10th Central and Eastern European Software Engineering Conference in Russia - CEE-SECR 2014



October 23 - 25, Moscow

Never mind the **Mobile** Web; Here's the **Device** Web

Dino Esposito JefBRAINS



- Client-side feature detection
- Server-side feature detection
- Responsive Web Design
- WURFL

Developers are **NOT** scared of working long hours.

Developers are scared of **not looking** smart.



Why on earth are people buying so many different devices if we developers **ignore them** all and boil it down to CSS to provide different views?

Web performance is important right?

Desktop and devices are not the same

- My site is good enough on mobile devices.
- Mobile users expect pages to be slow.
- We'll provide an app for that.
- Mobile users only care about doing things.
- Mobile users love to pinch-and-zoom.

We'll provide an app

How many apps?

-Web is device neutral

• How written?

-Hybrid? Native?

Good enough on mobile devices

How about latency?

- Interval between request and response
- Up to 300 milliseconds

How about connection?

- 3G can be 15 times slower than wifi

You have **NO CONTROL** over these things

Golden Rules of Any Mobile Strategy

Make sites accessible to devicesRecognize and intelligently serve classes of devices.

Provide an app for some platforms Device sites are an excellent analysis of what you need.

Responsive Web Design

Based on CSS Media Queries

- http://www.w3.org/TR/css3-mediaqueries
- Conditional CSS style sheets
- Automatically applied by browsers

Proportional layout

- Fluid grids, percentage-based sizes
- Visual breakpoints

```
<link type="text/css"
   rel="stylesheet"
   href="view480.css"
   media="only screen and (max-width: 480px)">
```

```
<link type="text/css"
rel="stylesheet"
href="view800.css"
media="only screen and (max-width: 800px)">
```

Browser Property device-width, device-height width, height orientation

aspect-ratio

device-aspect-ratio

Description Width and height of the physical device screen.

Width of the rendering viewport—i.e., the browser's window.

Returns portrait when height is greater or equal than width. Otherwise, it returns landscape.

Indicates the ratio between width and height. It's a value such as "16/9".

Indicates the ratio between device-width and deviceheight. It's a value such as "16/9".

Where does MOBILE fit in RWD?

Why server-side solutions seem scary to some? many? most?) people?

Mozilla/5.0 (Linux; Android 4.0.3; GT-P3110
 Build/IML74K) AppleWebKit/535.19
 (KHTML, like Gecko) Chrome/18.0.1025.166
 Safari/535.19

It's all about useragent strings...

	UA	Capabilities

The importance of having devicespecific views.

Serving intelligent markup.

DEMO



Media Queries

Display modes

WURFL

Enable **WURFL.js** as below

<script type="text/javascript" src="http://wurfl.io/wurfl.js"> </script>

Here's what you get in the DOM

```
var WURFL = {
    "complete_device_name":"iPhone 5",
    "is_mobile":true,
    "form_factor":"Smartphone"};
```



Are you?

Nobody can afford slow mobile pages.

Be specific. Serve fast.

The Bottom Line

- Server-side better than RWD for bandwidth
- Serve markup intelligently when you need it
- Powerful alternative/prerequisite to native apps
- RWD is first-aid



http://www.pluralsight.com/courses/description/ device-driven-web-solutions-wurfl



