

Object Based Augmented Reality



Rich Fiore

PRODUCER/ DIRECTOR

rich@digitalfrosting.com



Summery



Object Based AR

- Instructional
- Entertainment





Object as trigger

- Noodle dish cast in plastic



Object Scanner

Android based only

Vuforia Object Scanner

The Vuforia Object Scanner allows you to create a target by scanning an object with an Android device. Simply install the app, place an object on the Vuforia scanning target, and start the scan. The app gives you real-time visual feedback on the scan progress and target quality and establishes a coordinate system so that you can build immersive experiences with precisely aligned digital content. The test mode allows you to evaluate the recognition and tracking quality within the app before you start any development. Complete instructions can be found in the [guide](#).

*Note: the Vuforia Object Scanner is only supported on the **Samsung Galaxy S6** and **Galaxy S7**.*



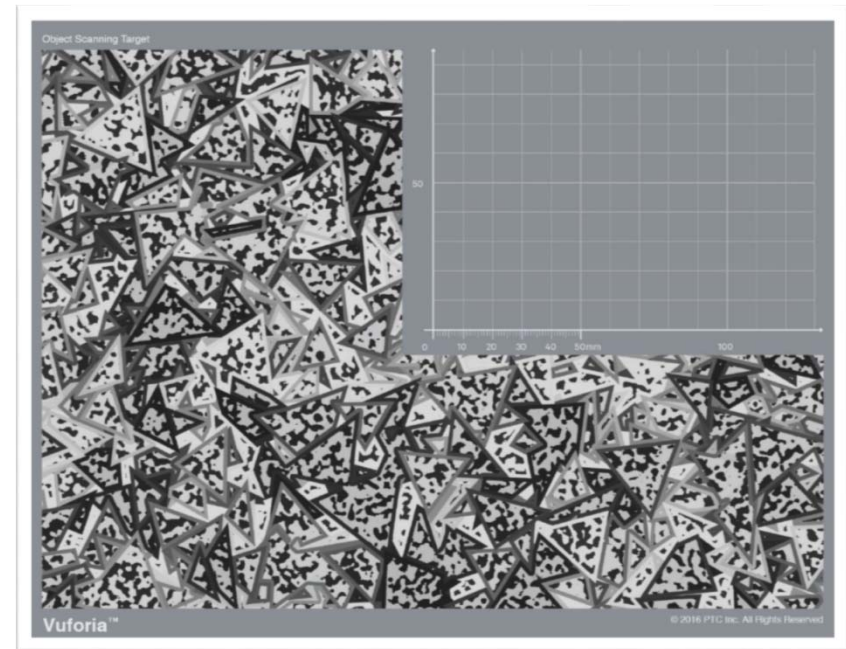
[Download APK](#)

scanner-5-5-11.zip (8.78 MB)



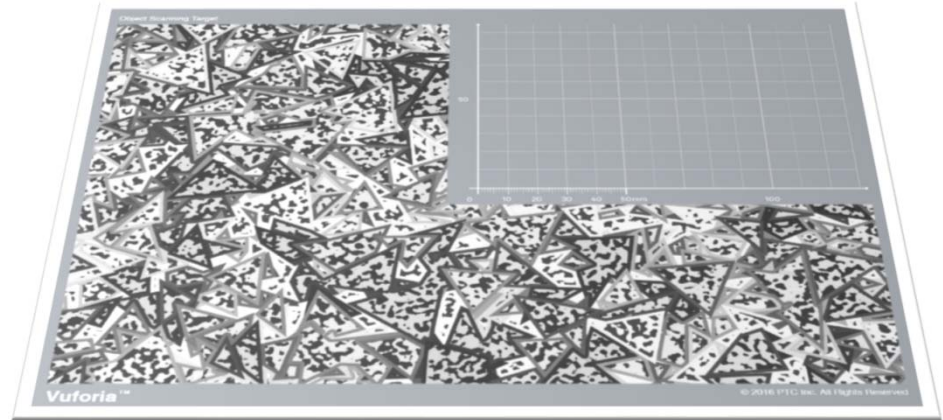
Object Scanner

Android based only



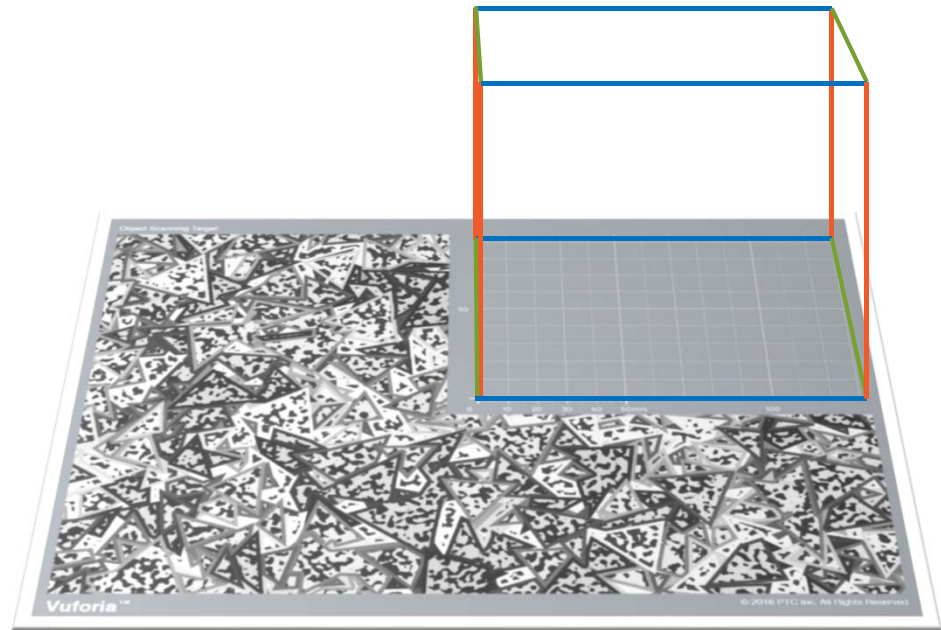
Object Scanner

Android based only



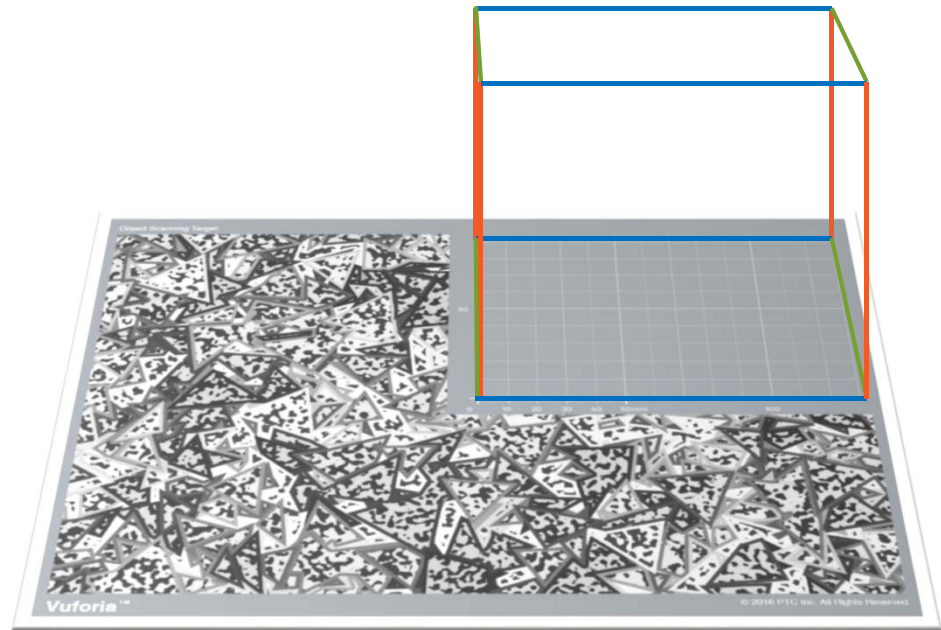
Object Scanner

Android based only



Object Scanner

Android based only



Bad Object Target



Problems

- Reflections
- Transparent
- Smooth



Good Object Target



Features

- Detail
- Contrast
- Edges



Find Object to Scan



4 or 5 inches in length or width



Non-glossy, Non-transparent



Lots of edges and details



iOS users

The Vuforia scanner
is Android based
only



Lighting



Key to good scan

- Soft smooth light
- Limit shadows
- Limit gloss and reflections



Next



Building the scene



Building the Object Target Scene



Summery



Scene Limitations

- Limits are based on RAM and GPU
- Size and complexity of assets
- Material shaders

Any .FBX file can be imported.



Next



Making a Splash Screen



Building a Splash Screen



Next



Making a Menu System



Building a Menu System



Review



Scan in 3D object using Android App

Converted 3D scan to a dataset

Built the AR scene in Unity

Scripted shadows to follow movement

Make a Splash Screen with a logo

Designed a flexible menu system



Next



Using VuMarks and User Defined Targets



END OF M4



Put code on this side

```
var proto = {  
  foo: 'Hello World'  
};
```

```
function Bar(){}  
Bar.prototype = proto;
```

```
var baz = new Bar();
```

```
console.log(baz.foo);
```

- ◀ Line up with these notes
- ◀ Set up prototype object
- ◀ Constructor function
and set prototype property
- ◀ Create instance
- ◀ Call inherited member



Demo



This bullet list is preset with animations

Use this layout to introduce your demo

How to do this one thing

- Why we do it
- How we do it

Then there's that thing

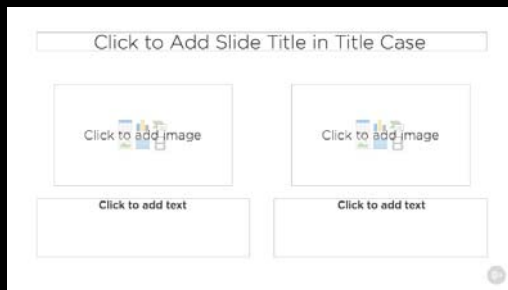
Don't forget to do this

We'll finish it off with this thing

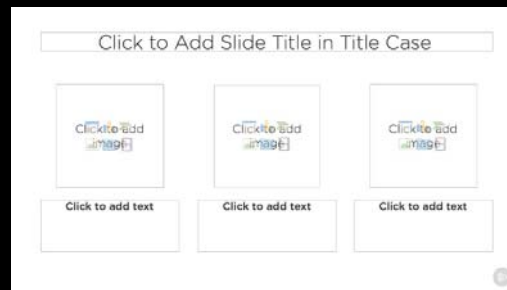




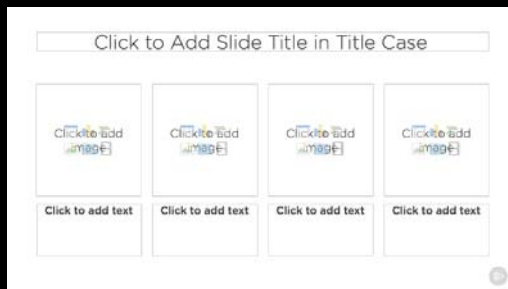
Using the **Image Chunking Slides**



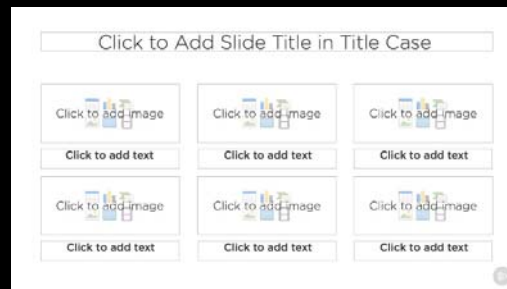
Two Image Chunking



Three Image Chunking



Four Image Chunking



Six Image Chunking

These layouts can be used as an alternative to a bulleted list.

They're built specifically for **photos** or **graphics** and look especially awesome when you incorporate icons from the **Pluralsight Icon Library**.

See them in action in the next 4 slides.



Example of Image Chunking Two Items



Jill Anderson

Some information about this graphic goes here and four lines or fewer is best



John Doe

Some information about this graphic goes here and four lines or fewer is best



Example of Image Chunking Three Items



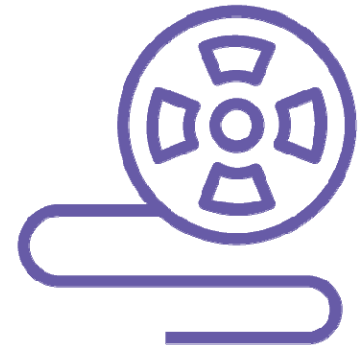
Clipboard

Some information
goes here; three lines
or fewer is best



Book

Some information
goes here; three lines
or fewer is best



Film

Some information
goes here; three lines
or fewer is best



Example of Image Chunking Four Items



Write



Create



Record



Learn



Example of Image Chunking Six Items



Address book



Binoculars



Camera



Eyeglasses



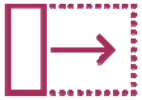
Megaphone



World



Icons with Bullets



An image chunking option for when you have longer text



Two whole lines of text per image also fits nicely however, you should avoid using three lines



Add relative icons on the left for each text item on the right



An alternative to bullets

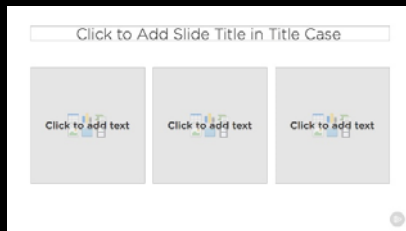




Using the **Text Chunking Slides**



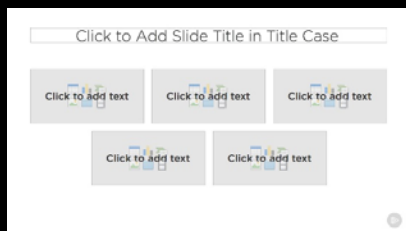
Two Text Chunking



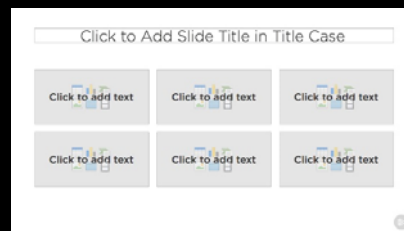
Three Text Chunking



Four Text Chunking



Five Text Chunking



Six Text Chunking

These layouts are intended to group chunks of text. Among other uses, they can be a great alternative to a bullet list.

Use **animations** to bring focus to the point you're speaking on one at a time, and/or use **color** to group points together.

If you have more than six points to discuss, you may want to use a standard bullet list.

We have provided some **example uses** of these layouts in the next few slides.



Text Chunking Two Items

Talking point one

Be concise and keep the text
to four lines or fewer

Talking point two

Be concise and keep the text
to four lines or fewer



Text Chunking Three Items

Talking point one

Be concise and keep
the text to four lines
or fewer

Talking point two

Be concise and keep
the text to four lines
or fewer

Talking point three

Be concise and keep
the text to four lines
or fewer



Text Chunking Four Items

**This is the first talking point
that should be kept to three
lines or fewer**

**This is the second talking
point that should be kept to
three lines or fewer**

**This is the third talking point
that should be kept to three
lines or fewer**

**This is the fourth talking point
that should be kept to three
lines or fewer**



Text Chunking Five Items

Talking point one

Keep the text to three
lines or fewer

Talking point two

Keep the text to
three lines or fewer

Talking point three

Keep the text to
three lines or fewer

Talking point four

Keep the text to
three lines or fewer

Talking point five

Keep the text to
three lines or fewer



Today's Mobile World

iPhone

Nexus 5

Lumia 950 XL

iPad

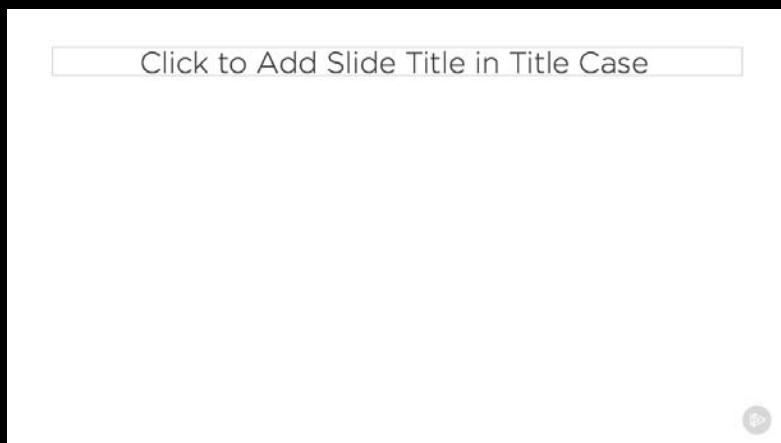
Nexus 7

Surface





Using the **Title Only Slide**



Title Only

This is the slide you'll want to use when you just need a big space for a diagram, chart, or graphic.

Make sure you check out the training videos available on the **Author Kit** for design best practices.

If you need help bringing your ideas for this space to life, contact your Editor about getting help from one of our **Content Graphic Designers**. In most cases, you just need to submit a rough outline and let our designers work their magic. However, in some special cases, your Editor can get you in touch with a designer directly.

We included some possible starting points for you in the next few slides.



Remember, we are here to help!



Customer Acquisition and Loyalty

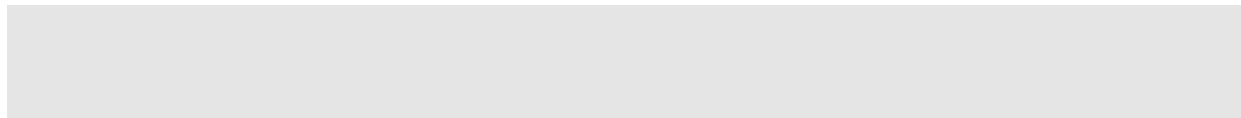
Observed higher sales



42%



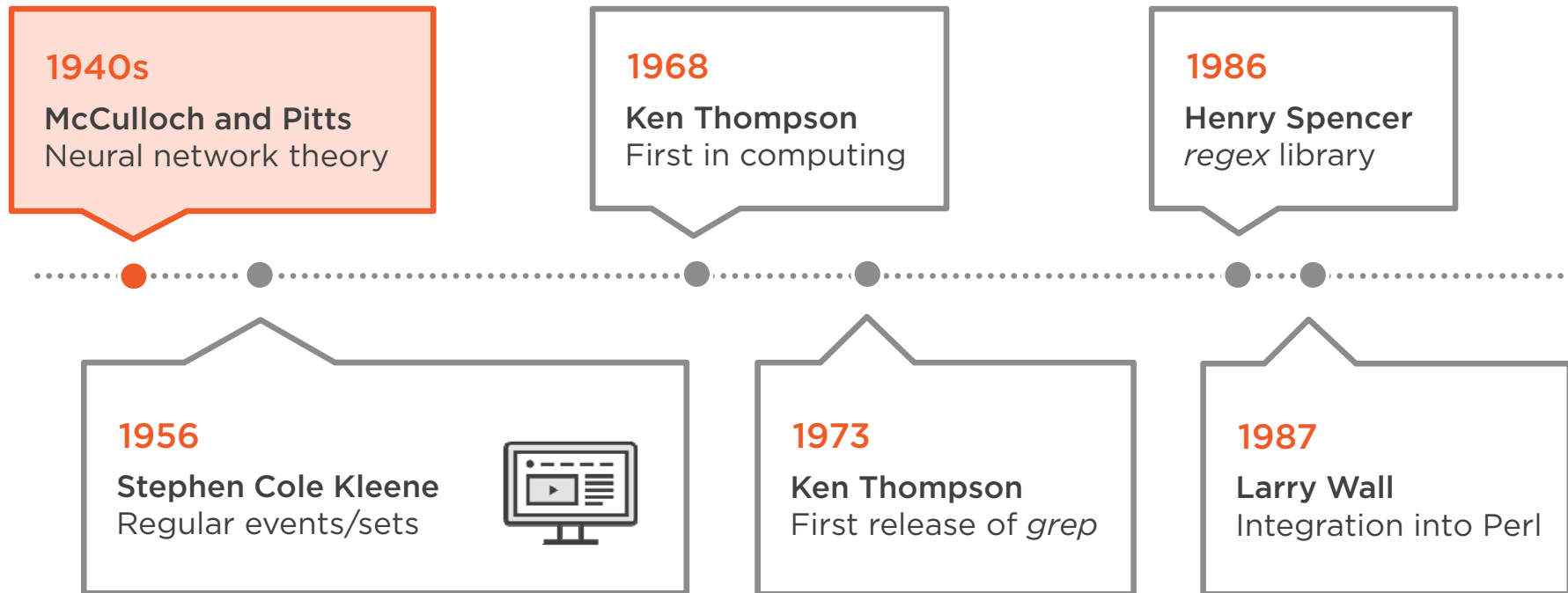
Observed more loyal customers



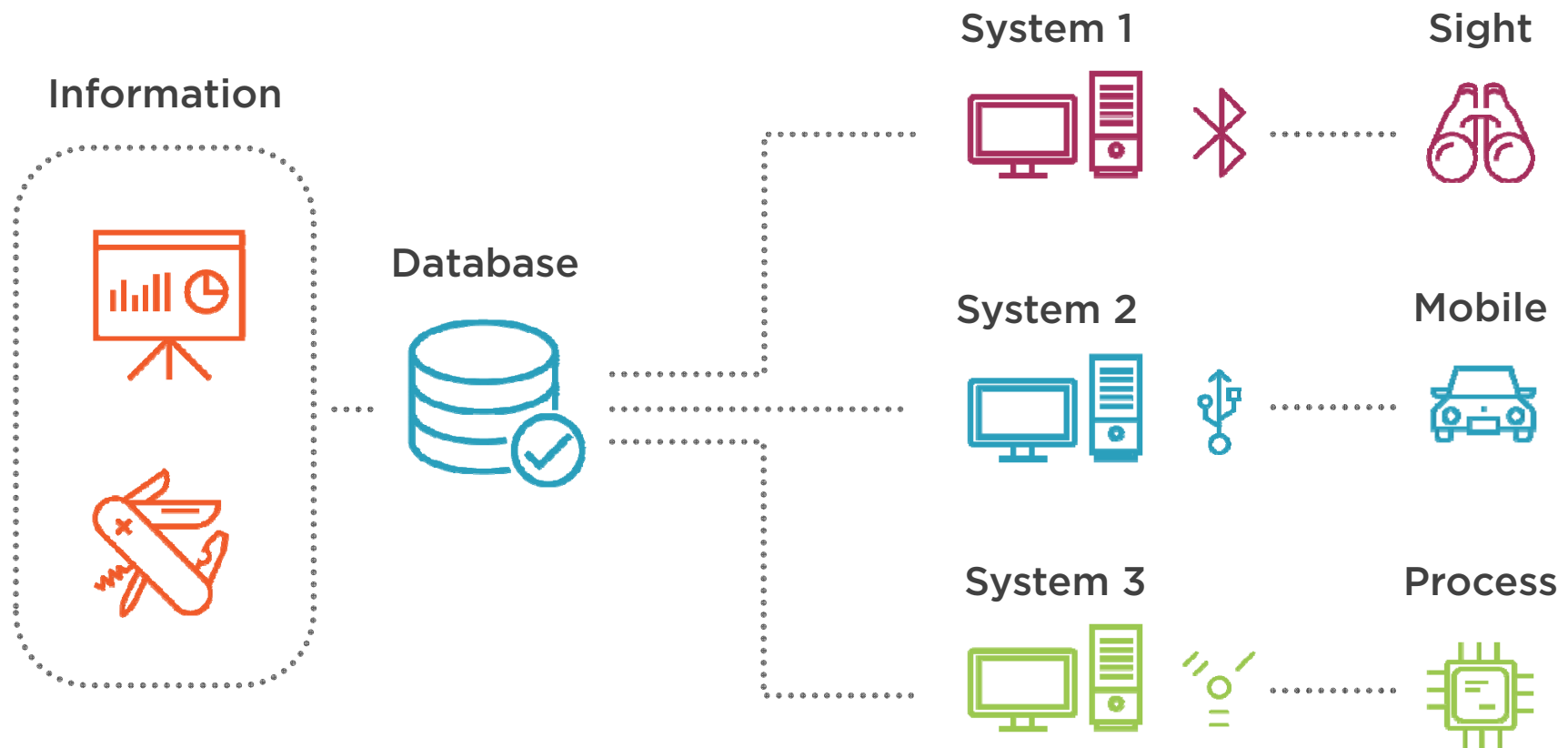
70%



Timeline of Events



Title Only Layout Example





Using the **Code Slides**



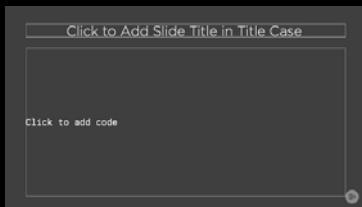
Code Top (Dark)



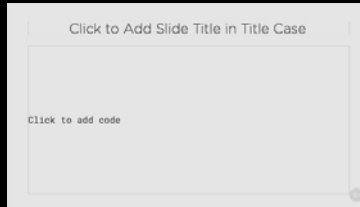
Code Top (Light)

Code Top Layouts

Use when you need a slide title and info about your code



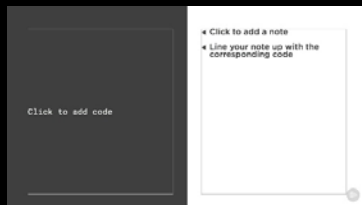
Code (Dark)



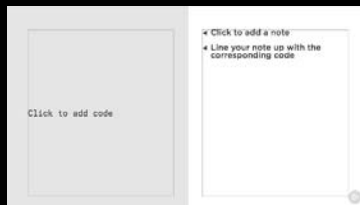
Code (Light)

Code Layouts

Best for larger code snippets



Code Notes (Dark)



Code Notes (Light)

Code Left Layouts

Great for annotating code structure



Make use of the color palette to highlight code.

We recommend using the **Roboto Mono** typeface for your code slides. However, if you use a different font for code in your demos, feel free to use that instead to reinforce a consistent look.



```
<div class="row carousel-indicators">  
    <div style="background-color:red;" class="col-  
md-4" data-target="#homeCarousel" data-slide-to="0"  
class="active">  
  
<div class="row carousel-indicators">
```

Slide Title in Titlecase

Information about the code above



```
<div class="row carousel-indicators">  
    <div style="background-color:red;" class="col-  
md-4" data-target="#homeCarousel" data-slide-to="0"  
class="active">  
  
<div class="row carousel-indicators">
```

Slide Title in Titlecase

Information about the code above



Code Snippet on Dark

```
<div class="row carousel-indicators">  
    <div style="background-color:red;" class="col-  
md-4" data-target="#homeCarousel" data-slide-to="0"  
class="active">  
    </div>  
    <div style="background-color:green;"  
class="col-md-4" data-target="#homeCarousel" data-slide-  
to="1">  
    </div>
```



Code Snippet on Light

```
<div class="row carousel-indicators">  
    <div style="background-color:red;" class="col-  
md-4" data-target="#homeCarousel" data-slide-to="0"  
class="active">  
    </div>  
    <div style="background-color:green;"  
class="col-md-4" data-target="#homeCarousel" data-slide-  
to="1">  
    </div>
```



Put code on this side

```
var proto = {  
  foo: 'Hello World'  
};
```

```
function Bar(){}  
Bar.prototype = proto;
```

```
var baz = new Bar();
```

```
console.log(baz.foo);
```

- ◀ Line up with these notes
- ◀ Set up prototype object
- ◀ Constructor function
and set prototype property
- ◀ Create instance
- ◀ Call inherited member



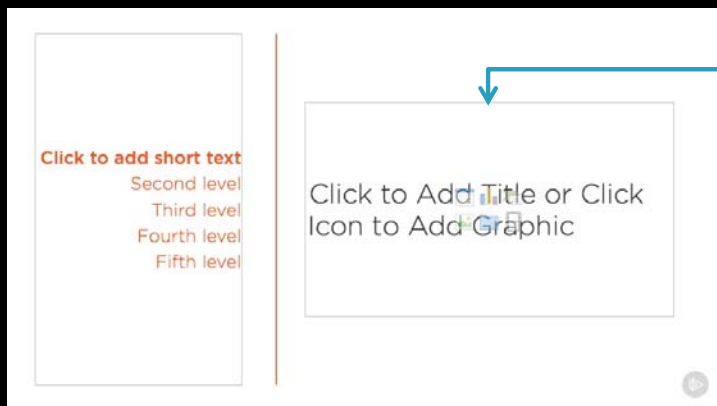


Using Bullet List Slides

We've provided some bullet list layouts to accommodate various quantities of information.

Content left | Title/Image right

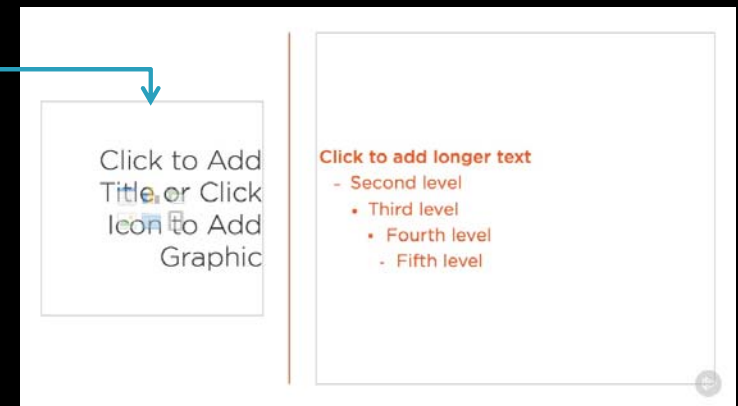
Intended for bullet text that is shorter and titles/images that are larger



Content | Image/Title

Title/Image left | Content right

Intended for bullet text that is longer and titles/images that are smaller



Image/Title | Content

Remember, you can use **text** or **images** in these placeholders.



Animation built in
Bullet alternative
Sentence fragments
List of things
Procedure list
Talking points

Title or Relevant Graphic





Animation built in

Bullet alternative

Room for a bit more text

Use this layout for

- Longer sentence fragments
- List of things
- Procedure list
- Talking points





Graphic on left should fill the entire space

- Graphic must be high quality and royalty free

Graphic and text animation is built in



Icons with Bullets



Keeping it to one line is best



However, if it is absolutely necessary you can utilize the second line if it does not cause a widow



It would look better if you pulled in the box to even it out though



This is a fourth bullet





Comparison Slide

Use this slide if you need to compare single items or groups of items.

Click to Add Slide Title in Title Case	
Compare item one	Compare item two
Click to add text	Click to add text



Comparison Example

Functional group

- Configure and administer security
 - Configure advanced networking
 - Configure advanced storage
- Administer and manage resources
 - Configure availability solution
- Deploy and consolidate vSphere

Objectives

- Manage vSphere storage virtualization
- Configure software-defined storage
- Configure vSphere storage multipathing and failover
- Perform advanced VMFS and NFS configurations and upgrades





Other Slides

The following self-explanatory slides are a good way of adding diversity into the flow of your course.

Use them purposefully.



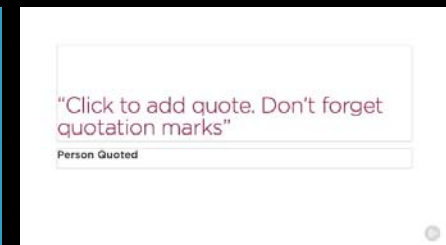
Section Header



Definition



Important Statement



Quotation



Word Definition

Here is where you put the definition. This is one of the few places where complete sentences are appropriate. Be sure to cite your source.



This is a short, important
statement to bring
attention to something.



“Using quotes in your slides can be powerful if used sparingly.”

Heather Ackmann

