



# Design Systems

Sep 16th 2021

Web & Mobile Design - DMA 331

Something to ask students

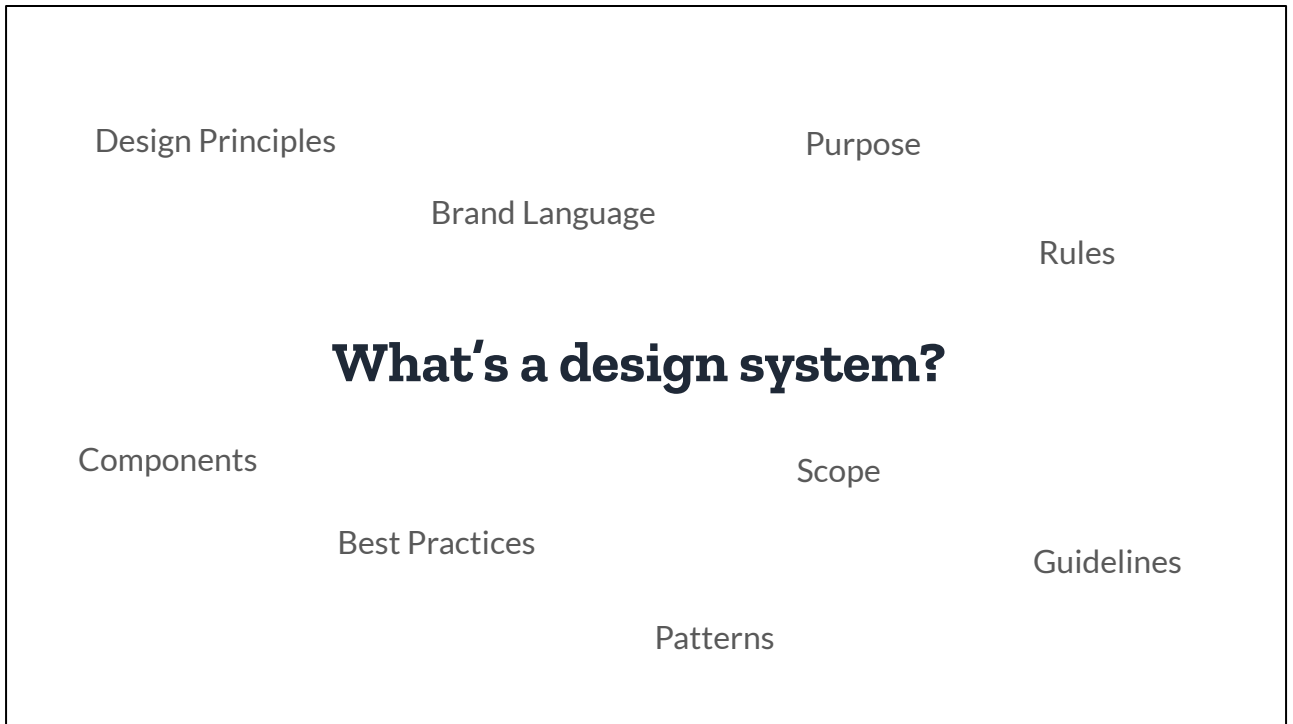
# **Reading Discussion**

## **UX Audit Assignment**

Don't feel constrained to squeeze everything together

Several submissions missing comments all together

Feel free to be more critical of these apps



A design system can include a lot of things  
Including all the things listed here, and we are going  
to focus on Rules and Scope in this talk

logic + principles and UI elements... when do you stuff  
not just how it should look

Open question to the room

## **Design System:**

**A tool to help you and your team align and focus on the critical parts of your experiences through rules and components**

The definition of a design system that I like to use

# Landscape



Starting from Scratch



Map Existing  
Products

2 scenarios.. All new products and services... lots of stuff that's been around for a while owned and maintained by different groups

Most of the organizations I've seen have the latter case

# Rules



**Tech-stack agnostic**  
**Platform agnostic**  
**Foundational**  
**Scaleable**

Works in both scenarios touched on previously... new products and legacy applications

So why talk about the rules first? It may be less tangible to many but it's far more foundational and its very scalable

## **Handling hover actions from desktop to mobile**

All actions concealed by a hover should be revealed inline

## **Handling system notification**

All user actionable messaging should present as a persistent toast, informational messaging can be presented in context

Some examples of rules...

2 examples of rules that help guide decision making..  
Let's go into detail about a third



## Hiding or Disabling a Button

Hide when the action is unavailable?

Hide based on user permissions?

Disable when the action is unavailable?

Disable based on user permissions?

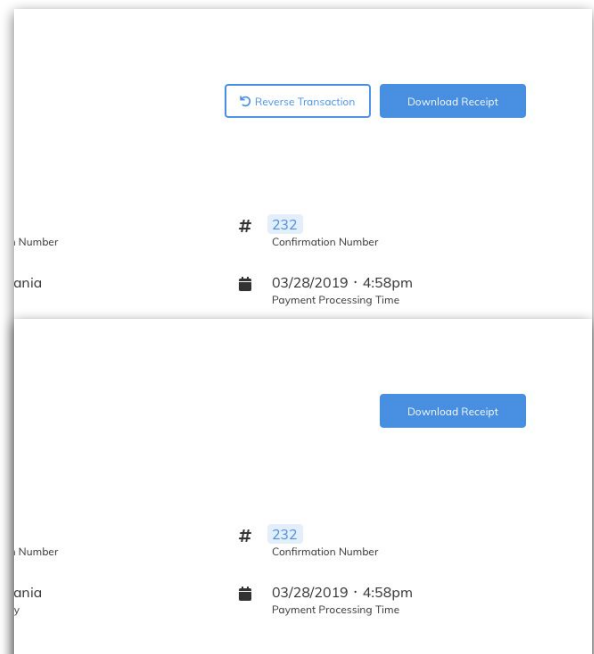
A rule that might seem trivial but good to think about with multiple user types all using an application for different reason and with different access

This is an example of a rule with a level of detail that was useful for the team

Scenario: Reversing a transaction, but it's timeboxed and some users don't have the privilege to reverse

Users were contacting support asking where the reverse option was

This was one of only a few actions that were time sensitive, which made this even more jarring to the overall experience



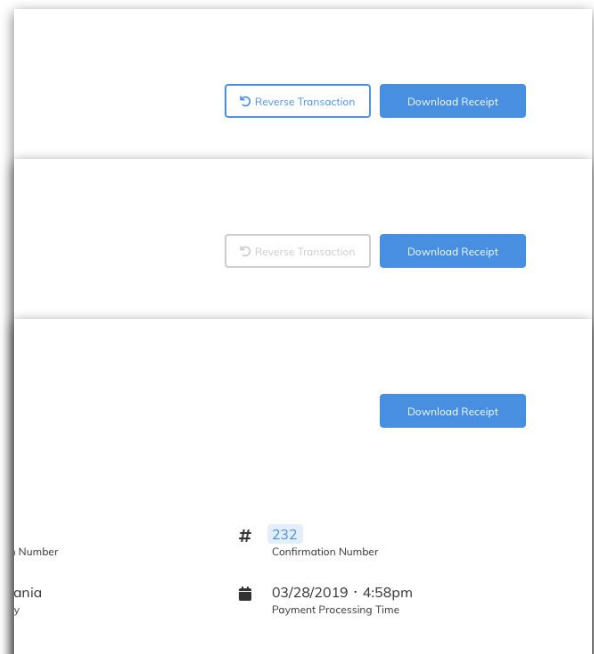
Scenario.. And the problem we had with the buttons

## What We Did

- If I have the permissions to the action during my experience then disable (*won't read as broken*)

- If no access hide it away (*don't want to tease the user with actions they can't perform*)

We reduced user confusion, consistency reduced the amount of support calls



You could even add another layer to inform the user with a tooltip or something similar why the action is disabled

And now its done! Don't have to spend more time on button logic with rule  
Intro standard.... slimming down code complexity..  
Double win

"When you pour water in a cup, it becomes the cup. When you pour water in a bottle, it becomes the bottle. When you pour water in a teapot, it becomes the teapot. Water can drip and it can crash. Become like water my friend."

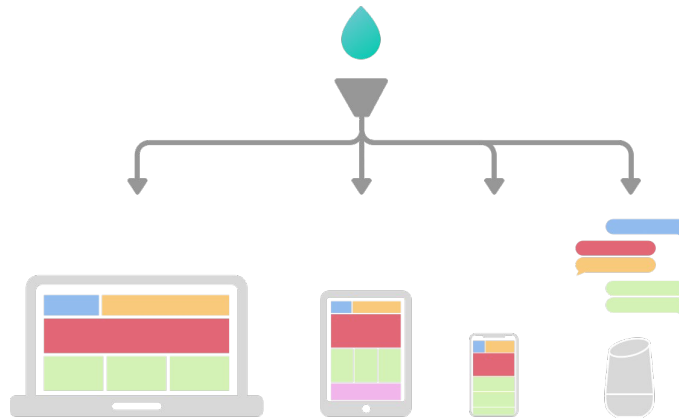
- *Bruce Lee*

Rules are fluid....!!!!!!!

Can be applied to many containers



# Fluid



*Fluidesign.rehanbutt.com*

Imagine voice VR AR.. or fluid experiences between devices

Once you have got some rules sorted you can dive a bit deeper into putting these together into an experience or workflow

# Bento



**Components are like a bento box, they  
come together to create the experience**

Bento box -> like a coming together of a bunch of  
foods

Components are similar in that... it doesn't start at  
the smallest unit (next slide)

# Bento



**You don't have to start with the smallest pieces**

Checkboxes and radio buttons are probably not the central experience of your product

Think about it like a bento box... you don't need to start at the smallest level...

focus on the central need of your product first...

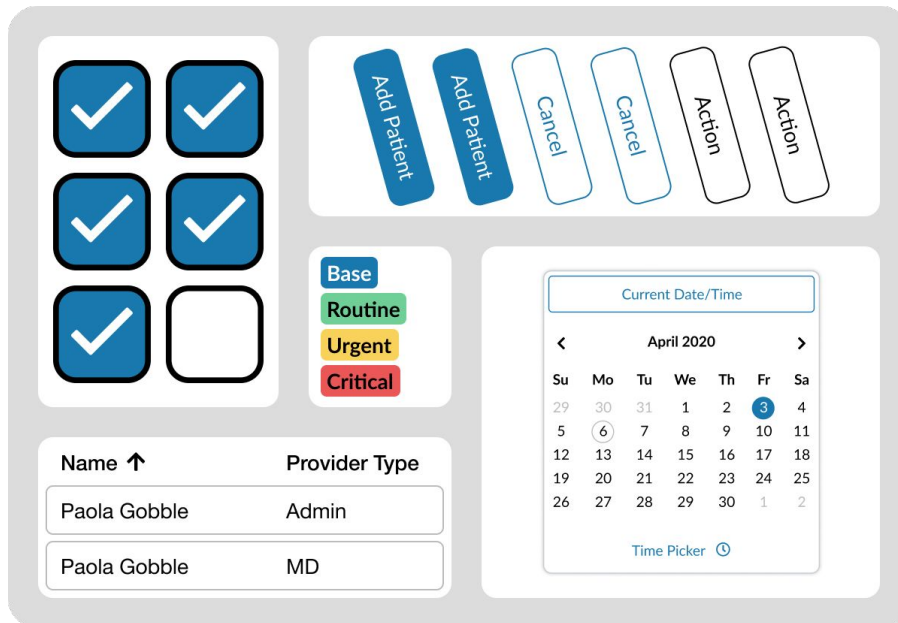
maybe its showing vital stats in real time.. Or providing telehealth services



Think about this bento box

A combination of foods that make up a meal.. Savory and sweet.. Some more complex than others





Now lets play with this idea in the context of a digital product.. You have lots of components that come together to build your application but you don't have to own very detail of every simple 1

The coming together of these flavor is more important the the specific styling of a checkbox

**Combination of  
flavors  
is magical**



The coming together of these flavor is more important than the specific styling of a checkbox

A checkbox alone isn't going to do with



Don't worry about growing your own **rice**  
and farming your own **fish**, at least not yet

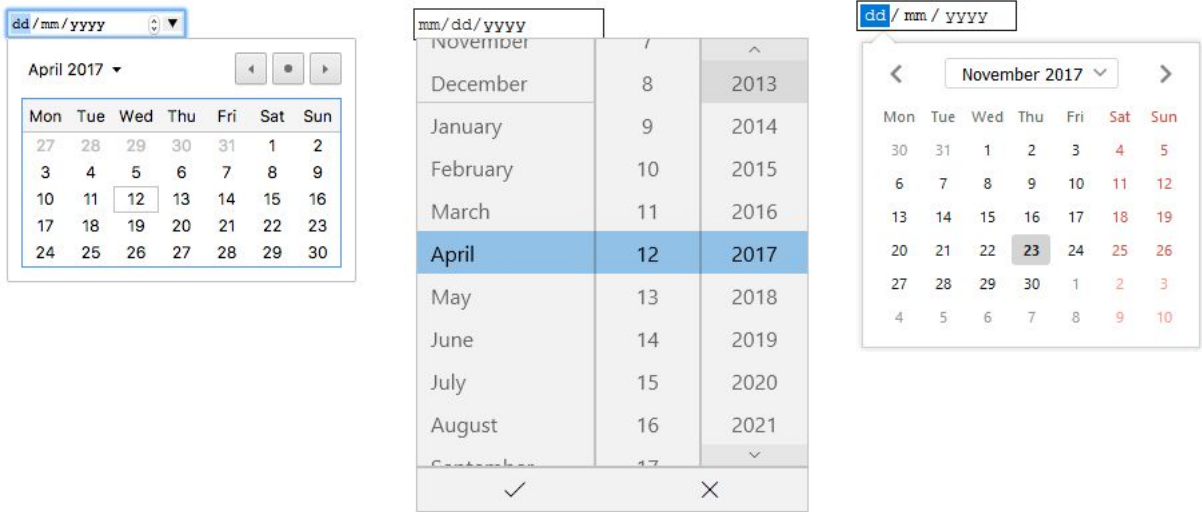
In this funny metaphor .... im saying dont worry about  
growing your own rice.... At least just yet



**Instead look to prep existing components  
from existing design systems or browser  
defaults**

Instead look for what's out there already in existing design system if that works for you.. Or browser defaults

things like checkboxes, date pickers, color pickers for example



Mozilla

Datepicker defaults..... Chrome, Edge, Firefox.. Its not perfect though.. Safari isn't covered here

And not all of these are the exactly same interaction.... Will be familiar though

If you in the travel industry sure maybe this is worth building a custom 1....

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/date>

A mockup of a medical form interface. It includes a grid of checkboxes, some of which are checked. To the right are buttons labeled 'Add Patient', 'Cancel', and 'Action'. Below these are radio buttons for 'Base', 'Routine', 'Urgent', and 'Critical'. A table lists patient names and provider types. At the bottom right is a date and time picker for April 2020.

Name ↑	Provider Type
Paola Gobble	Admin
Paola Gobble	MD

Current Date/Time

April 2020

Su	Mo	Tu	We	Th	Fr	Sa
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

Time Picker

Look to prep existing components either from existing design system or some cases browser defaults, checkboxes, date pickers, dropdowns and many more

## The UX maturity of your organization will influence how deep your design system is



[uxdesign.cc/@lucyprimadan](https://uxdesign.cc/@lucyprimadan)

There are several models but for those unfamiliar it something akin to this diagram.. And speaks to how well integrated UX is into your organization

Starting **small** is ok. Don't feel like you have to sort it all out yourself there is **lots of solutions** out there in the world more **formal** than browser defaults.



Material



Fluent UI



Polaris



Carbon

### *Existing Systems*

*Design System Repository: [adele.uxpin.com](https://adele.uxpin.com)*

Look at various system see which follow a similar situation to you... IBM more enterprises products Material more consumer grade principles.. Details would follow suit that they made so keep this in mind before going to far down implementing and noticing it doesn't work as expected... You can also build on top of their systems

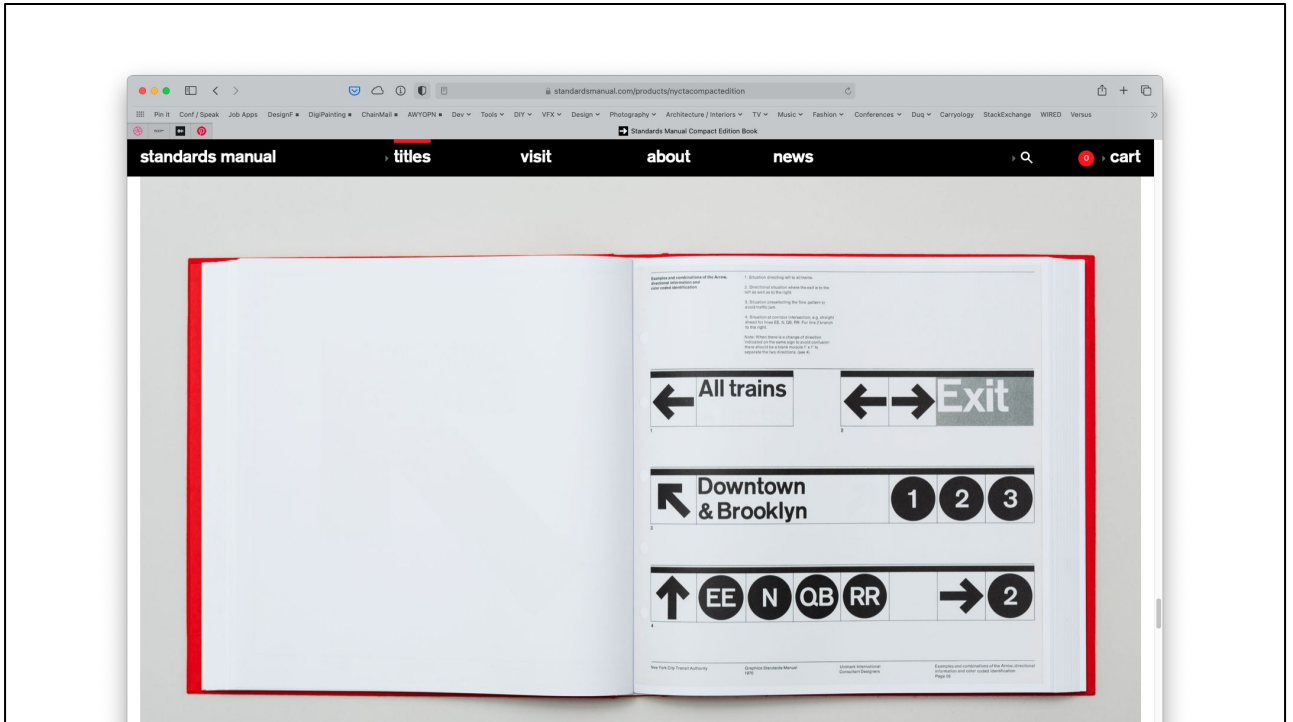
Explore some of these in Figma...

<https://www.figma.com/community/file/928108847914589057/UI2%3A-Figma's-Design-System>

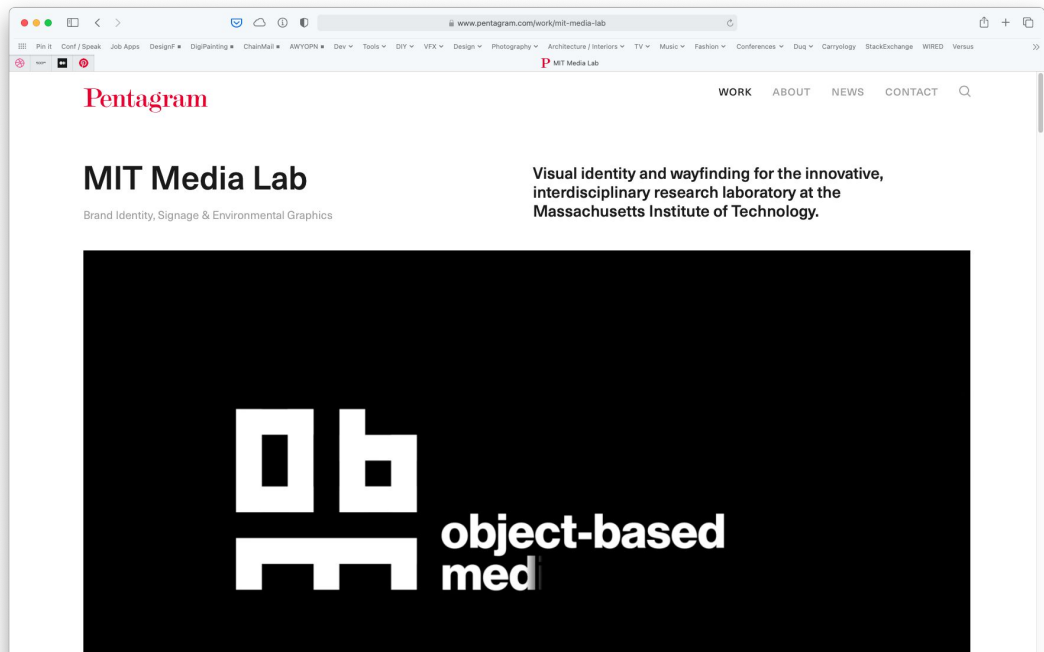
Material



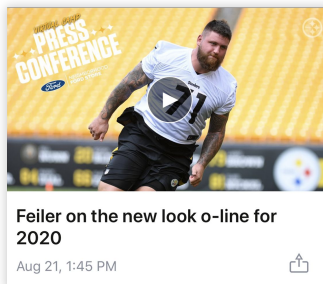
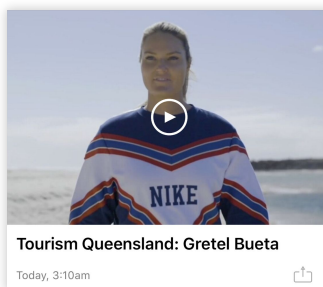
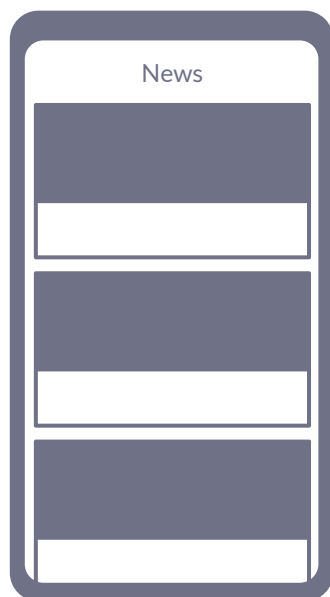
# **Non-Software Design Systems**



<https://standardsmanual.com/products/nyctacompackedition>



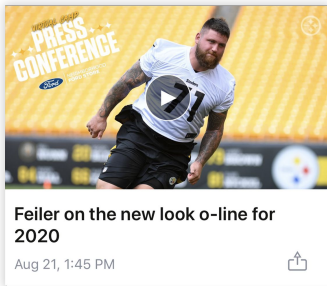
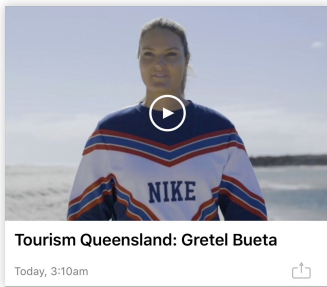
<https://www.pentagram.com/work/mit-media-lab>



Now let's talk about some stuff out in wild and some of which I tried to influence

Some context.. Imagine these are all news articles..




You might be thinking this seem pretty good all sorted out consistent card styling.. Icon is slightly different and day time is rendered differently in 1 case but generally pretty good.. WELL



These are representing 4 unique brands but feels like they would belong to 1

Which is a problem when you are working for many brands and they all have their own language that you want to portray

Another reason we start with the rules.. Over the visuals

 <p>1:1 responsive asset</p> <p>(rubric)</p> <p><b>Lorem ipsum dolor sit amet consectetur</b></p> <p>(contributor byline)</p> <p>(Published date)</p> <p><b>BASE COMPONENT</b></p>	 <p>NEWS</p> <p><b>Rihanna Celebrates Her Visual Autobiography In The Most Rihanna Way</b></p> <p>BY ALICE NEWBOLD 25 OCTOBER 2019</p> <p><b>VOGUE</b></p>	 <p>FASHION</p> <p><b>Egyptian-Italian musician, Mahmood, stars in the AW19 issue of GQ Style</b></p> <p>By GQ Style magazine 15 October 2019</p> <p><b>GQ</b></p> <p>Conde Nast International</p>
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Sometimes all it takes is a little differentiation to make a component to stand on its own brand

[https://www.slideshare.net/MobileUXLondon/global-design-systems-at-cond-nast-international-192305592?from\\_action=savet](https://www.slideshare.net/MobileUXLondon/global-design-systems-at-cond-nast-international-192305592?from_action=savet)

## Our System was Too Rigid

We had **50+** applications that were using the same system but the **rules and implementation** was too rigid for each brand to make it their own

**Branding** wasn't considered critical to the system at the outset, and native device tech was a bit more limiting






Branding as a component / theme

Technology not as mature

Jumping the gun straight to building

Conde Nast has done a great job at handling unique brand languages

## Benefits of a System

-  Reduces startup time
-  Consistency & Clarity
-  Reduces decision fatigue
-  Ease of scale
-  Focuses on the main experiences

A couple benefits of a system

Startup time for you and your users

Consistency and clarity again for you and your user group

..... You and your users



# Systems in Play

**4** new products in **6** months with **1** designer

And this was an informal system. Working design file & conversation

A little story how the power of a system even as a very informal 1

Same basic rules.. And some components design ....  
New problem space but shared some engineering teams..... easier on them as well

**Next Step -> formilize, document, dev and ship it!**

# Summary



## Rules

Logic and principles can guide the experience agnostic of tech & platform



## Fluid

Expect your experiences context to adapt and change



## Bento

Combination of the pieces is important, start small, details will be handled



## UX Maturity & Scope

An organization's UX maturity will help guide your process



## Leverage Existing

Systems  
Existing system formal & informal, many basics are covered

# Great Experiences Are Smooth



And great experiences are smooth like this costume change!

But seriously good design is invisible and a well implemented design system will help

At the end of the day design systems are just 1 tool to help create awesome experiences hopefully to all be as smooth as Evan Rachel Wood

People want to worry about their problem no worry about our tool

# **Responsify!**

## Assignment Review

Assignment due next week and the readings  
<https://dma331.rehanbutt.com/assignments/responsify>

# **Weather.gov**

## Re-design Process Demo

What are some of the things that were noted during UX Audit?