



Applying Visual Design to UI

March 4, 2015

Applying Visual Design to UI

- Visual Design and Human Instinct
- Visual Design elements:
 - Line
 - Size
 - Contrast
 - Overlap
 - Color
- Applying all this to UI

VISUAL DESIGN

Visual Design

Visual Design is not just for aesthetic purposes. It **can be used to create an eye track** to support the task flow of the user.

Visual Design and Human Instinct

Humans have a self-preservation instinct that causes them to **always inspect nearby objects first** to determine if there is a threat, then inspect objects further away after.

Visual Design for UI plays on this base human instinct. Basically, we control the track of the eye through the page **by making important things look near** and less important things appear further away.

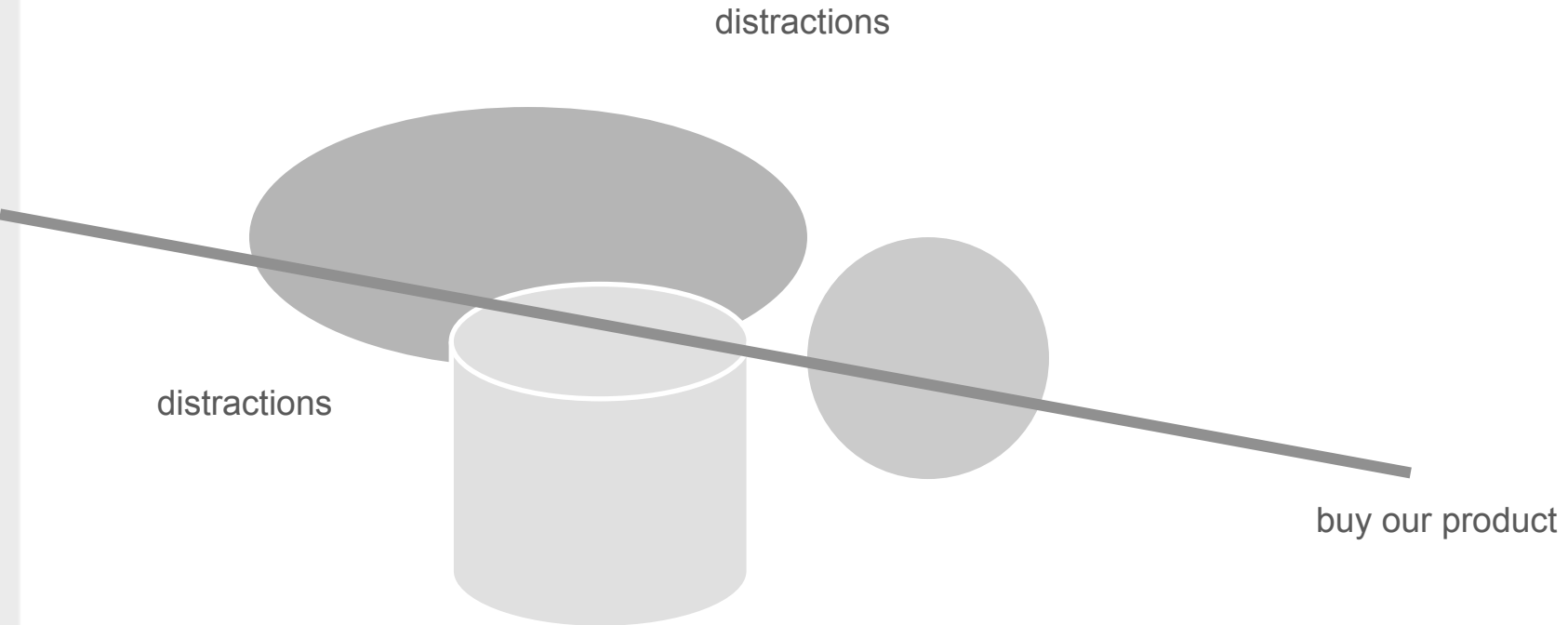
Visual Design

Visual Design uses the following tools to make important elements appear nearer and less important elements appear further away. **An understanding of Visual Design techniques and the user's tasks are necessary to apply UI guidelines properly to make a UI easier to use.**

- Line
- Size
- Contrast
- Overlap
- Color

ELEMENTS

Line



The human eye will follow a line until it terminates.

If a line comes in from the edge of the canvas and terminates somewhere within the canvas, there is almost a guarantee whatever is at the end of the line will be read or seen, no matter how many other elements or distractions are there.

Size



The human eye will inspect an object nearby first to determine if it is a threat, even if an object further away is larger and more threatening. One of the ways the eye determines what is nearer is by its *apparent* size, not actual size.

Size to control reading order

Heading

Section

Content

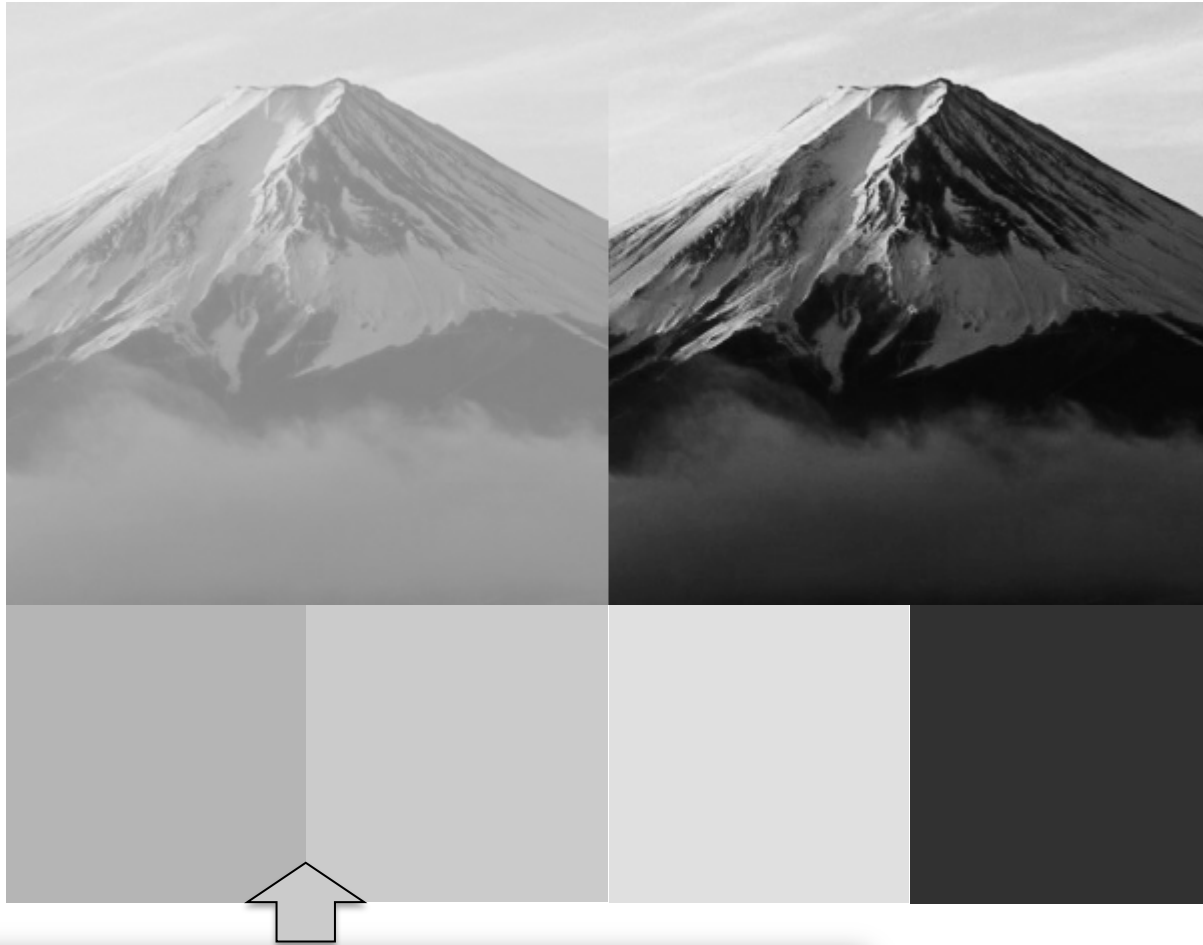
One

Two

Three

We can thus use size to prioritize information, and even cause a user to read information out of logical sequence.

Contrast



When the shadows and highlights of an object are nearly the same in lightness and darkness, it simulates the affect of the atmosphere over distance and the eye sees that as further away, even when two objects appear to be the same size.

Contrast to control reading order

Heading

One

Section

Two

Content

Three

We can thus use contrast to prioritize information, and even cause a user to read information out of logical sequence, even when objects are the same size.

Contrast to control attention

Enabled

Focused

Disabled

Here is a typical usage of that very affect of contrast to control emphasis, priority and focus in UI.

Tangents flatten space



The overlap of elements is another way to show what is near, causing the eye to inspect it first. When things are in tangent, however, they appear on the same plane.

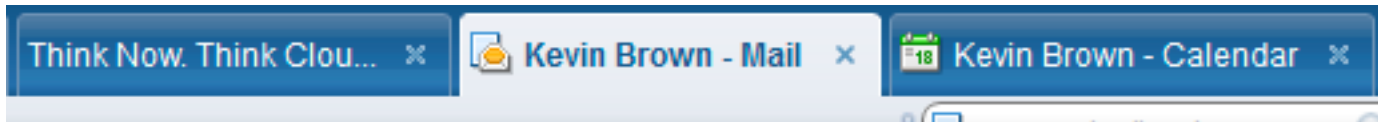
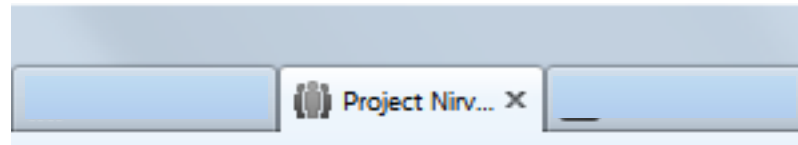
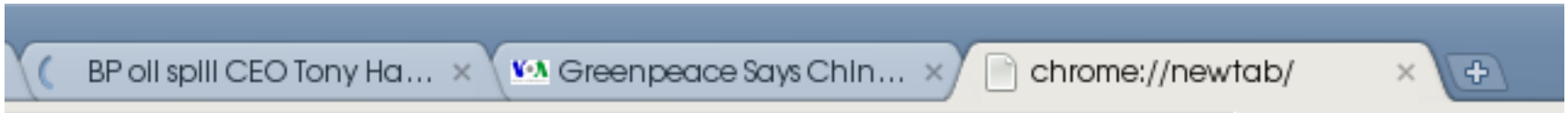
Overlap shows depth



When things are overlapping, the eye can easily tell what is in front and will tend to inspect that first.

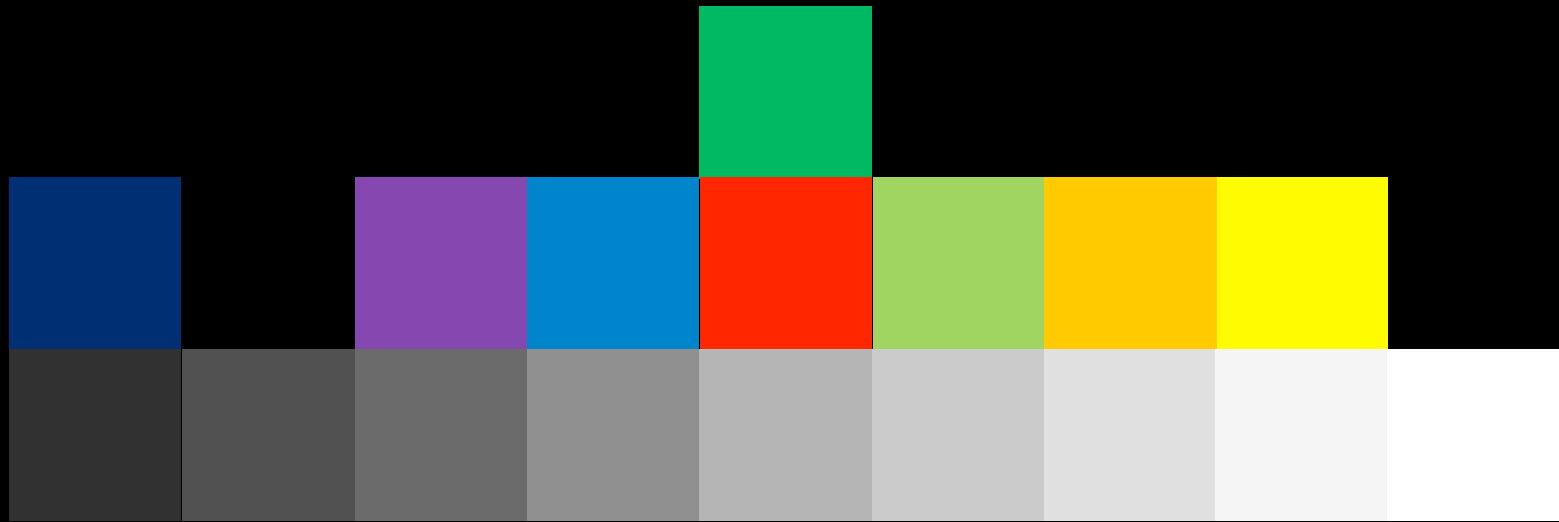
(Note in this case, the high contrast of the mountain might override the affect.)

Overlap (and contrast) used to show focus



Here is a typical usage of that very affect of overlapping to control emphasis, priority and focus in UI. The tabs at the top are the best example as they employ overlap and contrast together. The middle two use contrast only. The tabs at the bottom only employ size and in this case are more difficult to discern what is in focus.

Color recession

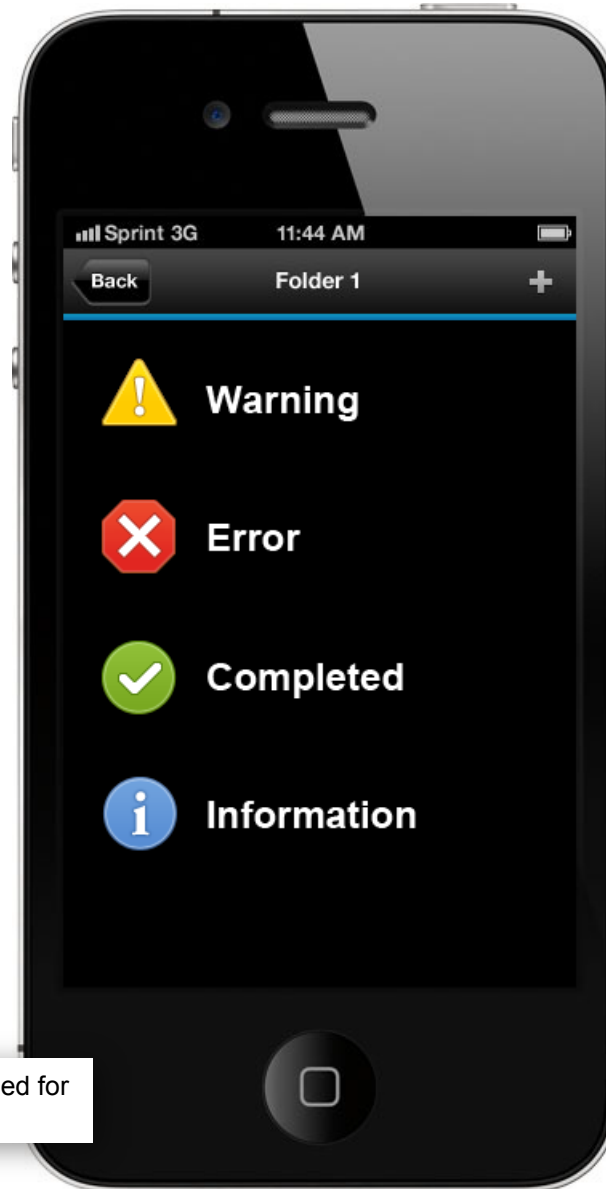


Appears further

Appears nearer





Colors themselves have an inherent appearance of either being nearer or further away due to their vibrance and intensity, and the contrast they have against their background.

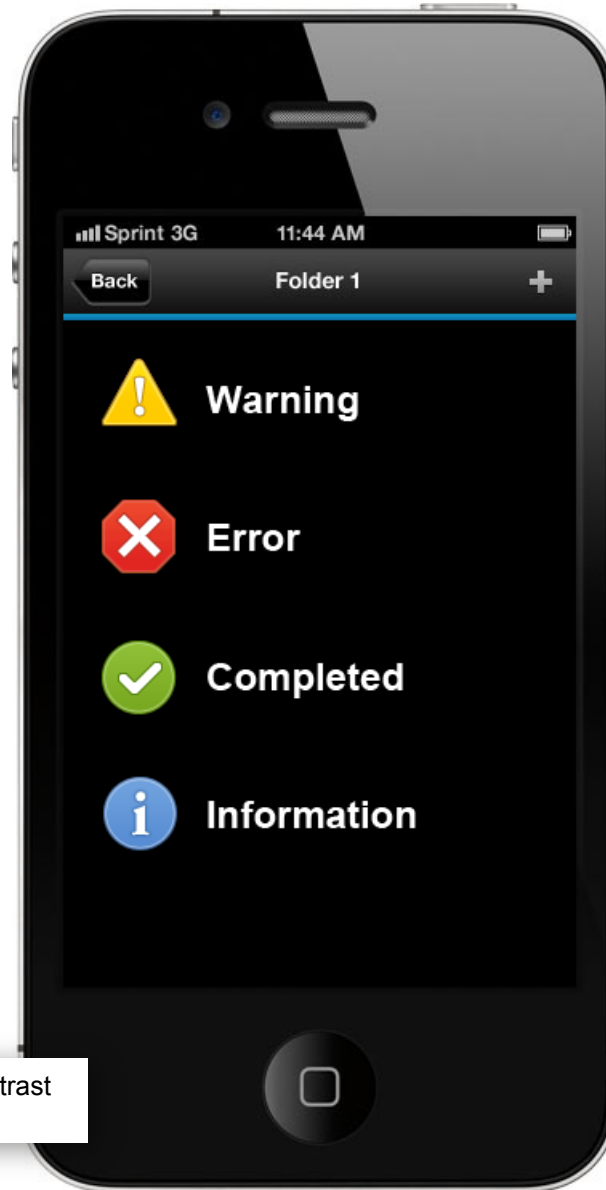
Color recession to get attention



Color recession is precisely the reason for certain colors being used for important iconography and notifications.

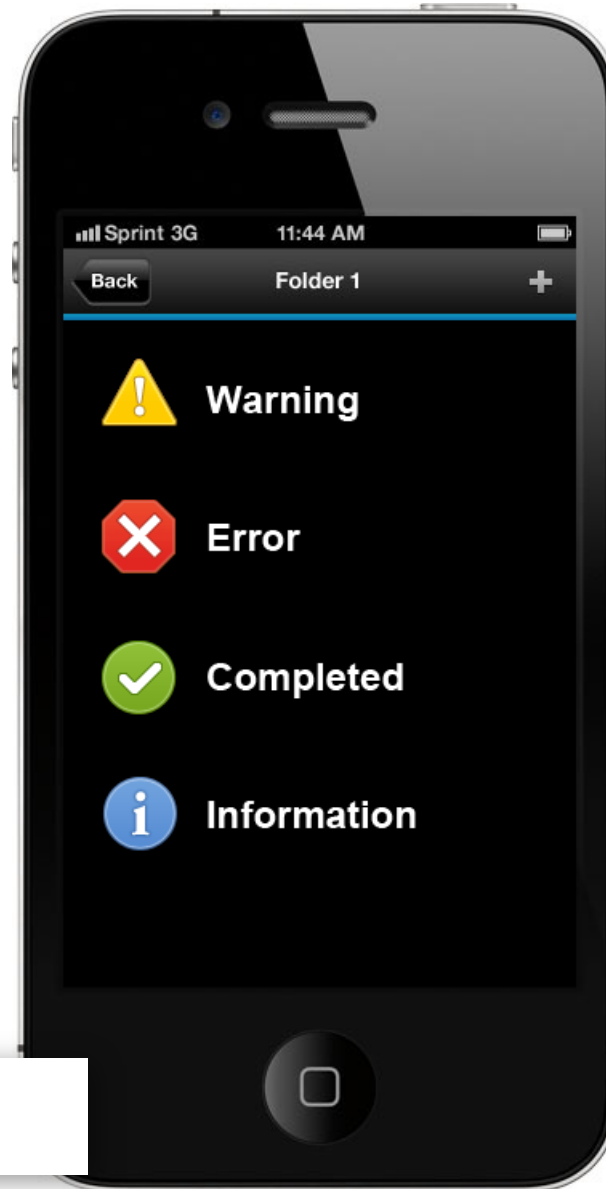
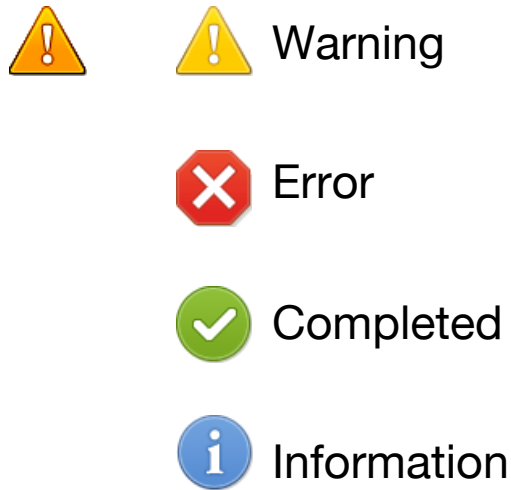
Color recession affected by background

-  Warning
-  Error
-  Completed
-  Information



In addition to color intensity, color recession is also related to contrast and is affected when the background color is changed.

Compensation for background color



Icons sometimes need to be adjusted to achieve the same effect on different backgrounds. This is why it's not advisable to pull icons designed for a particular UI and move them into a different UI.

APPLYING TO UI

Visual Design to control the eye

Product

Application

Application

Application

Application

Work Page

Servers

XXXXXXXX	X	XXXXXXXX XXXX	XXXXXXXX XXXXXX XX	XXX XXXXX	XX XX
XXXXXXXX	X	XXXXXXXX XXXX	XXXXXXXX XXXXXX XX	XXX XXXXX	XX XX
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XXXXXXXX	X	XXXXXXXX XXXX	XXXXXXXX XXXXXX XX	XXX XXXXX	XX XX
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XXXXXXXX	X	XXXXXXXX XXXX	XXXXXXXX XXXXXX XX	XXX XXXXX	XX XX
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Open Tasks

So let's put it all together.
Most enterprise applications have lots of elements and data on screen and it's difficult to know where to start or where to look.



Visual Design to control the eye

Product

Application

Application

Application

Application

Work Page

Servers

XXXXXXXX	X	XXXXXXXX XXXX	XXXXXXXX XXXXXX XX	XXX XXXXX	XX X
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Open Tasks

By judiciously applying size, contrast, color, line, etc... we can effectively create an eye track to help the user know where to start, where to go next and lead them through their tasks, making a complex UI easier.

Applying Visual Design to UI

An understanding of Visual Design techniques and the user's tasks are necessary to apply UI guidelines properly to make a UI easier to use.

