erfolgen also 18,5% der Internet-Zugriffe über ein mobiles Gerät.

#### Entwicklung



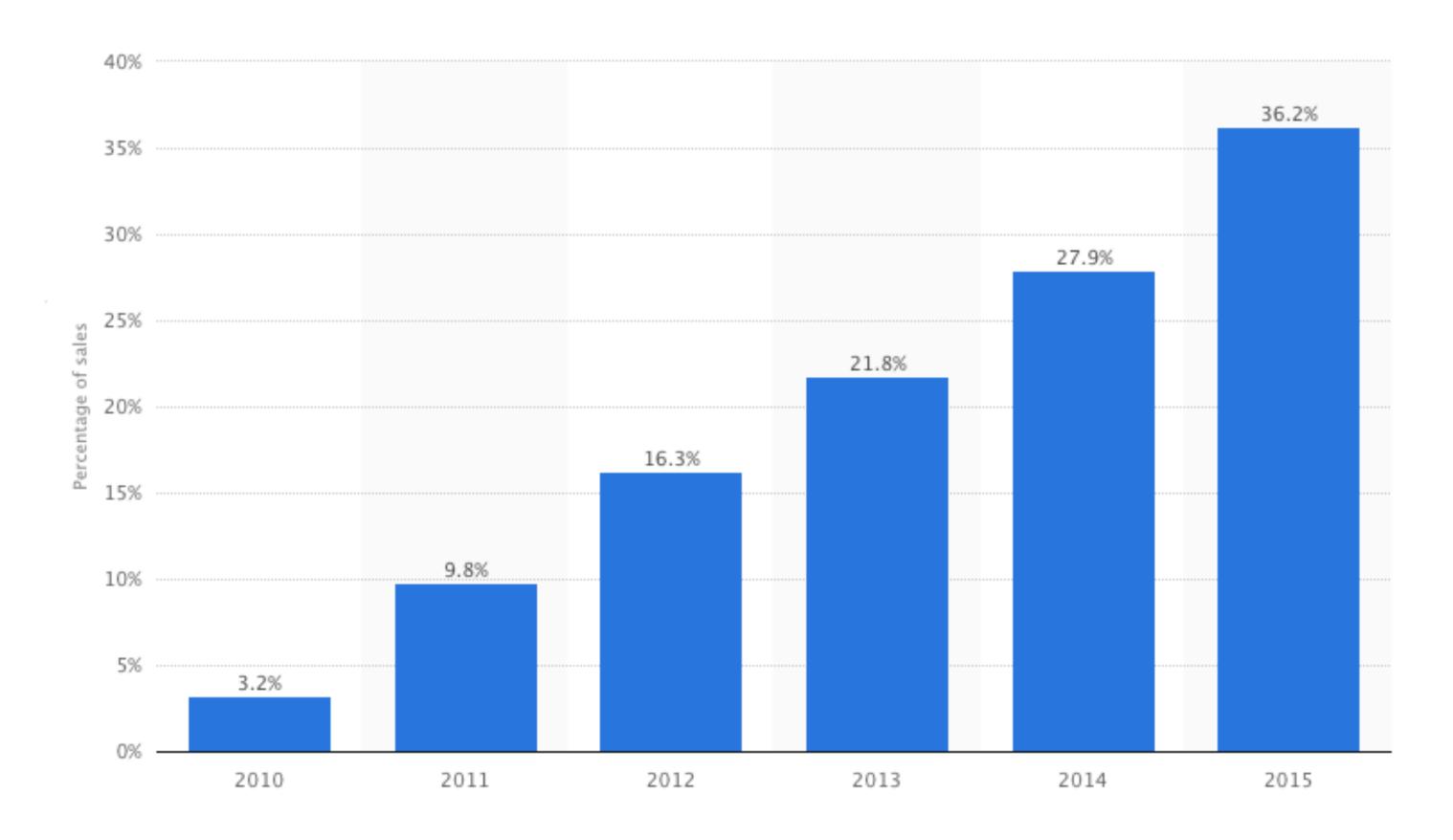
Windows ist das klar am meisten verwendete Betriebssystem. Alledings nahm der Anteil aller anderen Betriebssysteme im Vergleich über das letzte Jahr hinweg zu.





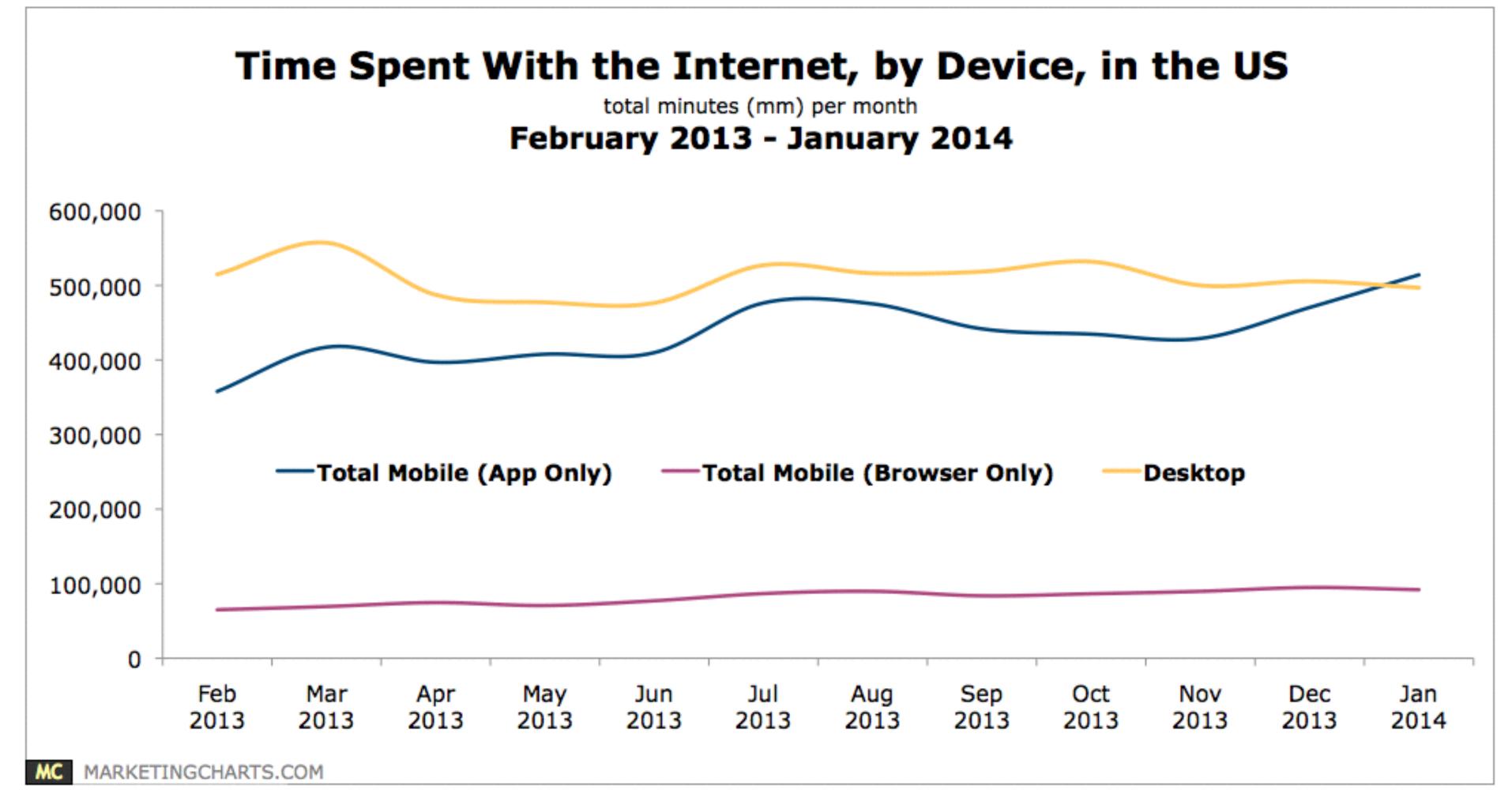
#### Share of mobile online sales on Black Friday from 2010 to 2015

This statistic gives information on the percentage of mobile online sales on Black Friday from 2010 to 2015. On Black Friday 2015,36.16 percent of online sales were generated via mobile devices, up from 27.91 percent in the previous year.



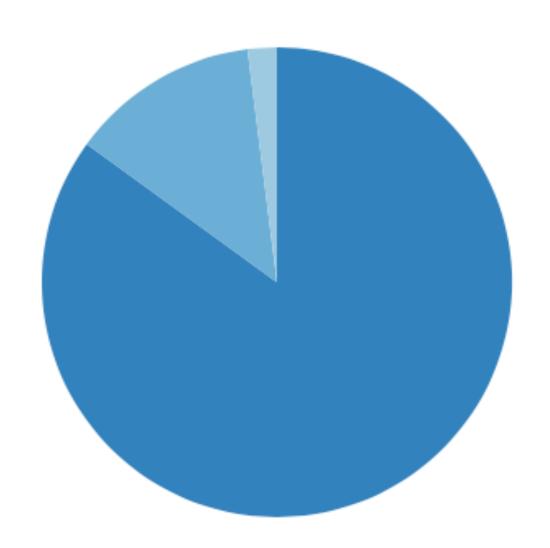
Show further information

© Statista 2015 Show sources information

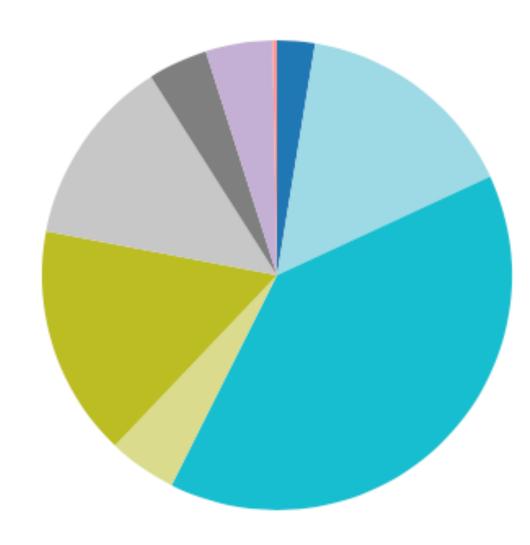


Source: comScore

#### **COMPARISON WITH IOS**



iOS 8 (85%) iOS 7 (13%) Earlier Version (2%)



5.1 (Lollipop) (2.6%)

5.0 (Lollipop) (15.5%)

4.4 (Kit Kat) (39.3%)

4.3 (Jelly Bean) (4.7%)

4.2 (Jelly Bean) (15.9%)

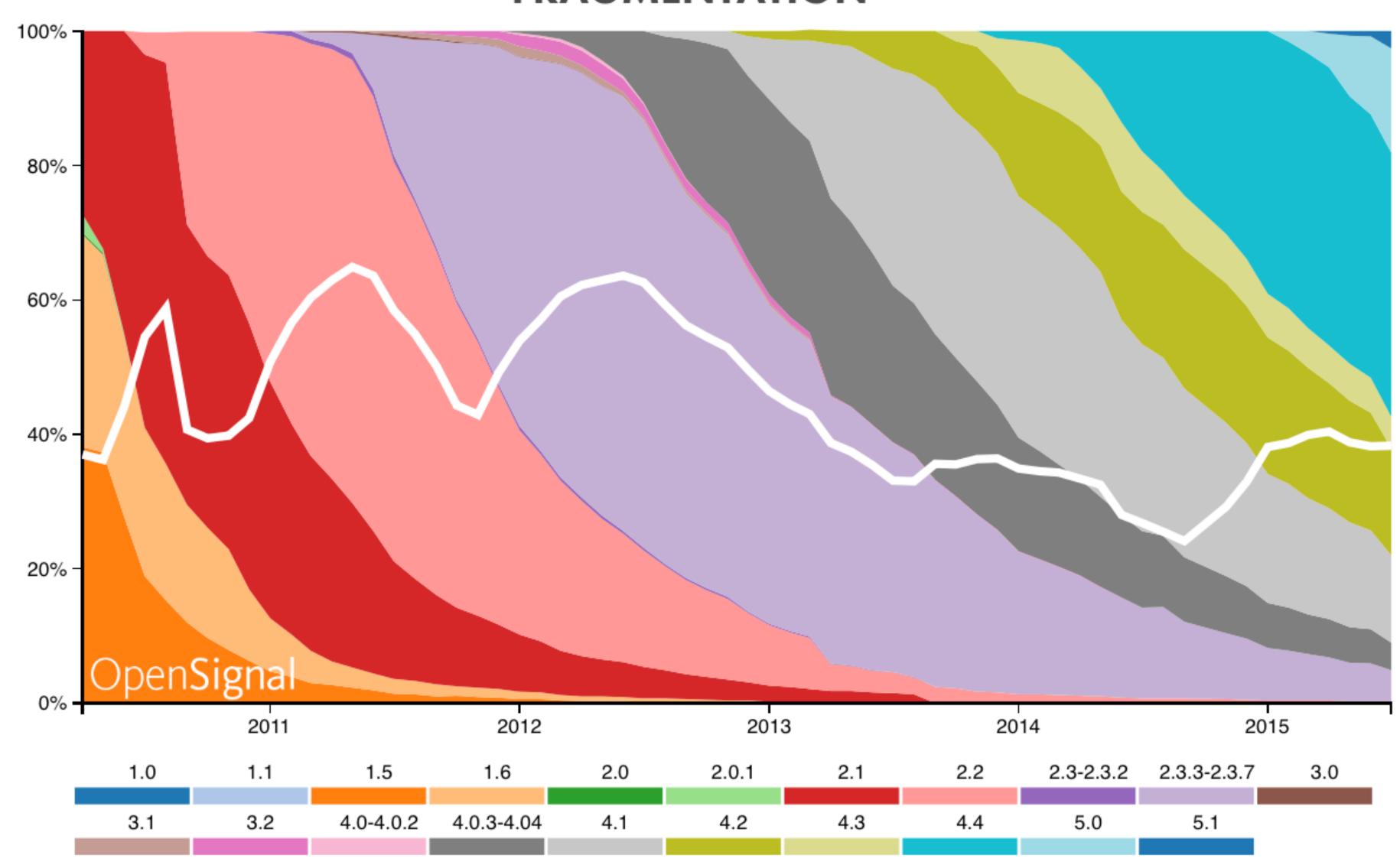
4.1 (Jelly Bean) (13%)

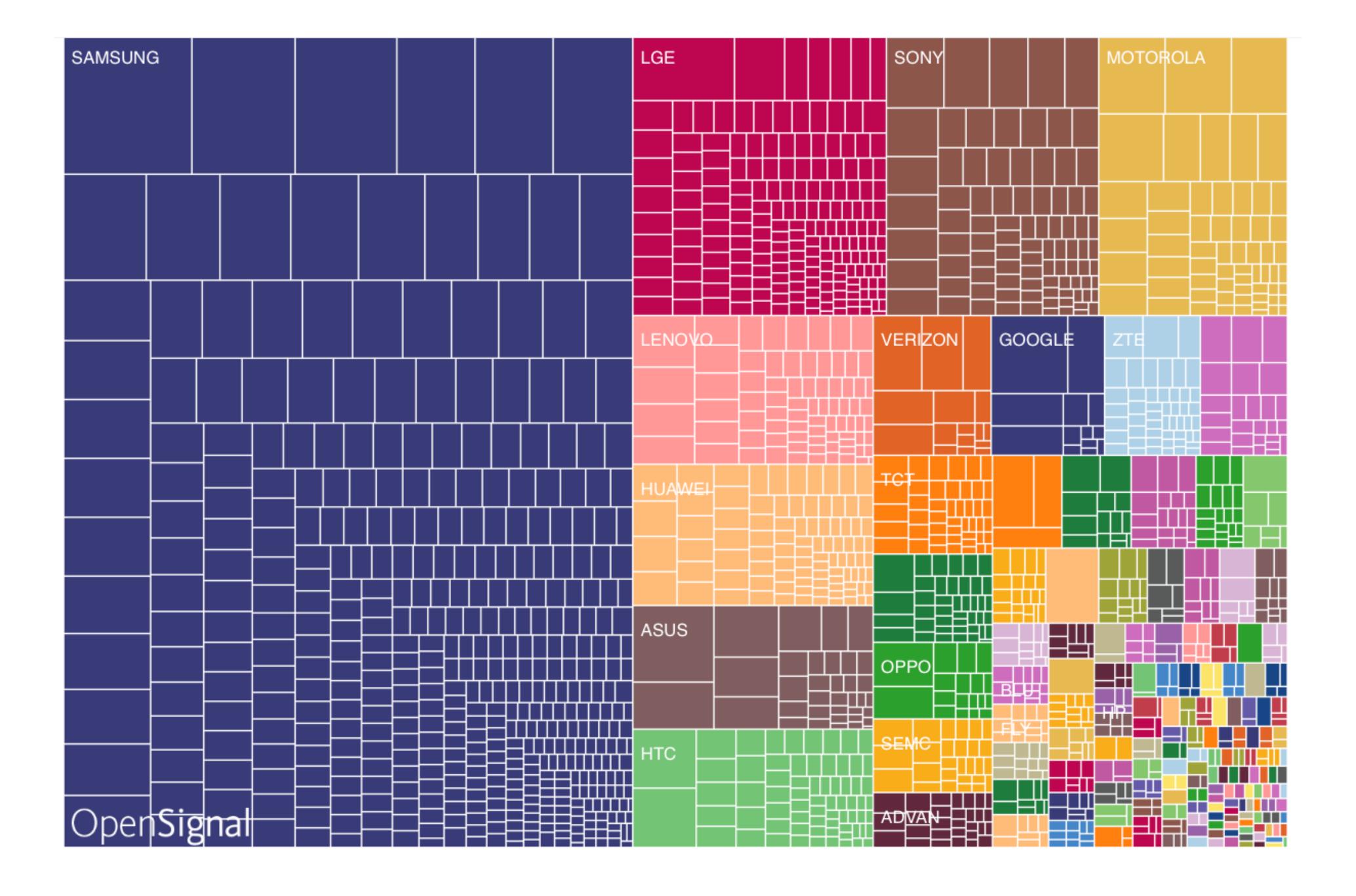
4.0.3 - 4.0.4 (ICS) (4.1%)

2.3.3-2.3.7 (Gingerbread) (4.6%)

2.2 (Froyo) (0.3%)

#### ANDROID OPERATING SYSTEM FRAGMENTATION





#### em and %

The em is simply the font size. In an element with a 2in font, I em thus means 2in. Expressing sizes, such as margins and paddings, in em means they are related to the font size, and if the user has a big font (e.g., on a big screen) or a small font (e.g., on a handheld device), the sizes will be in proportion. Declarations such as 'text-indent: 1.5em' and 'margin: Iem' are extremely common in CSS.

## Media Queries

### Media Queries

```
media_query_list: <media_query> [, <media_query> ]*
media_query: [[only | not]? <media_type> [ and <expression> ]*]
  | <expression> [ and <expression> ]*
expression: ( <media_feature> [: <value>]? )
media_type: all | aural | braille | handheld | print |
  projection | screen | tty | tv | embossed
media_feature: width | min-width | max-width
  | height | min-height | max-height
  I device-width I min-device-width I max-device-width
  I device-height | min-device-height | max-device-height
  | aspect-ratio | min-aspect-ratio | max-aspect-ratio
  I device-aspect-ratio I min-device-aspect-ratio I max-device-aspect-ratio
  | color | min-color | max-color
  | color-index | min-color-index | max-color-index
  I monochrome I min-monochrome I max-monochrome
  I resolution | min-resolution | max-resolution
  I scan I grid
```

## Responsive Design

I / parent font size (px) × required pixels = em

# JavaScript Facts / History

# Polyfills

# HTML 5 -> JavaEE Integration

#### CORS

- Cross-Origin Resource Sharing
- Browser and Server Solution
- Required For Cross-Domain Communication
- Access-Control-Allow-Origin, Access-Control-Allow-Methods

# React, Angular 2, WebComponents and Co.

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#### References

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Web storage: http://dev.w3.org/html5/webstorage/

Geo Location: http://dev.w3.org/geo/api/spec-source.html

WebSockets: http://dev.w3.org/html5/websockets/

Microdata: http://www.w3.org/TR/microdata/

Offline apps: http://www.w3.org/TR/2011/WD-html5-20110525/offline.html

Canvas: http://www.w3.org/TR/2dcontext/

DOM 3 Spec: <a href="http://www.w3.org/TR/DOM-Level-3-Core/">http://www.w3.org/TR/DOM-Level-3-Core/</a>

#### Thank You!

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