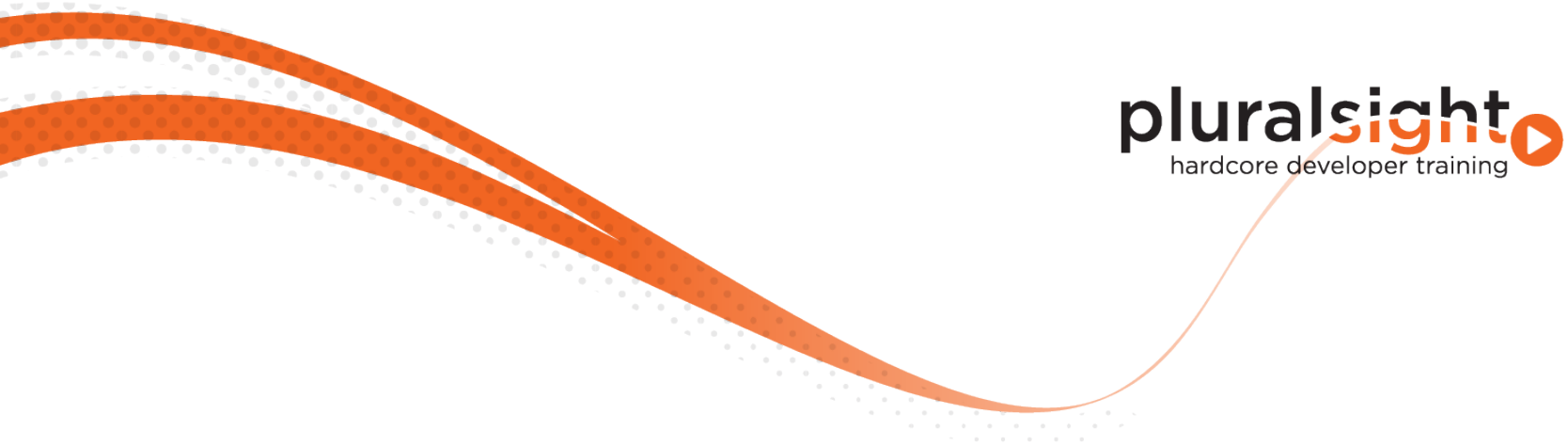
Mobility and Responsive Design with CSS and LESS

John Papa

Twitter: @john_papa



pluralsight
hardcore developer training

CodeCamper

Andy Attendee | Logout

my | sessions | speakers

- Right Now
- Saturday May 1
- Sunday May 2
- Monday May 3
- Tuesday May 4

filter by speaker, title, tag, time slot, track [Go]

Intro to Metro Stuff 11:00am
Ward Bell

Add to My

Knockout 12:00pm
John Papa

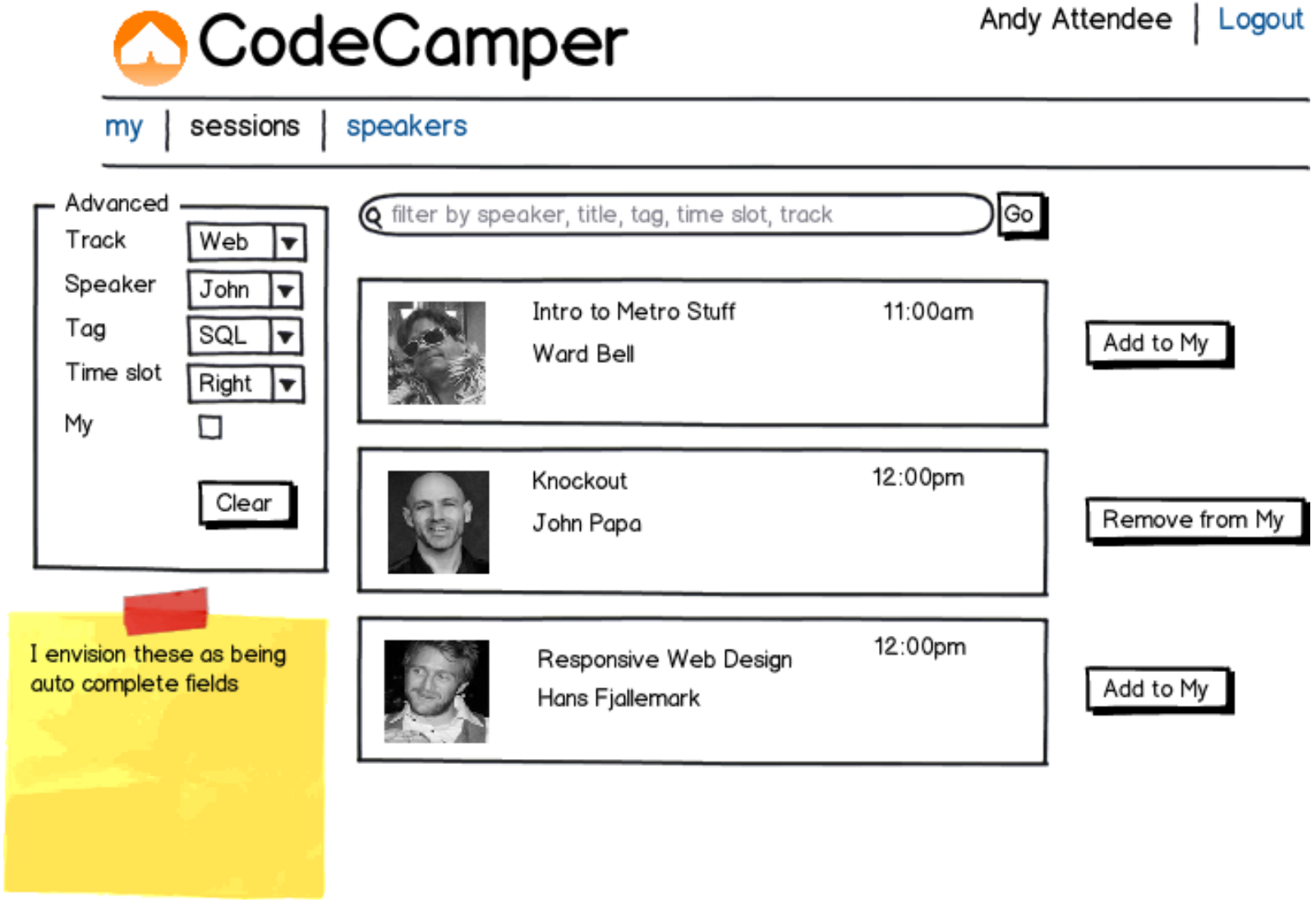
Remove from My

Responsive Web Design 12:00pm
Hans Fjallemark

Add to My

We want 2 states when not focused. 1st - Add to My
2nd - Added to My (with a checkmark). Then have a hover state for "Added" which allows user to

In the My View, session that are removed will go to a visible state that looks disabled. Then on refresh they go away.


CodeCamper
Andy Attendee | Logout
my | sessions | speakers
Advanced
Track Web
Speaker John
Tag SQL
Time slot Right
My
Clear
I envision these as being auto complete fields
filter by speaker, title, tag, time slot, track
Go
Intro to Metro Stuff 11:00am
Ward Bell
Add to My
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Add to My

CodeCamper

Andy Attendee | Logout

my | sessions | speakers

- John Papa
- Ward Bell
- Scott Guthrie
- Dan Wahlin
- Hans Fjallemark

filter speaker Go

Dan Wahlin

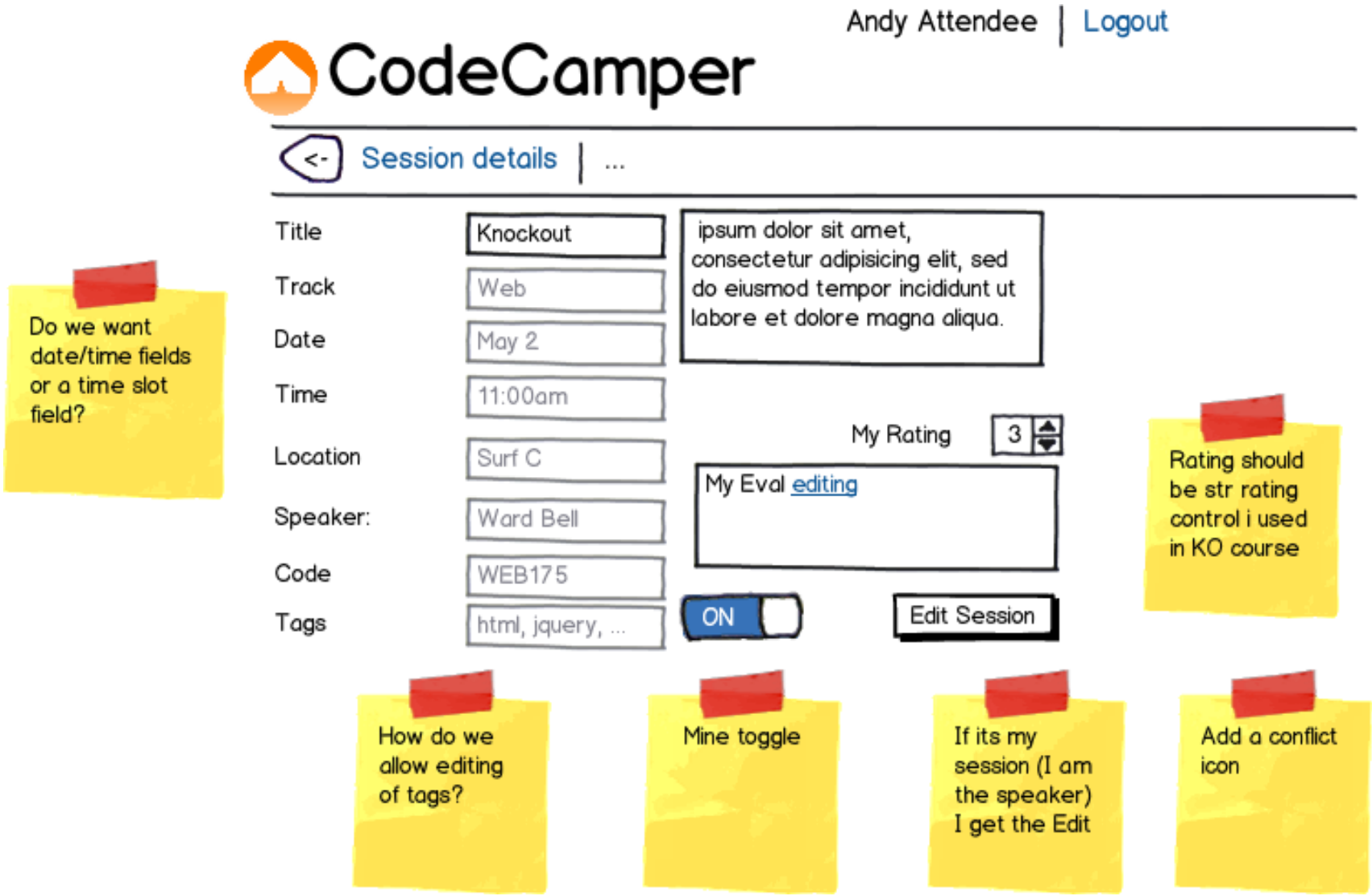
Ward Bell

John Papa

Scott Guthrie

Hans Fjallemark

Dr Doofenshmirtz


Andy Attendee | Logout
CodeCamper
<- Session details | ...
Title
Knockout
Track
Web
Date
May 2
Time
11:00am
Location
Surf C
Speaker:
Ward Bell
Code
WEB175
Tags
html, jquery, ...
ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
My Rating
3
My Eval editing
ON
Edit Session
Do we want date/time fields or a time slot field?
Rating should be str rating control i used in KO course
How do we allow editing of tags?
Mine toggle
If its my session (I am the speaker) I get the Edit
Add a conflict icon

Mobility and Responsive Design Agenda

- **Where's the CSS ?**
  - Debugging Tools
- **LESS**
  - Design Tools
- **Media Queries**
  - Testing tools

LESS

- http://lesscss.org
- **Variables**
- **Mixins**
- **Nested Rules**
- **Functions and Operations**
- **LESS in Depth**
  - Shawn Wildermuth's Pluralsight Course "A Better CSS: LESS and SASS"
  - http://jpapa.me/swless

Avoid Repeating Yourself

Easier Maintenance

Variables

LESS

```
@accent-color: #119EDA;
@text-color: #FFFFFF;
.accent(){
    background: @accent-color;
    color: @text-color;
    text-align: center;
}
button {
    border: 0;
    background-color: @accent-color;
}
```

Compiled CSS

```
.accent{
    background: #119EDA;
    color: #FFFFFF;
    text-align: center;
}
button {
    border: 0;
    background-color: #119EDA;
}
```

Mixins

LESS

```
.image-profile-size(@size: 90px){
    height: @size;
}
img {
    .image-profile-size;
}
img.smallImg {
    .image-profile-size(55px);
}
```

Compiled CSS

```
img {
    height: 90px;
}
img.smallImg {
    height: 55px;
}
```

Nested Rules

LESS

```
@accent-color: #119EDA;
button {
    border: 0;
    background-color: @accent-color;
    &:active, &:focus {
        position: relative;
        top: 1px;
    }
    &:hover {opacity: 0.6;}
    &:disabled {
        opacity: 0.6;
        position: relative;
        top: 0;
    }
}
```

Compiled CSS

```
button {
    border: 0;
    background-color: #119EDA;
}
button:active,
button:focus {
    position: relative;
    top: 1px;
}

button:hover { opacity: 0.6; }

button:disabled {
    opacity: 0.6;
    position: relative;
    top: 0;
}
```

Functions and Operations

LESS

```
@base-accent-top-width: 200px;
@base-accent-top-height: 30px;

.accent-left-base(@sizeMultiplier: 1) {
    width: @base-accent-top-height *
            @sizeMultiplier;
    height: @base-accent-top-width *
            @sizeMultiplier;
}

.accent-left { .accent-left-base; }

@media only screen and (max-width: 900px) {
    .accent-left {
        .accent-left-base(.8);
    }
}
```

Compiled CSS

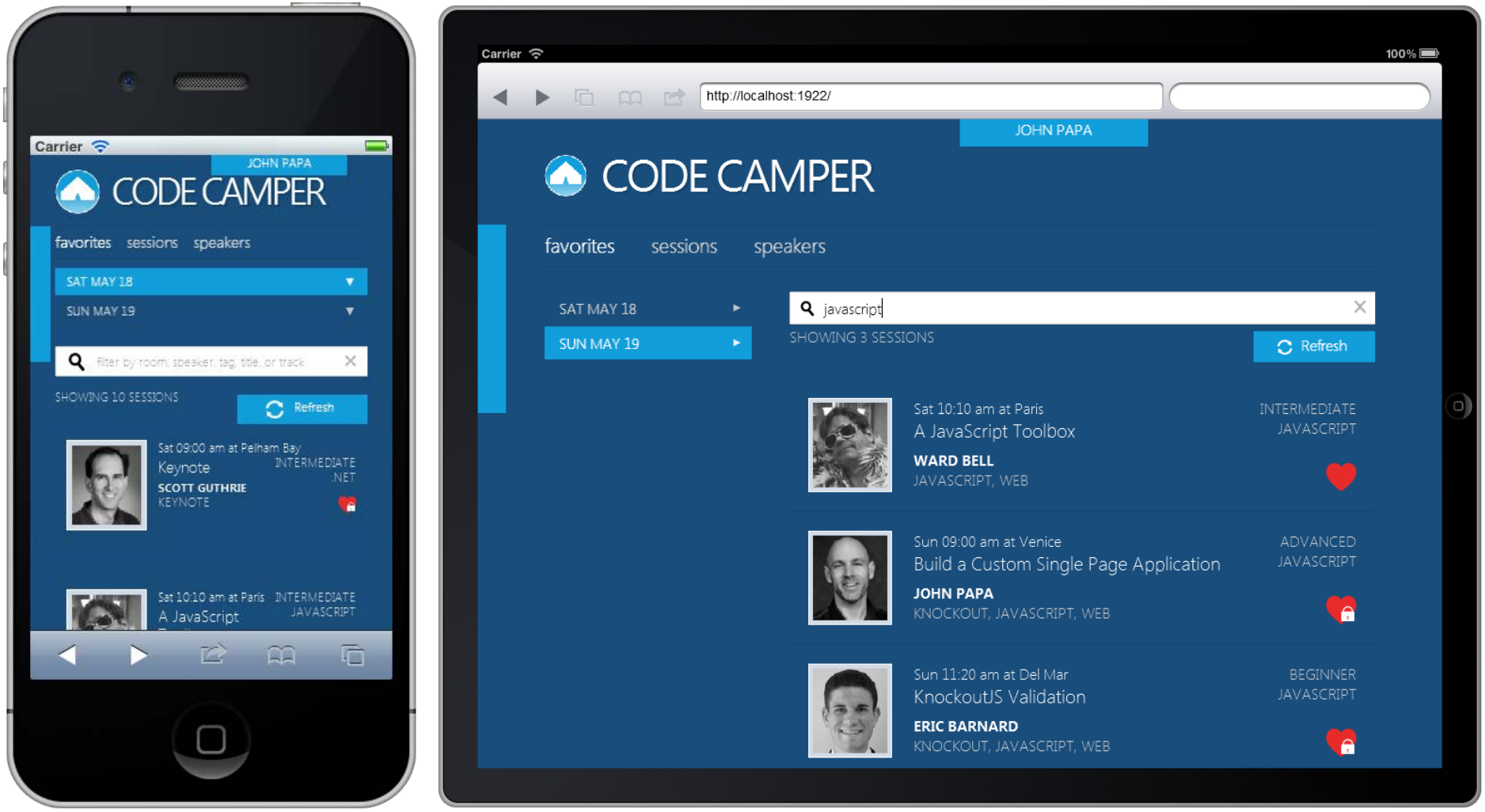
```
.accent-left {
    width: 200px;
    height: 30px;
}


@media only screen and (max-width: 900px)
{
    .accent-left {
        width: 160px;
        height: 24px;
    }
}
```

Responsive Design and Media Queries

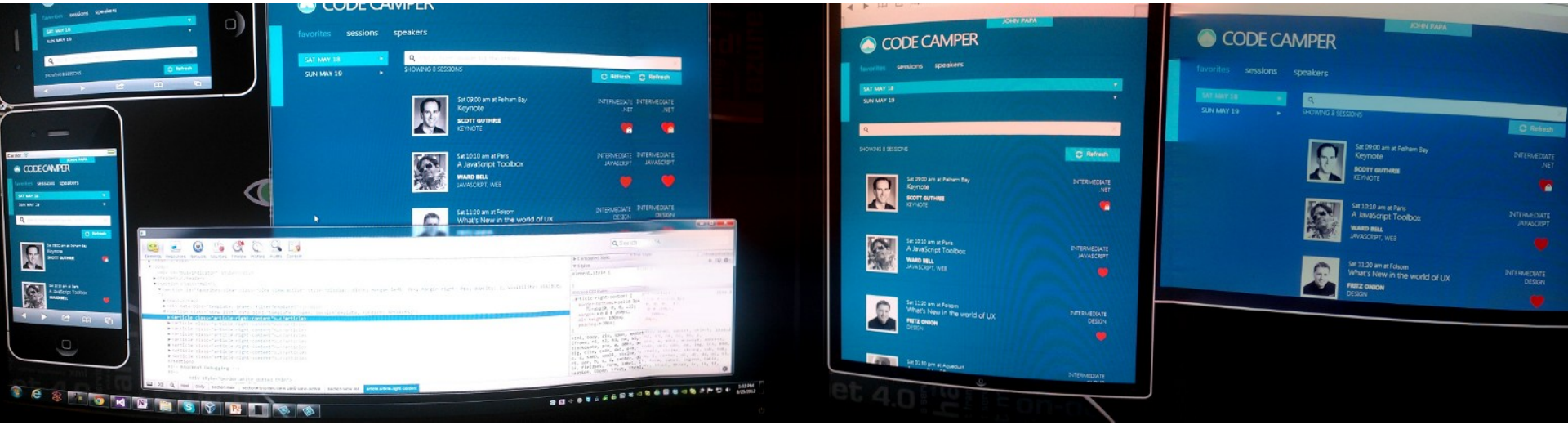
- **Responsive Design in a web app**
  - Ability for a web app to adapt to its environment
- **Media Queries**
  - CSS feature that define how styles should adapt
  - Based on media type and dimensions

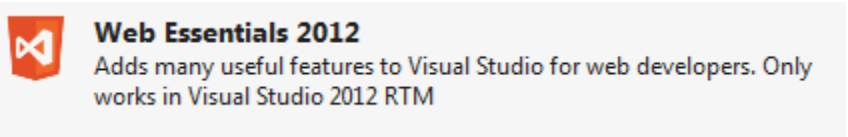
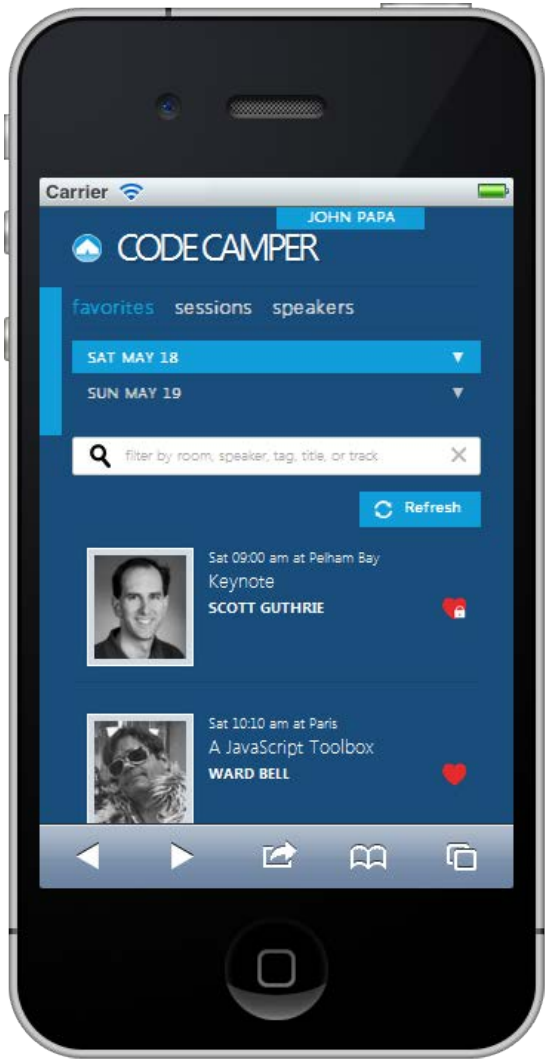
Mobility and Devices



Testing For Multiple Devices

- **Electric Mobile Studio**
  - http://jpapa.me/electricplum



Resources

- Balsamiq Mocking
  - http://www.balsamiq.com
- LESS
  - http://lesscss.org
- Electric Mobile Studio
  - http://jpapa.me/electricplum
- Web Essentials 2012
  - http://jpapa.me/webess2012