

How we deliver
the right experience
to the right device

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What we're already doing

Progressive Enhancement:

We start with plain, well structured, semantic HTML and a minimal stylesheet to format content into a basic, legible hierarchy. Then we layer on functionality and more complex CSS to provide an enhanced experience to capable browsers.

Why it's important

- Enables us to develop web applications for the broadest audience possible.
- Uses one code base.
- Keeps things accessible, search-friendly, and flexible; all good things.

Prog. Enhancement in Apps

At Filament, roughly 80% of our work is complex web applications. Building these apps with progressive enhancement has introduced some unique challenges and pushed us to find some elegant solutions.

Widget Example: Slider

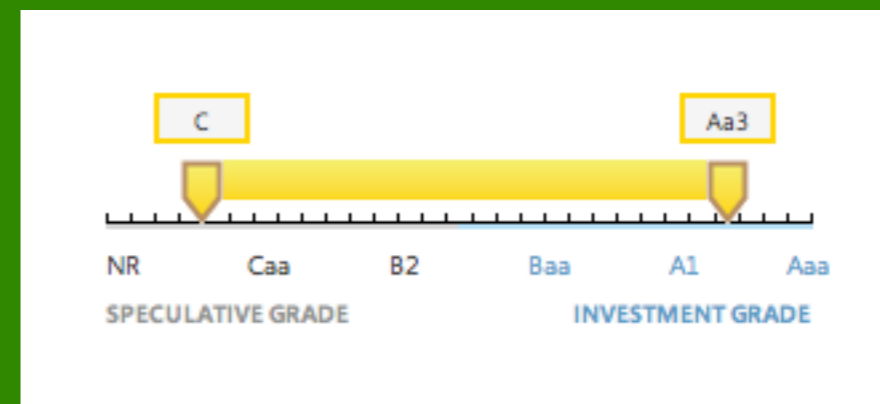
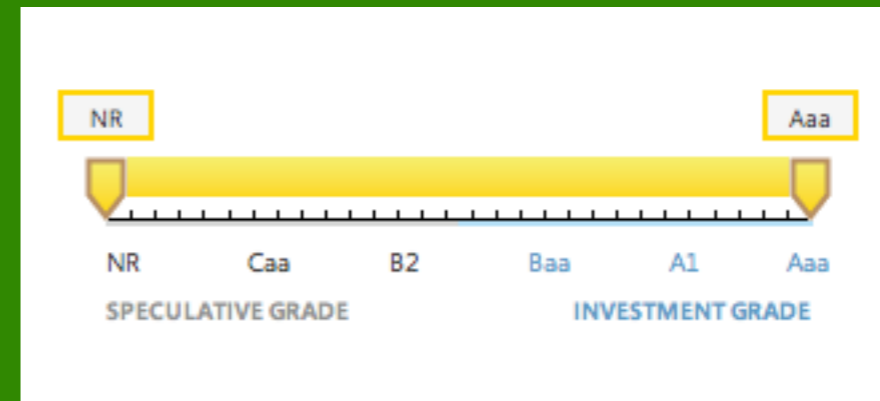
From: To:

Speculative Grade

- NR
- WR
- SG
- IG
- C
- Ca
- Caa
- Caa3
- Caa2
- Caa1
- B
- B3
- B2
- B1
- Ba

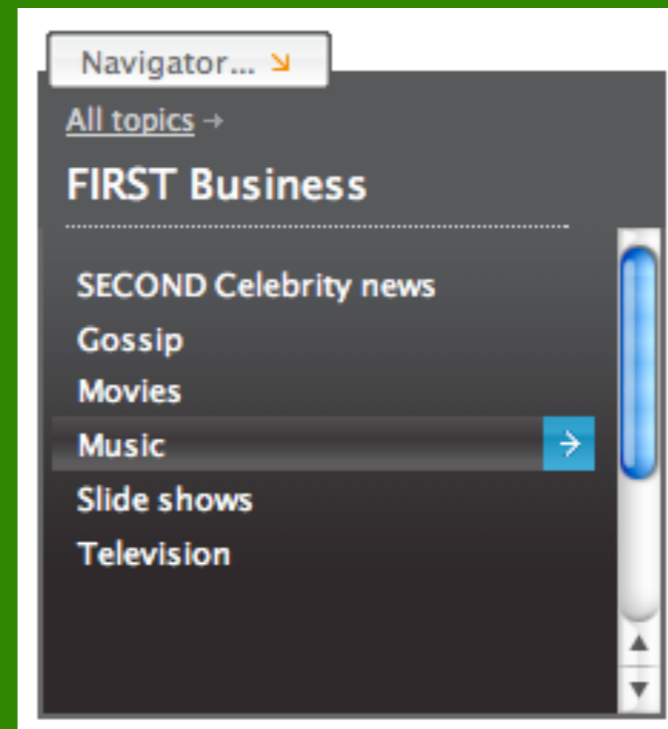
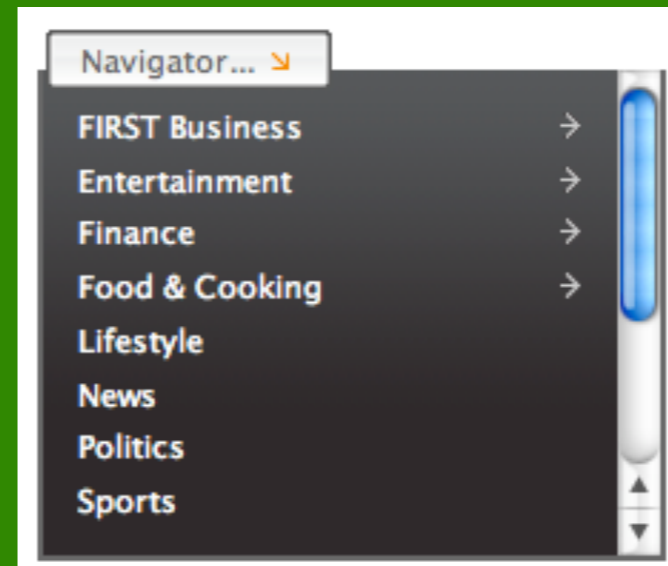
Investment Grade

- Ba3
- Ba2
- Ba1



Widget Example: 'iPod' Menu

- [FIRST Business](#)
 - [SECOND Celebrity news](#)
 - [Gossip](#)
 - [Movies](#)
 - [Music](#)
 - [THIRD Alternative](#)
 - [Country](#)
 - [Dance](#)
 - [FOURTH Style](#)
 - [Style](#)
 - [Style](#)
 - [FIFTH Origin](#)
 - [Origin](#)
 - [SIXTH Country](#)
 - [Country](#)
 - [Country](#)
 - [Country](#)
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 - [Country](#)
 - [Country](#)
 - [Origin](#)
 - [Origin](#)
 - [Origin](#)



App Example: Nymbler

Nymbler Blog | How it works | Helpful hints

 **Nymbler**[™]
Your personal baby name assistant

Nymbler makes name connections with insights from baby-naming expert [Laura Wattenberg](#), author of The Baby Name Wizard.

Inspirations - Choose up to 6 names to influence name suggestions.

Dominique Angela

Girls

Find Names

+ Type a name of your choice Clear Inspirations

This list was generated from: Dominique and Angela.

Ariana	Lashonda	Danae
Kayla	Angelique	
Leonora	Kirstie	
Mallory	Delphine	
Tatyana	Priscilla	

My Favorites

Aaron

Clear My Favorites

More Names...

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Like Nymbler? Let other people know:

Angelique

- Add to Inspirations
- Add to My Favorites
- Block this name

→ **Angelique**

Where to draw the line

How do we know where to draw the line between a basic or enhanced experience?



Raising our Standards

Simply testing for Javascript support is not enough

- Unqualified devices are being let in.
- These devices may improperly handle the advanced layout and scripting required for a usable Ajax application.

What we really need

- A better way to evaluate a device's capabilities before providing an enhanced experience
- The security of knowing that our application is usable to all who visit
- **testUserDevice.js !!**



What is testUserDevice.js?

- A library-agnostic script that tests a device's ability with CSS and Javascript in order to support an advanced UI
- A painfully descriptive filename

So how does it work?

We start with simple, well structured markup. As soon as the `<body>` is ready, the test script:

- inserts elements into the DOM
- manipulates the elements by applying CSS
- tests to see if the device rendered the CSS properly

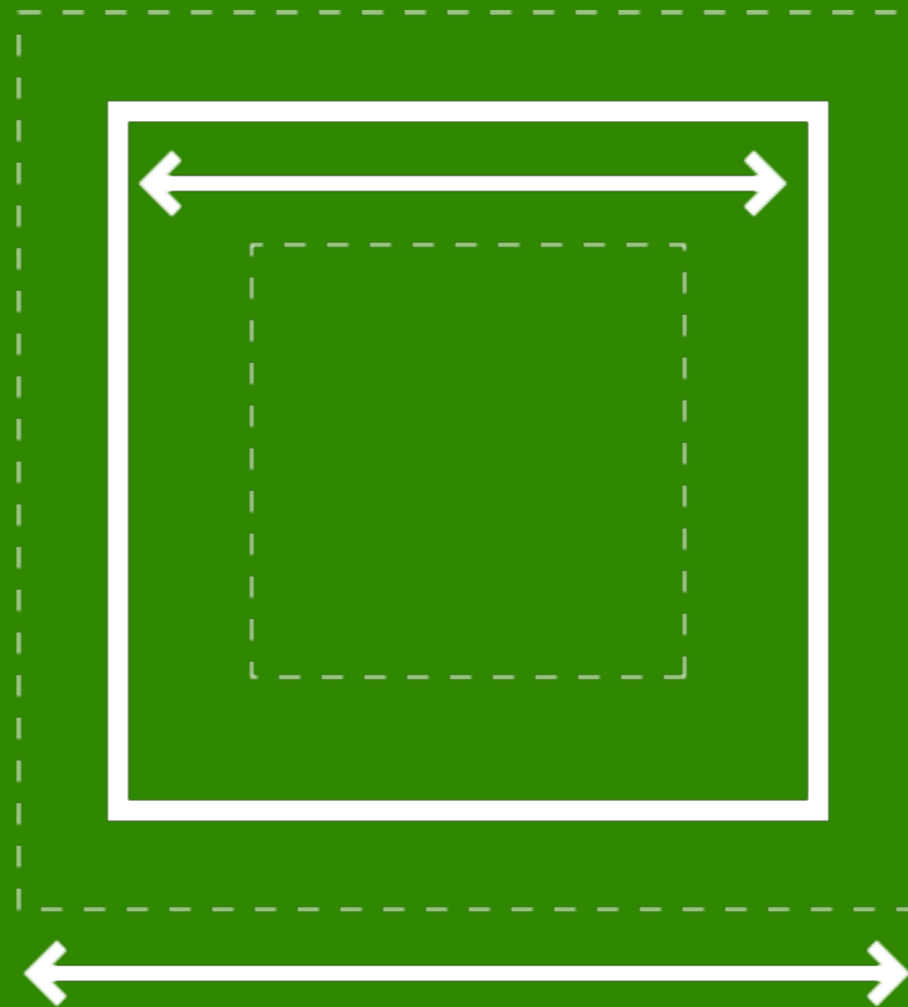
Like object detection for CSS

But this test is all or nothing!

```
if( you_can_handle_this_kung_fu ){  
    //Flying sidekick  
}
```

What does it test?

- ✓ **Box Model**
- ✓ **Positioning**
- ✓ **Floats**
- ✓ **Clears**
- ✓ **Overflow**
- ✓ **Line-height**
- ✓ **Object-detection**



What if it fails?

The device renders a basic experience

- The page works as-is without further enhancements.
- **Javascript can still be used!** The test just allows for a better divide between simple and advanced functionality.

What happens if it passes?

Enhanced functionality layers over the basic experience.

- 1) A class of 'enhanced' is added to the <body> element for CSS scoping

```
body.enhanced div#content {float: left;}
```



What happens if it passes?

- 2) Any alternate links to stylesheets with a class of 'enhanced' are enabled

This:

```
<link class="enhanced" type="text/css" rel="alternate stylesheet" href="styles.css" />
```

Becomes this:

```
<link class="enhanced" type="text/css" rel="stylesheet" href="styles.css" />
```

What happens if it passes?

3. Any links to stylesheets with a class of 'basicNoCascade' are disabled

This:

```
<link class="basicNoCascade" type="text/css" rel="stylesheet" href="basic.css" />
```

Becomes this:

```
<link class="basicNoCascade" type="text/css" rel="alternate stylesheet" href="basic.css" />
```

What happens if it passes?

4. Scripts passed as an argument are run on DOM ready
5. A cookie is set so the browser auto-passes the test on future pages.

This can be used on the back-end to really speed things up!

```
<?  
  if($_COOKIE["enhanced"]){  
    // Link to styles and scripts with everything enhanced already  
  }  
?>
```

How do I use it?

To run the test, simply link to the Javascript file and call it:

```
enhancedDomReady();
```

Enhanced scripting can be passed as an argument:

```
enhancedDomReady({  
    buildSuperSlickInterface();  
});
```

More info

More info and script source available here:

<http://www.filamentgroup.com/lab/>



Thanks. *Questions?*

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