

HELLO!



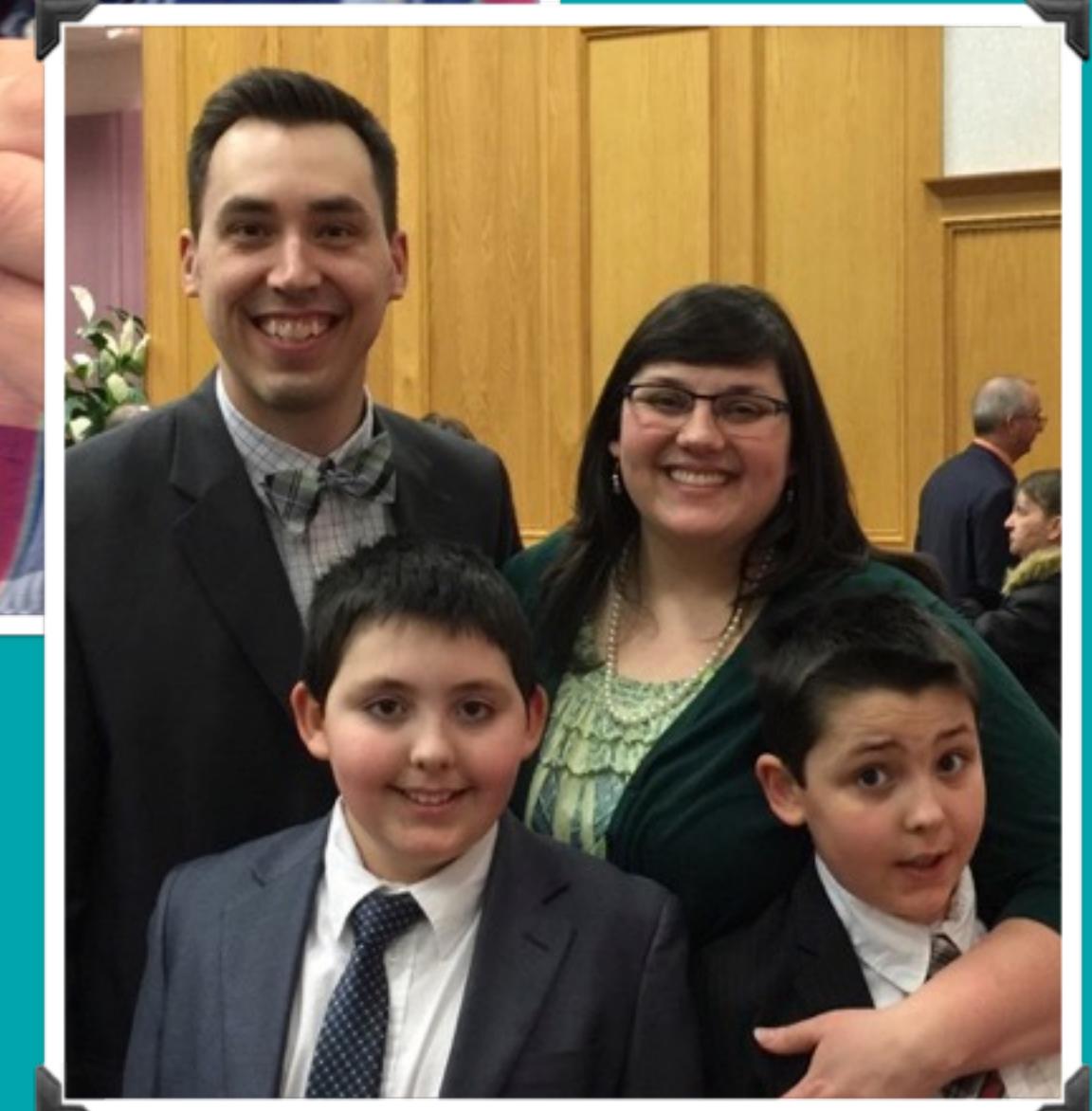
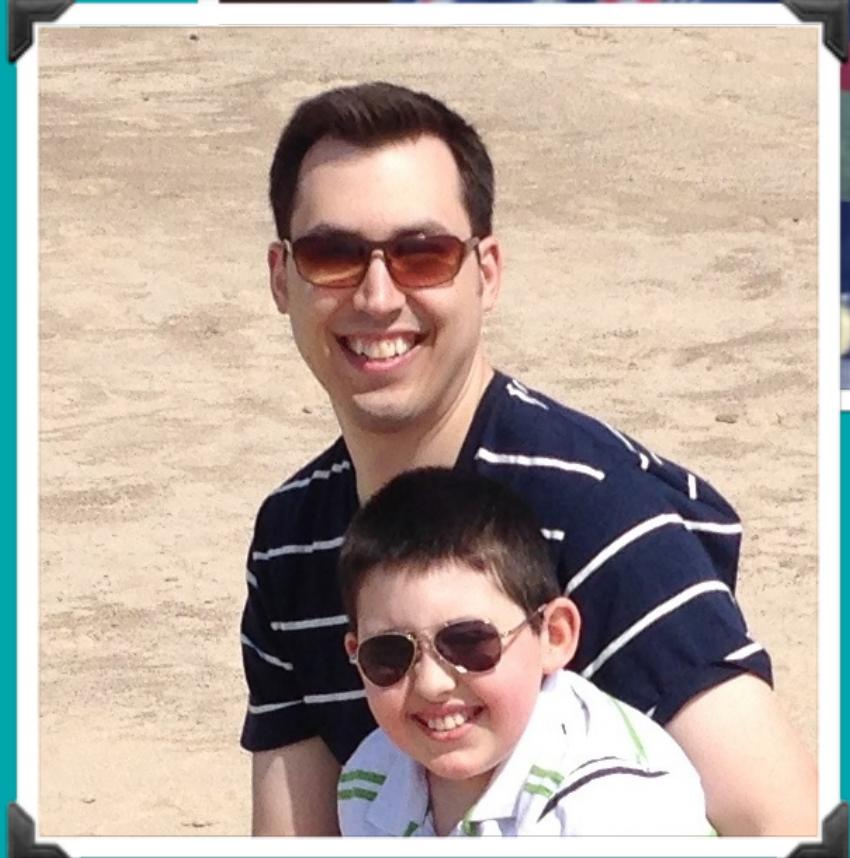
MODERN WEB DESIGN + SHAREPOINT

STRANGER THINGS HAVE HAPPENED



HELLO! I'M JOEL

- SharePoint Architect
 - Apparatus Infrastructure Services
- A+ Certified at age 17 (don't ask the year)
- MCSA: Windows Server 2012
- MCSE: SharePoint
- Volunteer Director of IT
 - Elkhart County Historical Museum
- Family Man



AGENDA

- Why SharePoint
- Branding Features in SharePoint
- Responsive UI
- Dynamic Content
- AngularJS in SharePoint
- Concluding best practices, tips, and tricks



**WHY
SHAREPOINT?**

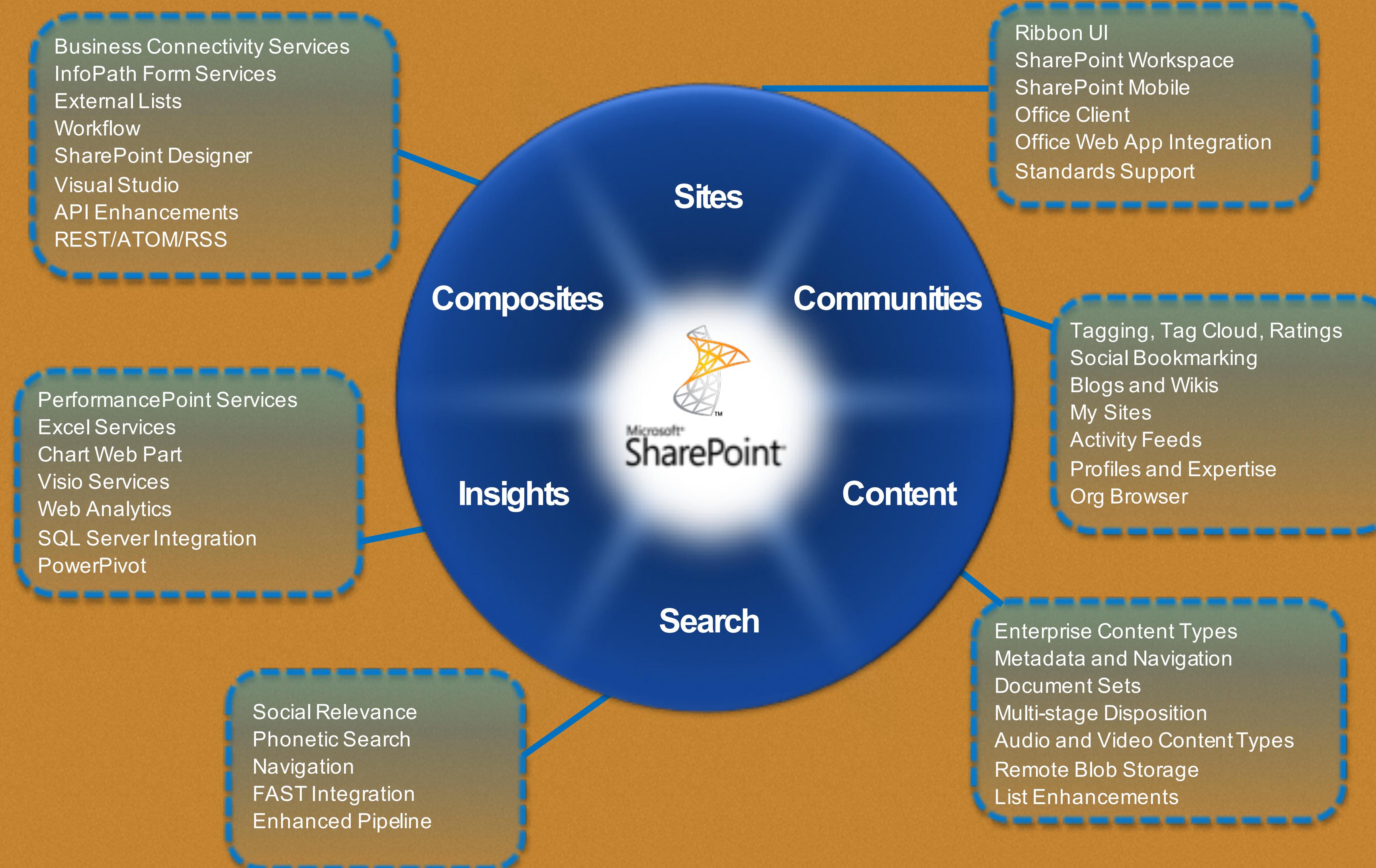
ARE YOU USING SHAREPOINT? ... PROBABLY

Over 50%
of Top Intranets
Use SharePoint

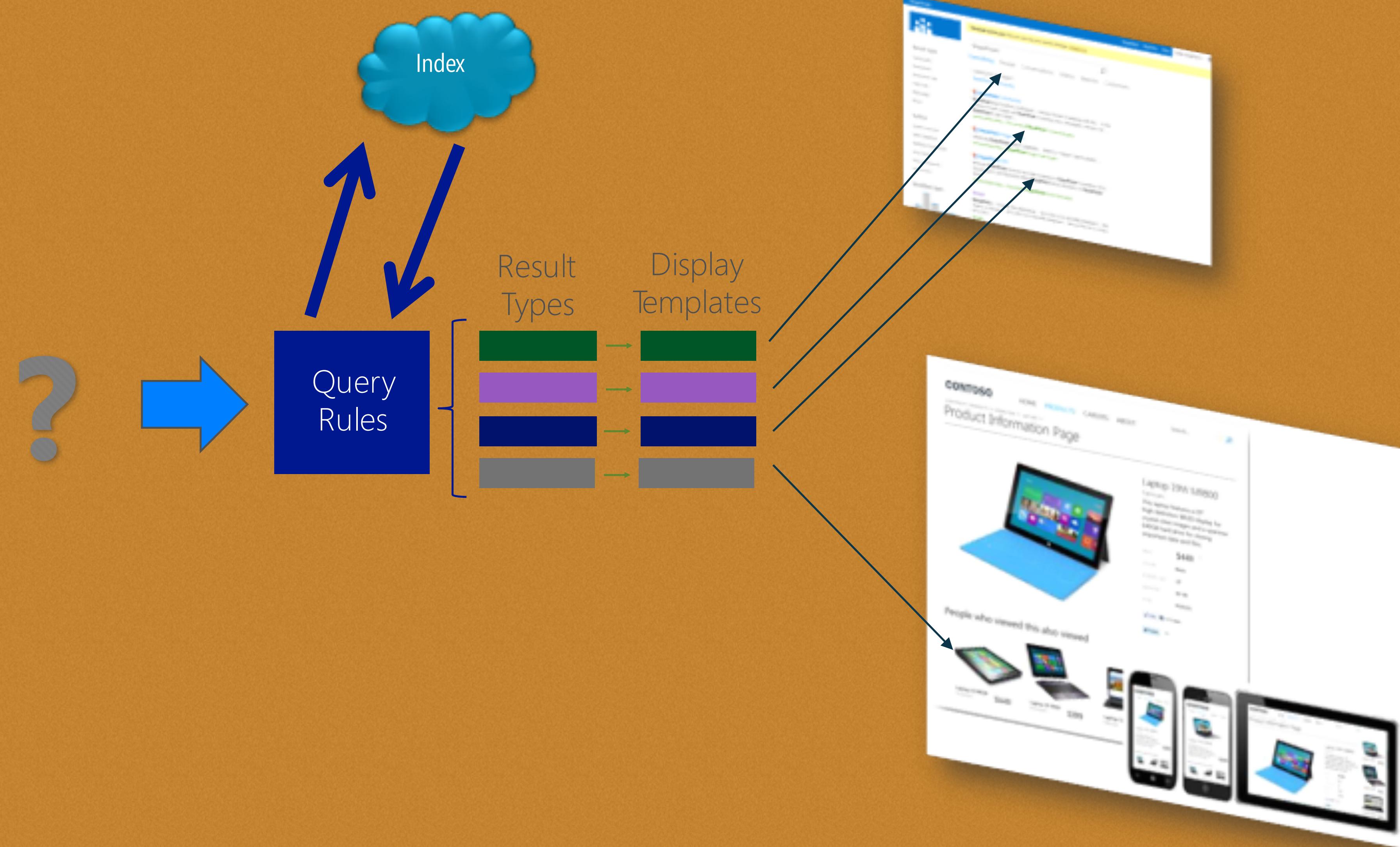
Source: 2010 Nielsen Norman Group



THERE'S A LOT OOB



SHAREPOINT 2013 SEARCH IS POWERFULL



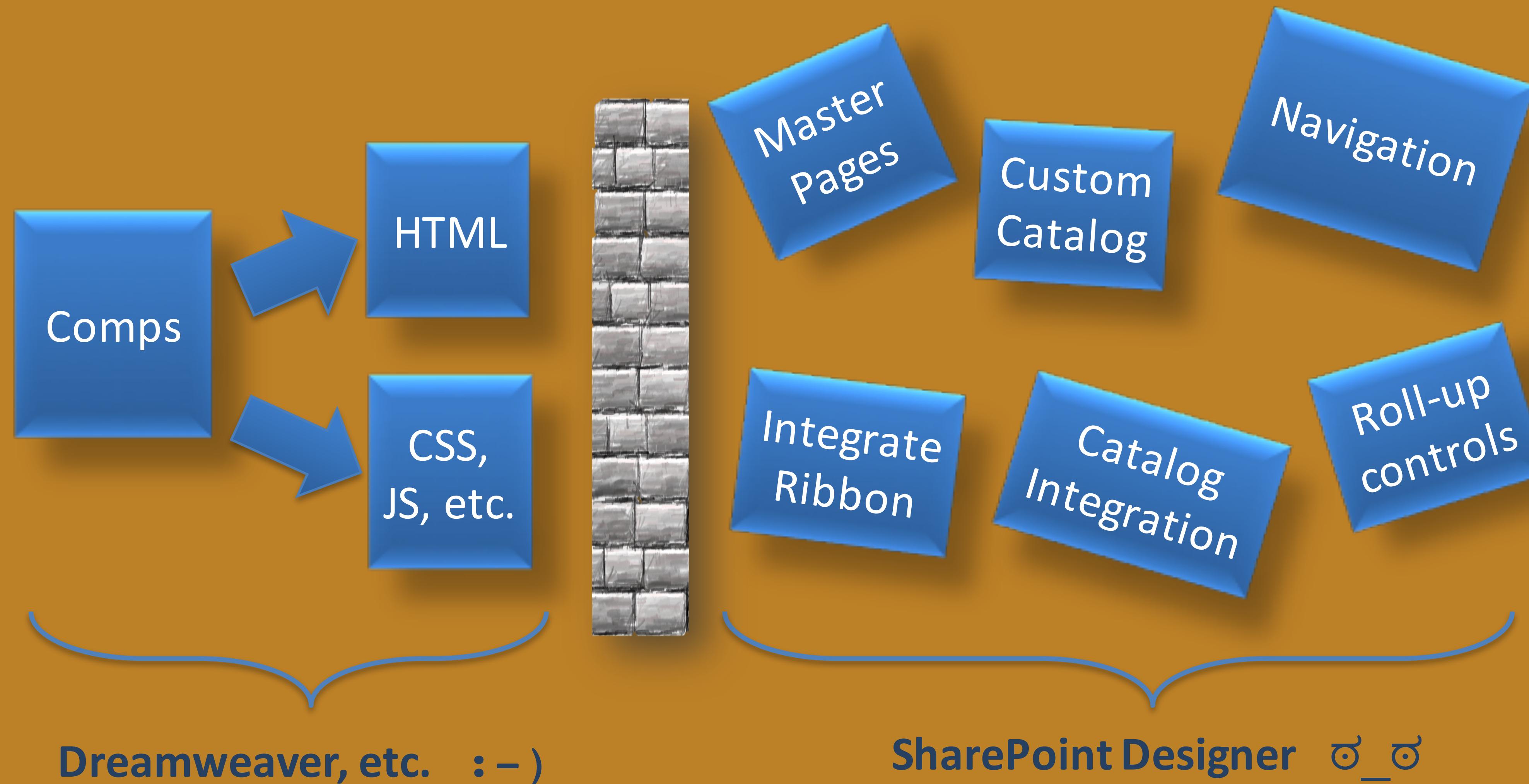
WHY NOW? - WHAT'S CHANGED

- SharePoint 2013 supports, even recommends client-side scripting, HTML5, and CSS3.
- No more custom solution breaking SharePoint. Complex code can be wrapped into an “App”.
- SharePoint 2013 provides a client-side API with REST and CSOM.

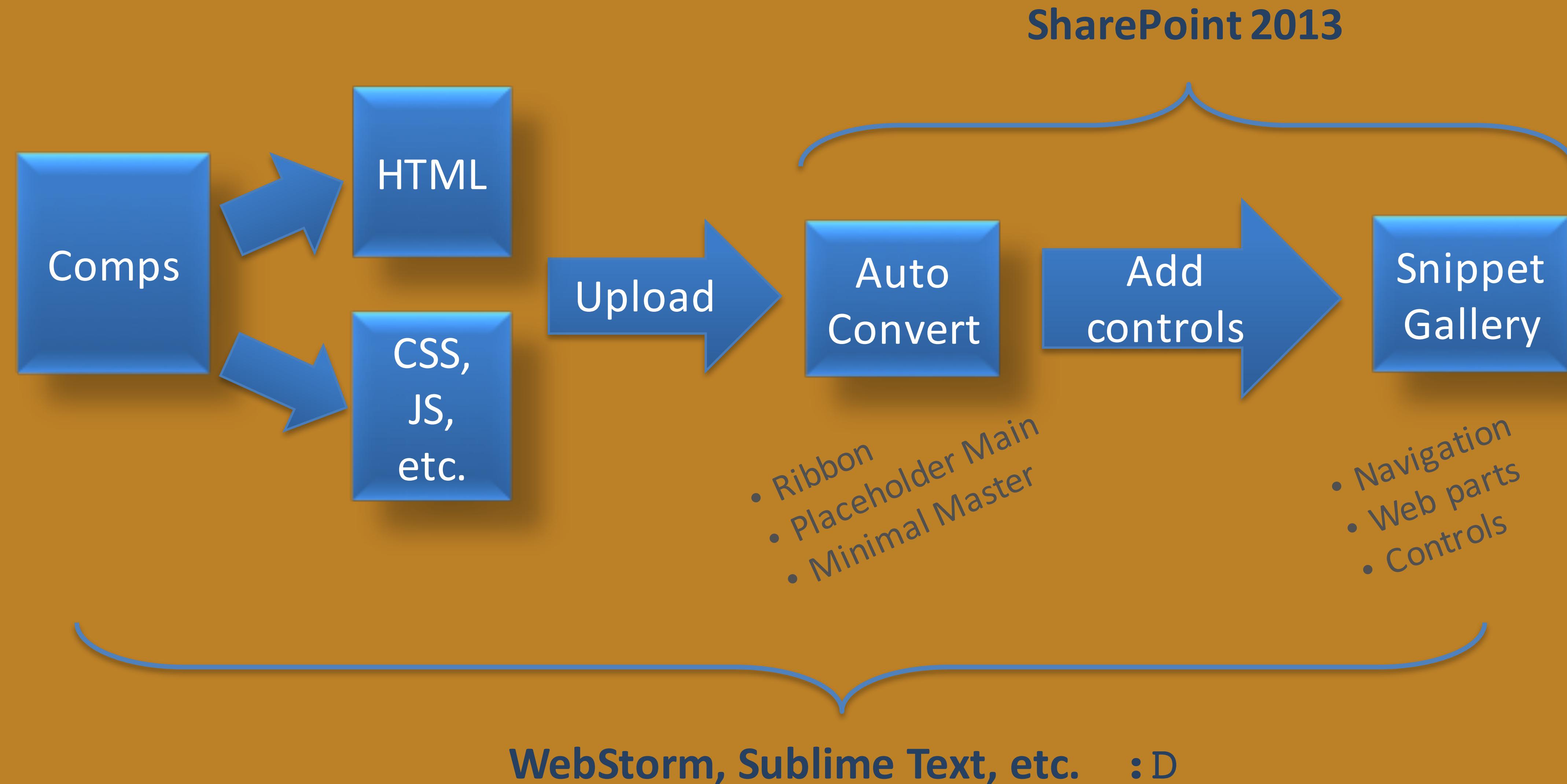


*XSLT? Where we are going,
we don't need XSLT.*

A LOOK BACK: SHAREPOINT 2010



NEW METHODOLOGY



HOW IT WORKS

Design Manager: Upload Design Files

Map the following location as a network drive so you can work easily with your design files:
https://apparatus.sharepoint.com/sites/jchmiel_dev/_catalogs/masterpage/

Use this drive to:

- Upload the HTML version of your Master Page
- Upload CSS and js files and any other design assets
- Access design files for editing

Need help mapping a network drive? [Learn more...](#)

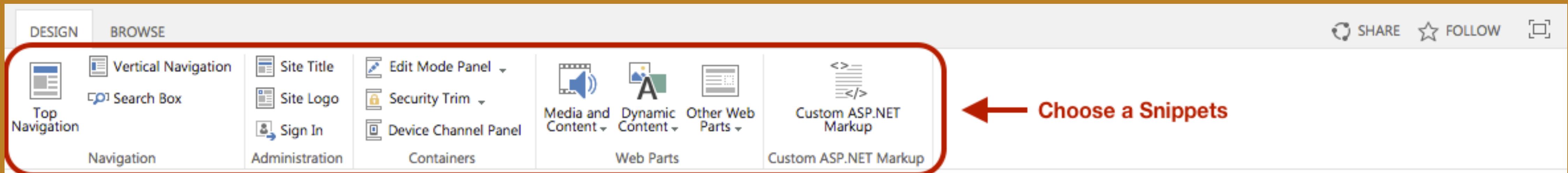
Design Manager: Edit Master Pages

A master page defines common elements across all the pages of your site. You can use the network drive you mapped earlier to edit your master pages using any HTML editor. To preview your master page, click on its file name or status. While previewing your HTML master page, use the Snippet Gallery to get code snippets for SharePoint functionality that you can copy and paste into your HTML file.

- [Convert an HTML file to a SharePoint master page](#)
- [Create a minimal master page](#)

 Name	Status	Approval Status
 beehivemaster	...	Conversion successful. Approved
 beehivesystem	...	Conversion successful. Approved
 oslo	...	Conversion successful. Draft
 seattle	...	Conversion successful. Draft

SNIPPETS MAKE IT HAPPEN



The screenshot shows the SharePoint ribbon with the 'DESIGN' tab selected. A red box highlights the 'Custom ASP.NET Markup' icon in the 'Web Parts' section of the ribbon.

Choose a Snippets

Preview

Joel's Dev Site
Color Styling Search Departments
EDIT LINKS

Top Navigation

About this Component

The navigation snippets provide common navigation links and menu items on a site page. The contents of the navigation menu are defined in [Navigation Settings](#). There, you can choose between navigation content defined by site structure or navigation content defined by site metadata and keywords. You can change how the menu looks and functions (including the number of flyout levels via the `StaticDisplayLevels` property).

Update Reset

HTML Snippet

Cut and Paste, sweet!

Copy and paste this snippet at the desired location in your HTML design file. Note that many HTML preview regions are read-only but will render properly on your site.

```
<div data-name="TopNavigationNoFlyoutWithStartNode"><!--CS: Start Top Navigation Snippet--> <!--SPM:<%@Register Tagprefix="SharePoint" Namespace="Microsoft.SharePoint.WebControls" Assembly="Microsoft.SharePoint, Version=16.0.0.0, Culture=neutral, PublicKeyToken=71e9bce111e9429c%">--> <!--MS:<SharePoint:AjaxDelta ID="DeltaTopNavigation" BlockElement="true" CssClass="ms-displayInline" -->
```

Customize and Configure

Customization - Top Navigation (AjaxDelta)

Important

CssClass ms-displayInline ms-core-navigation ms-dialogHidden

Accessibility

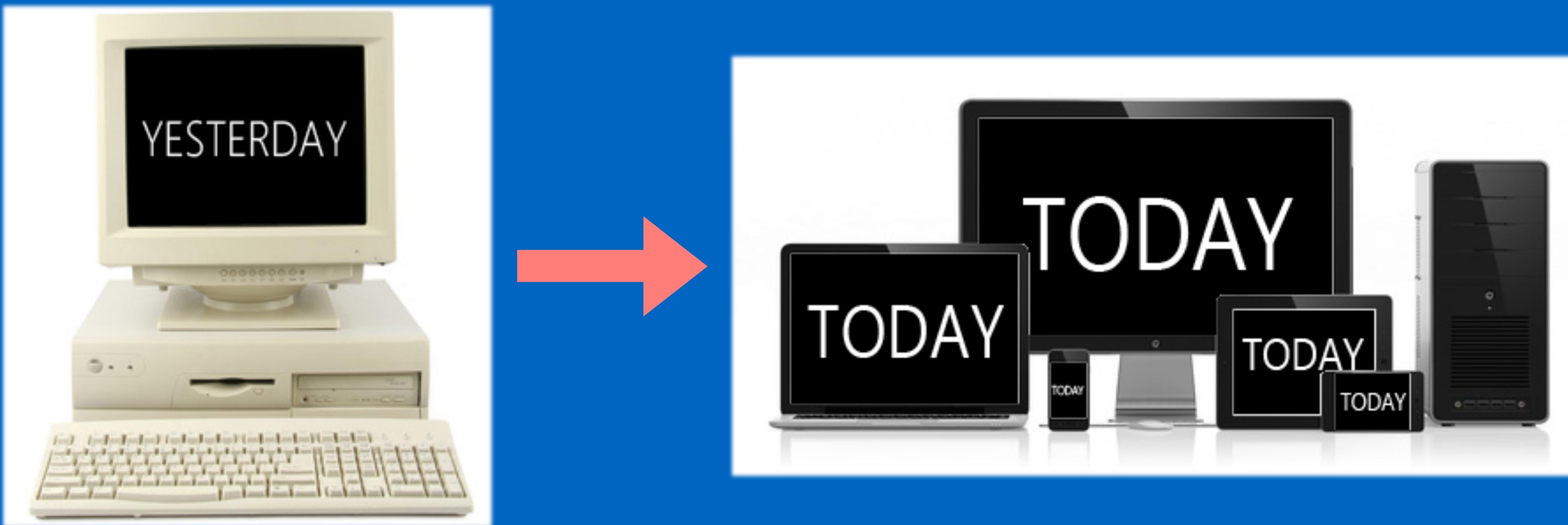
DEMO



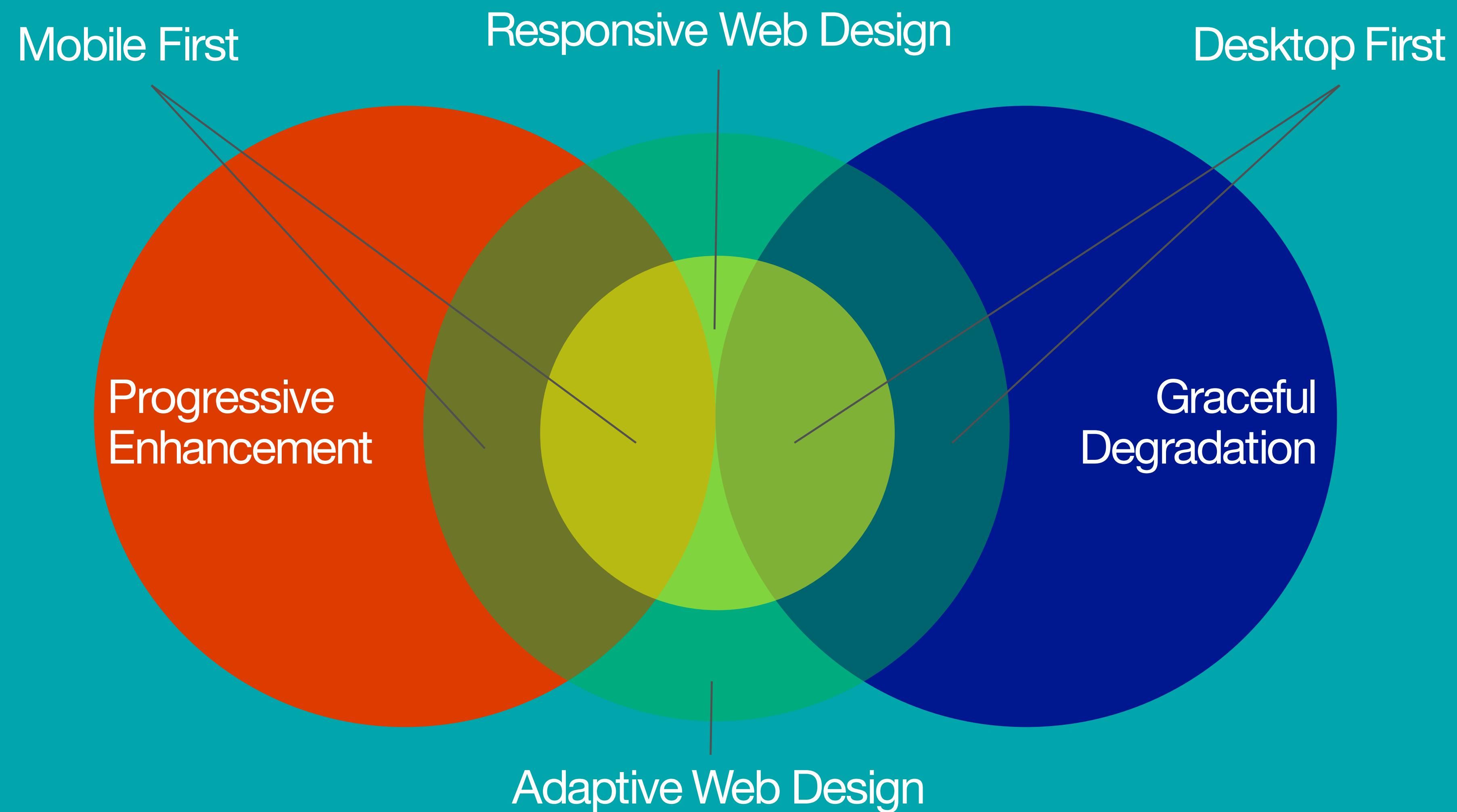
RESPONSIVE UI

THE FUNDAMENTALS

THE OFFICE IS CHANGING BYOD



FUN WITH BUZZWORDS

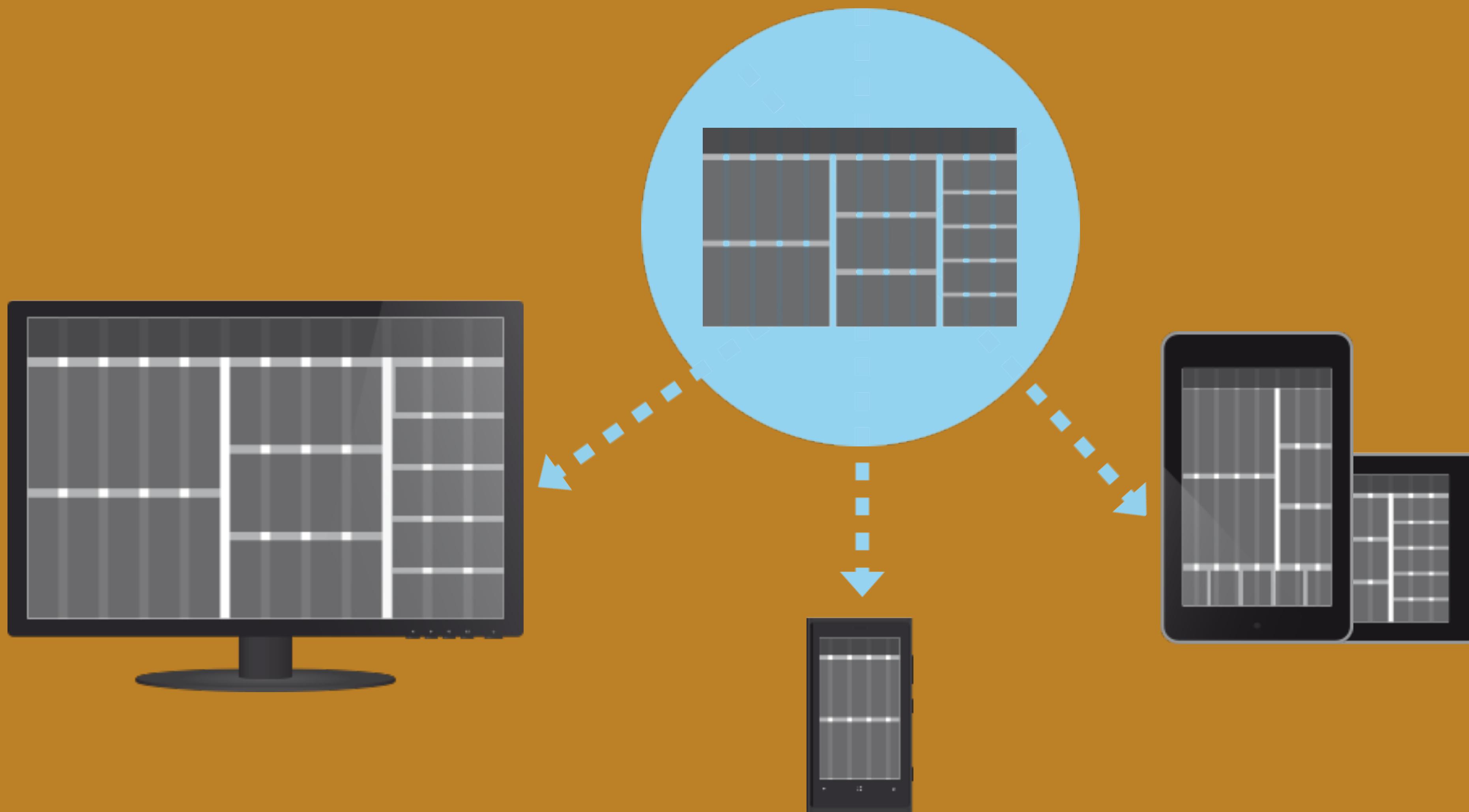


3 PILLARS OF RESPONSIVE WEB DESIGN



Fluid Grid – Flexible Media – CSS3 Media Queries

A FLUID GRID



FLEXIBLE MEDIA

- Flexible Images
- Flexible Video
- Proportional Text



MEDIA QUERIES

In-Line Media Query:

```
<link rel="stylesheet" media="screen and (min-width: 768px)" href="tablet.css" />
<link rel="stylesheet" media="screen and (max-width: 599px)" href="small.css" />
```

Media Query in style sheets:

```
@media screen and (min-width: 786px) {
  body {
    font-size: 1.3em;
  }
}
@media screen and (min-width: 992px) {
  body {
    font-size: 1.6em;
  }
}
```

Devices with ability to handle orientation:

```
@media screen and (orientation: landscape) {
  .landscape {
    width: 30%;
    float: right;
  }
}
```

USE CSS WISELY

*Do not try and hide the spoon. That's adds load time. Instead...
only try to realize the truth. There is no spoon in mobile first CSS.*



Specter Group | BETTER HOMES STRONGER COMMUNITIES

search...

ABOUT BLOG COMMUNITIES CONTACT

WELCOME TO SPECTER GROUP
A PREMIER BUILDER SERVICE EASTERN ATLANTIS

// COMMUNITIES

Maecenas massa arcu, posuere eget hendrerit at, venenatis sit.

Maecenas massa arcu, posuere eget hendrerit at, venenatis sit amet elit. Nullam tempor interdum nisi.

Maecenas massa arcu, posuere eget hendrerit at, venenatis sit amet elit. Nullam tempor interdum nisi.

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Specter Group

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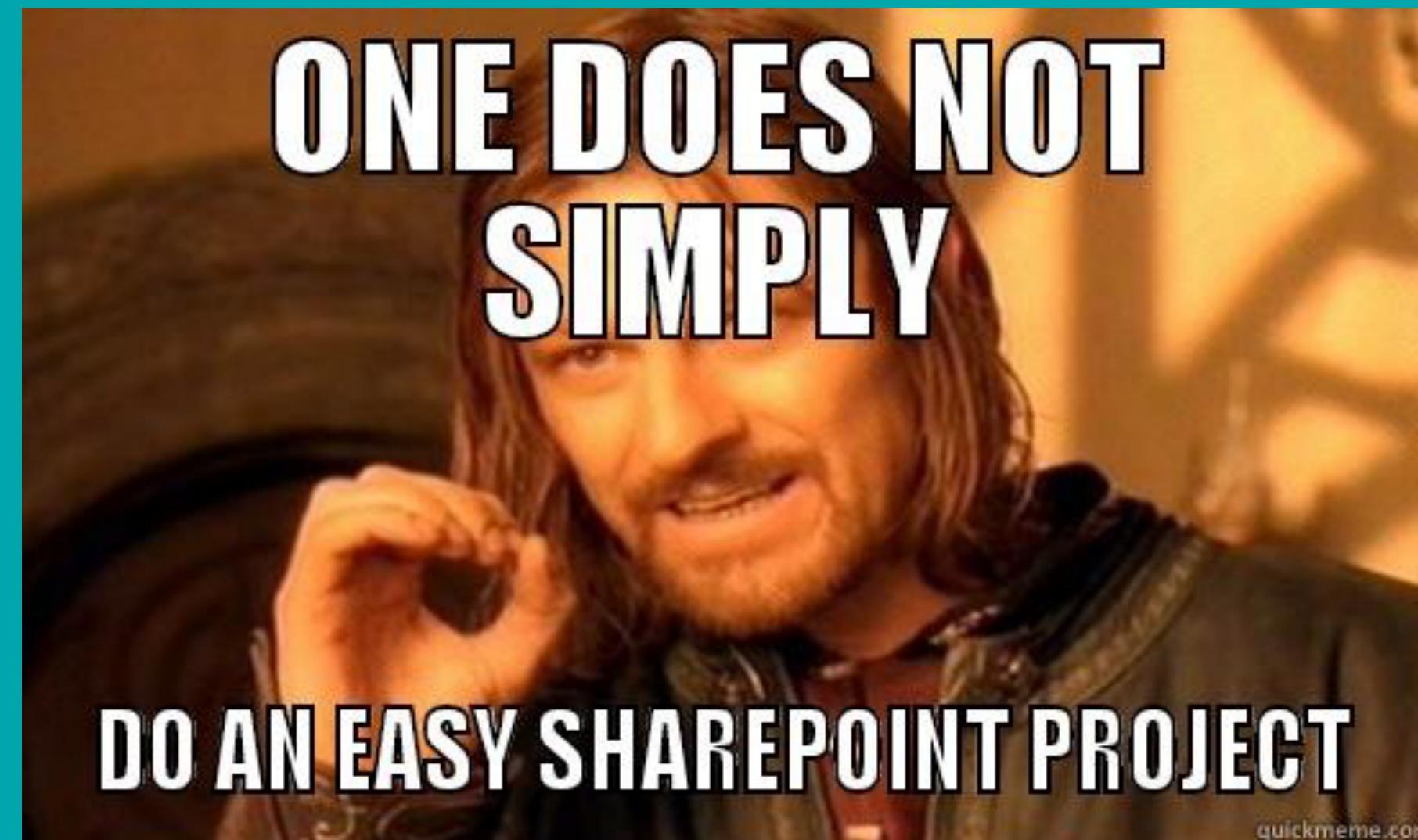
DEMO



**I CAN'T BELIEVE IT'S
SHAREPOINT!**



ONE MORE THING... DISPLAY TEMPLATES



THEY'RE EVERYWHERE

The screenshot shows the Office 365 search interface. At the top, there's a search bar with the query "contoso marketing deck". Below it, a sidebar lists "Result type" options like Excel, PDF, PowerPoint, SharePoint Site, Web page, and Word. Under "Author", it shows entries for Alex Darrow, Janet Schor, Sara Davis, and Tony Krijnen. A "Modified date" filter allows selecting from "One Year Ago" to "Today". The main search results area displays several items, including a "PowerPoint presentations for contoso marketing" result, a "Contoso Electronics 2010 Marketing Campaign" result, and a "2013: Search" result which is highlighted with a green arrow. The "2013: Search" result includes a thumbnail of a Microsoft SharePoint 2013 Deep Dive Demo Guide.

The screenshot shows a SharePoint search results page with a search bar at the top containing the word "document". Below the search bar, a message says "You can expand your search to search everything." The results are listed in a grid format, each item featuring a thumbnail, the title, a brief description, and a link. The first five results are highlighted with red boxes and labeled "Document Sample1" through "Document Sample5". To the right of the results, a large blue arrow points left towards the search bar, labeled "Control". To the left of the results, another large blue arrow points right towards the items, labeled "Items".

Document Sample	Description	Link
Document Sample1	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample.docx
Document Sample2	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample2.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample2.docx
Document Sample3	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample3.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample3.docx
Document Sample4	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample4.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample4.docx
Document Sample5	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample5.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample5.docx
Document Sample	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample.docx
Document Sample2	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample2.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample2.docx
Document Sample3	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample3.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample3.docx
Document Sample4	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample4.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample4.docx
Document Sample5	Document Sample ... https://niaulin.sharepoint.com/sites/benjamin/Shared Documents/Document Sample5.docx ...	niaulin.sharepoint.com/sites/benjamin/.../Document Sample5.docx

DEMO



THINK ABOUT IT...

- Reusable code that an end-user can use.
- Don't code the queries and search logic, just the presentation layer.



WORKING WITH



ANGULARJS

by Google

WHY ANGULARJS?

- Open source!
- Lots of training material online
- Lots of books
- Well supported in the community
- and...

Codecademy



pluralsight. hardcore developer training



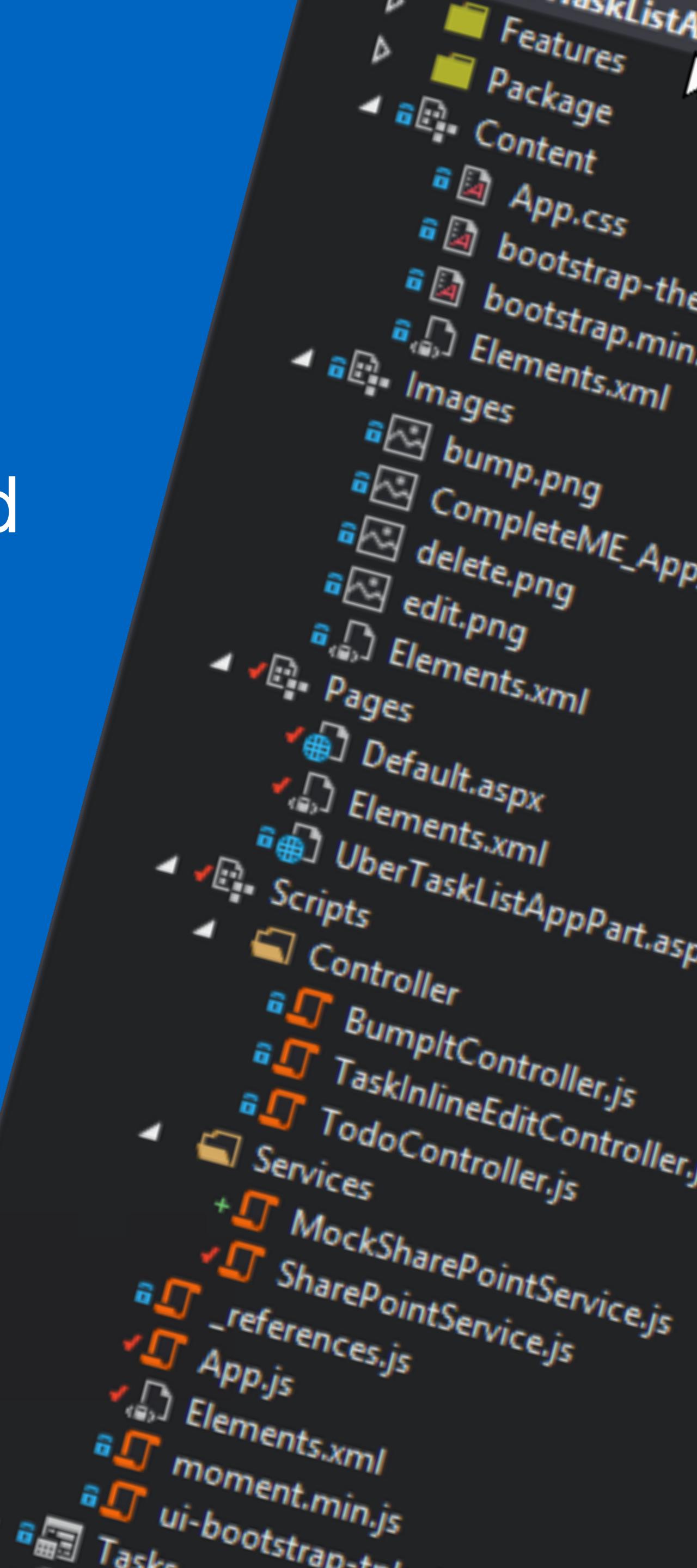
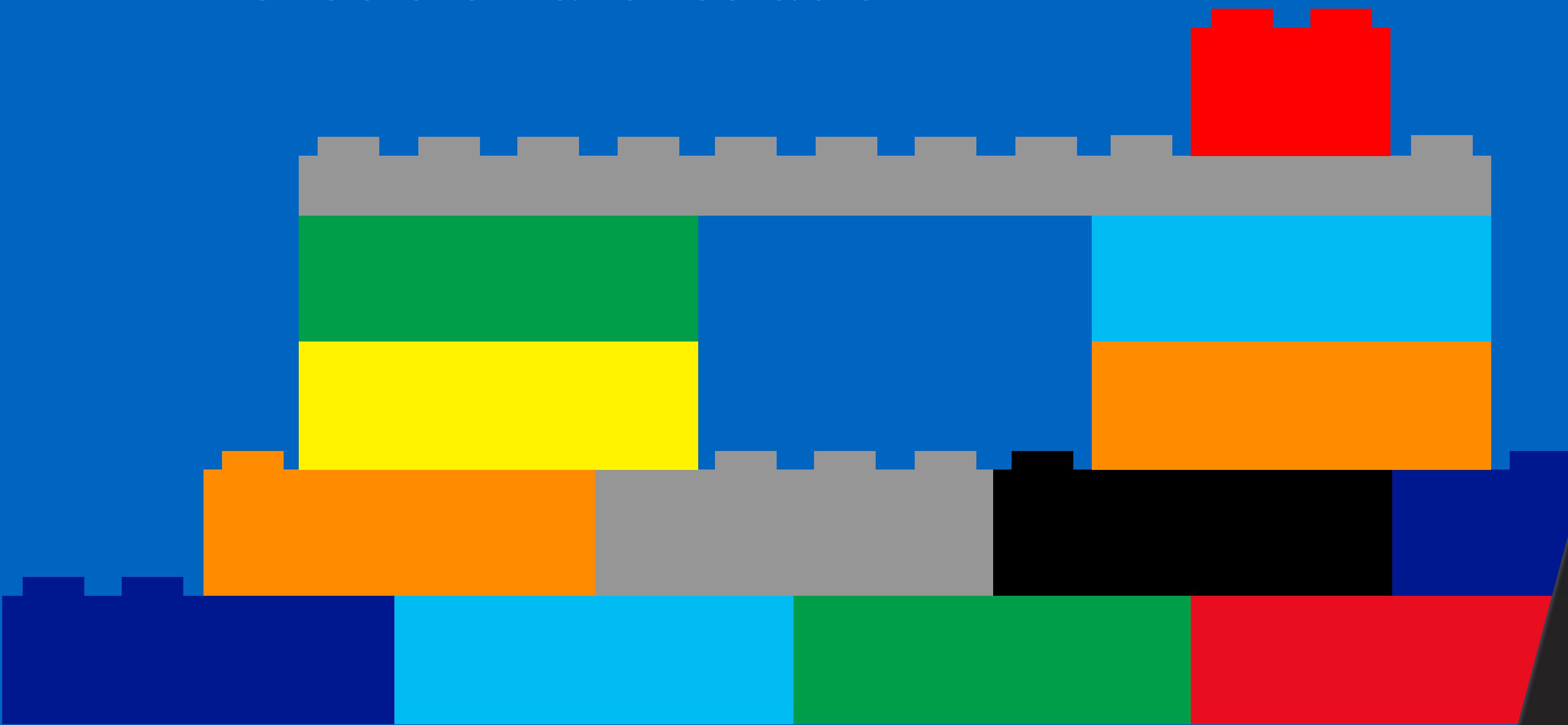
GOOGLE'S USE CASE

Google
feedback

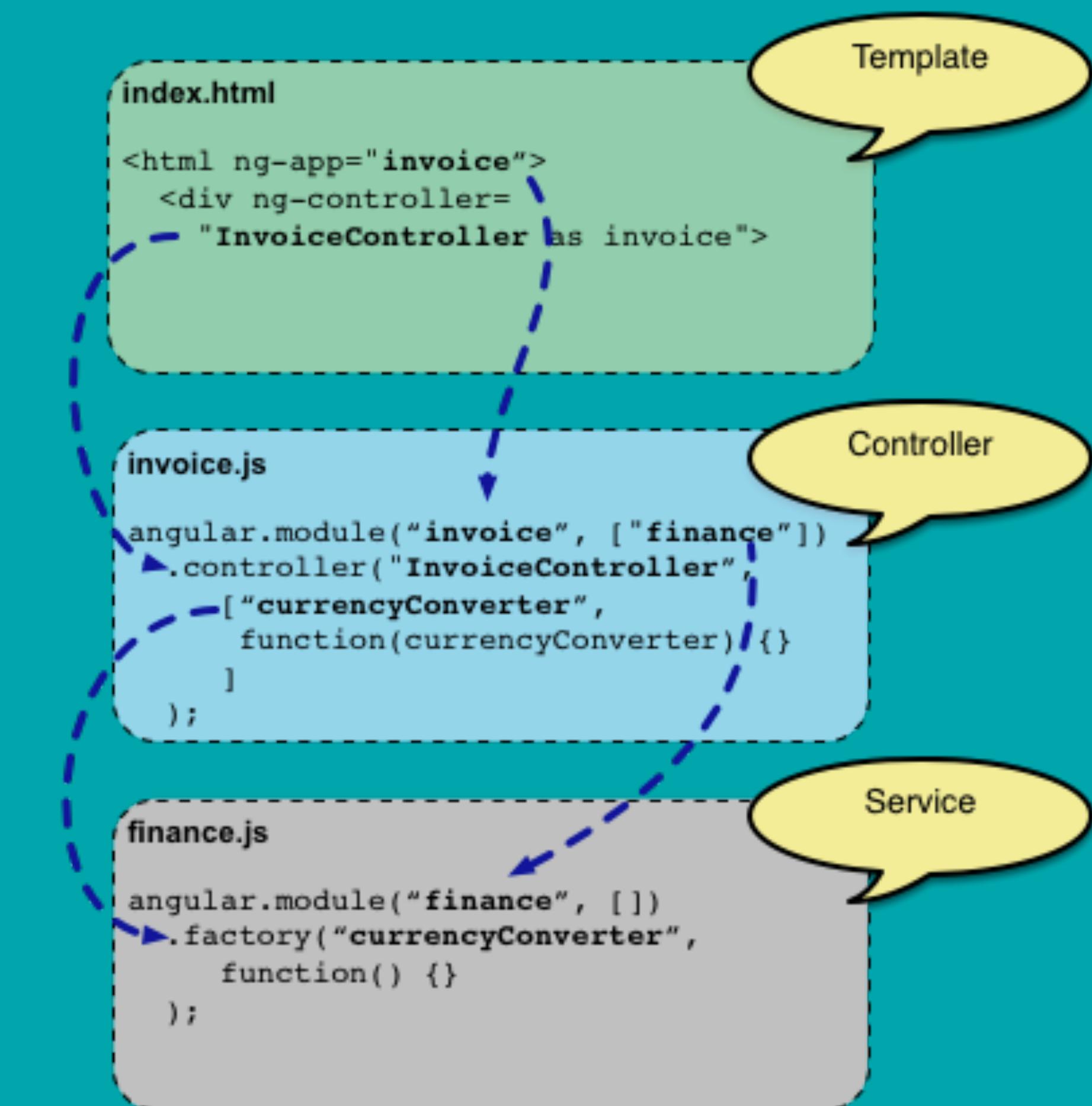
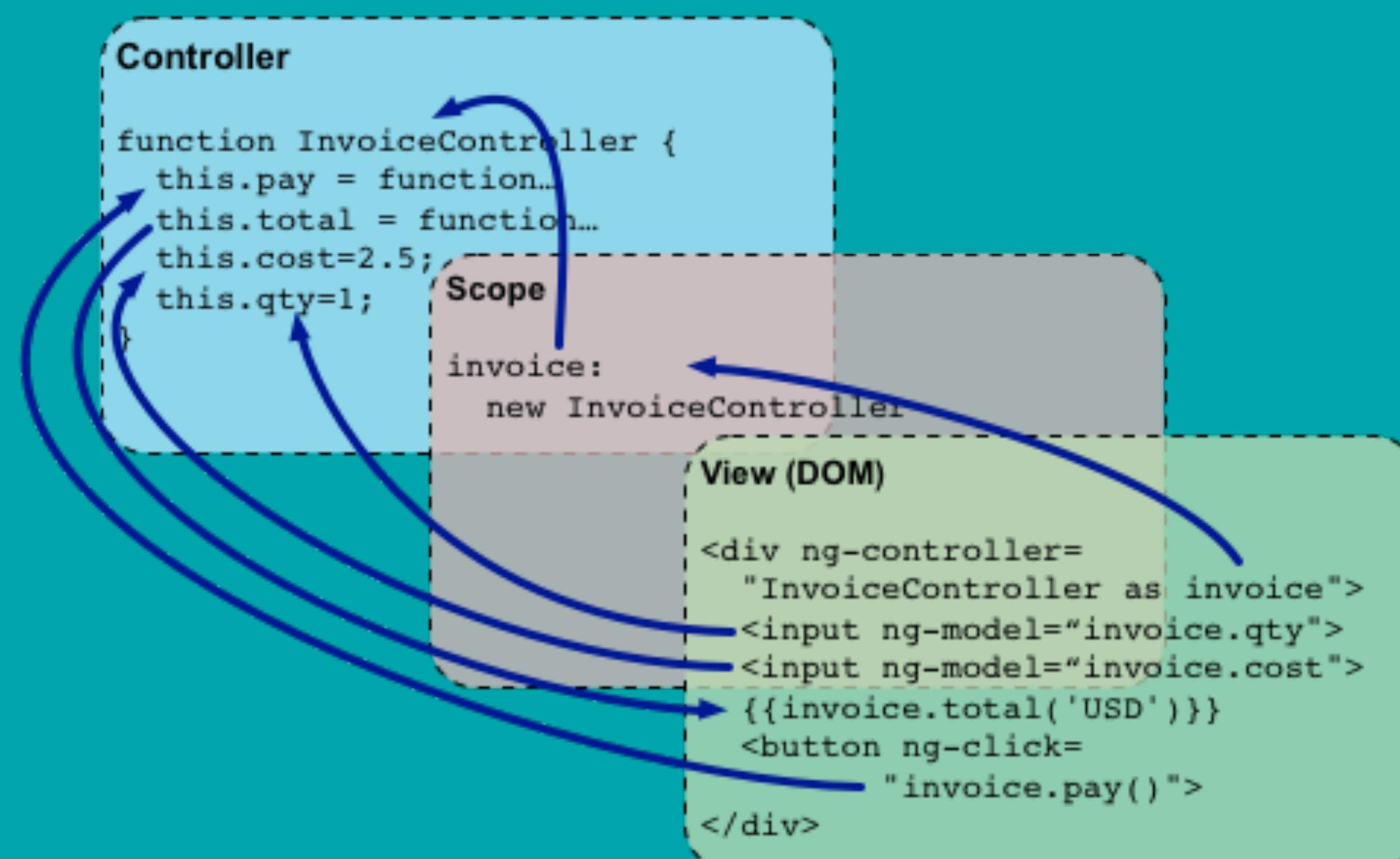


STRUCTURE

- Everything to build a CRUD app with a well defined structure...and testable!



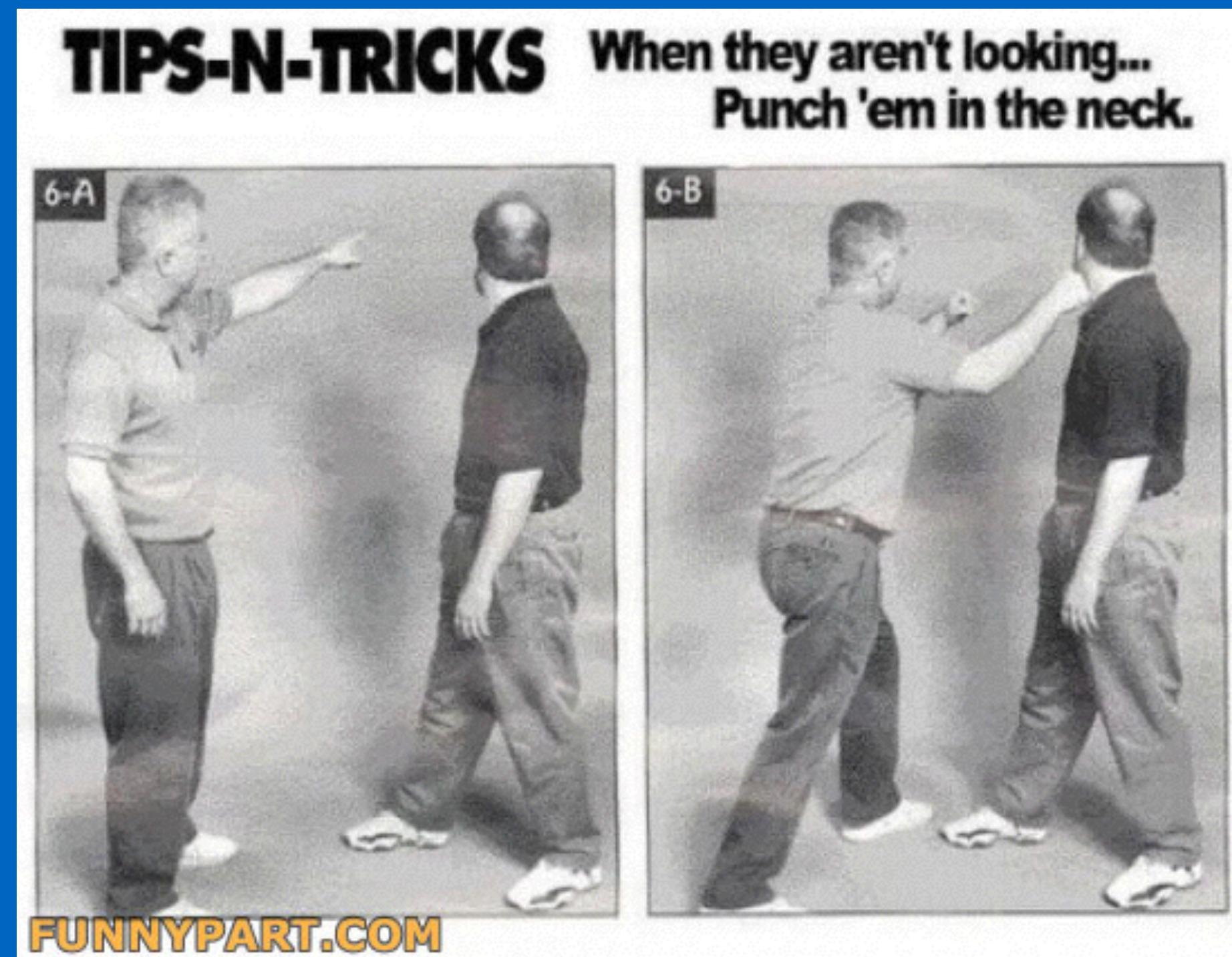
MODEL VIEW...



DEMO



SOME TIPS AND TRICKS



TACKLING NAVIGATION

- How will your navigation adapt to different viewports
- Responsive navigation may require thought
- Consider real estate required for navigation
- **Note: Multi-level SP OOTB Navigation relies on hover**
- Consider business goals and content management of navigation

Floating

Dropdown

Collapsing

Off Canvas

WARNING: MOBILE FIRST AND IE8

- IE8- does not recognize CSS3 Media Queries
- Will only load mobile view
- Common fixes:
 - IE8- stylesheet

```
<!--[if lt IE 9]>
  <link rel="stylesheet" type="text/css" href="/styles/styles-ie8.css" />
<![endif]-->
```

- JavaScript Libraries such as CSS3 Media Queries

```
<!--[if lt IE 9]>
  <script src="http://css3-mediaqueries-js.googlecode.com/files/css3-mediaqueries.js"></script>
<![endif]-->
```

TIPS AND TRICKS

- Mobile first (with caveats)
- Possible HTML conversion issues:
 - Don't use IE Hacks like <!--[if lt IE 9]> unless you need them
 - JavaScript embedded in Master Page or Page Layouts can be bad...and bad practice
- Watch out for HTTP & HTTPS references, use relative paths like: //domain.com/jquery.js
- Develop for the real world (will mobile users need to edit pages?)
- **Don't break SharePoint!**
- Don't forget to Publish all your files
- Test, and test, and test some more
- Train content authors! RWD relies on groomed content.

PLANNING TIPS

- Set project budget, deliverables and expectations accordingly
- This should be familiar...
 - **Start with content / site purpose**
 - Sitemap
 - Information Architecture
- What's different...
 - Wireframing and high fidelity mockups – including tablet and/or mobile as needed
 - Design to the extremes, then fill in the gaps



IN SUMMARY

1. Create HTML Design
2. Map network drive to Master Page Gallery
3. Add HTML, Images, & CSS assets
4. Use Design Manager to convert to HTML Master Page
5. Edit HTML, add Snippets and customize CSS
6. Develop any JavaScript functionality
7. Publish all the files
8. Apply the Master Page to the site

THANK YOU!