

Components



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Overview



What is a component?

Defining a component

Rendering a component

Props

Component Lifecycle

State

Testing

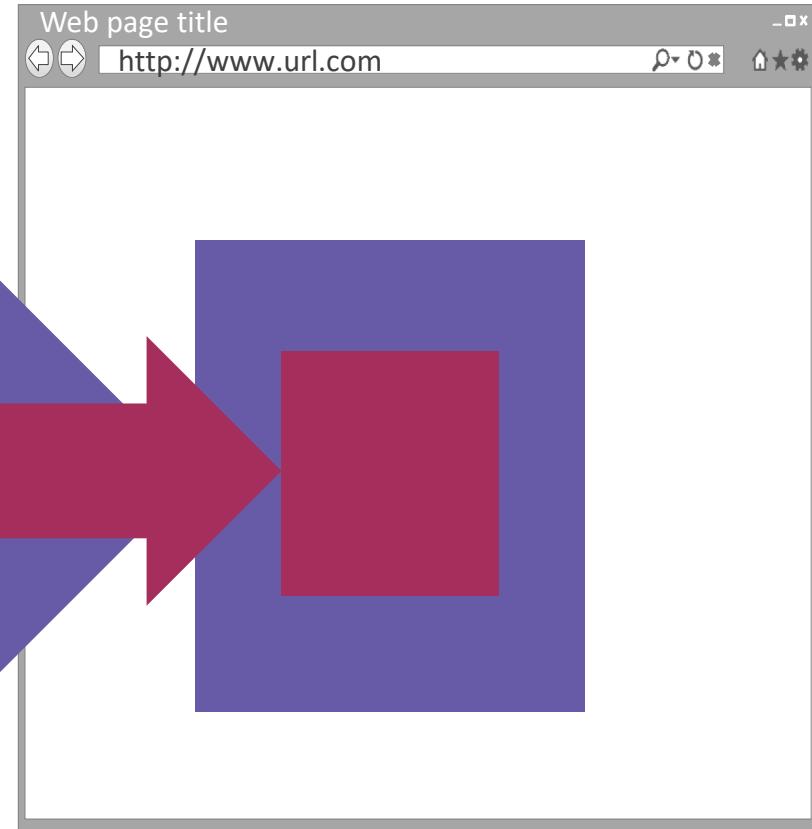


What Is a Component?

React Application



DOM



The Author Quiz

Author Quiz

Select the book written by the author shown



Macbeth

The Shining

Heart of Darkness

Hamlet



```
function Hello(props) {  
  return <h1>Hello at {props.now}</h1>;  
}
```

Defining a Component



Rendering a Component

```
import ReactDOM from 'react-dom';
import React from 'react';
```

```
function Hello(props) {
  return <h1>Hello at {props.now}</h1>;
}
```

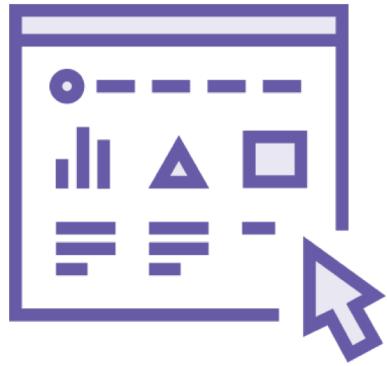
```
ReactDOM.render(<Hello now={new Date().toISOString()} />,
  document.getElementById('root')
);
```



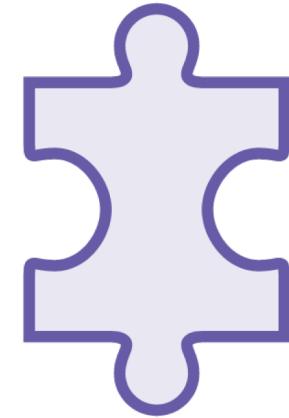
Bootstrapping the Author Quiz



Initialize
Generate a new
application skeleton



Style
Create the basic
layout and styles



Component
Define the top-level
AuthorQuiz
component



Props

```
ReactDOM.render(<div id="mydiv"></div>,  
document.getElementById('root')  
) ;
```



Props

```
function Sum(props) {  
  return (  
    <h1>{props.a} + {props.b} = {props.a + props.b}</h1>  
  );  
}
```

```
props = {  
  a: 4,  
  b: 2  
}
```

```
ReactDOM.render(<Sum a={4} b={2} />,  
  document.getElementById('root')  
>;
```



“All React components must act like pure functions with respect to their props.”

React documentation



Class Components

```
class Sum extends React.Component {  
  render() {  
    return <h1>  
      {props.a} + {props.b} = {props.a + props.b}  
    </h1>;  
  }  
}
```

```
ReactDOM.render(<Sum a={4} b={2} />,  
  document.getElementById('root')  
) ;
```

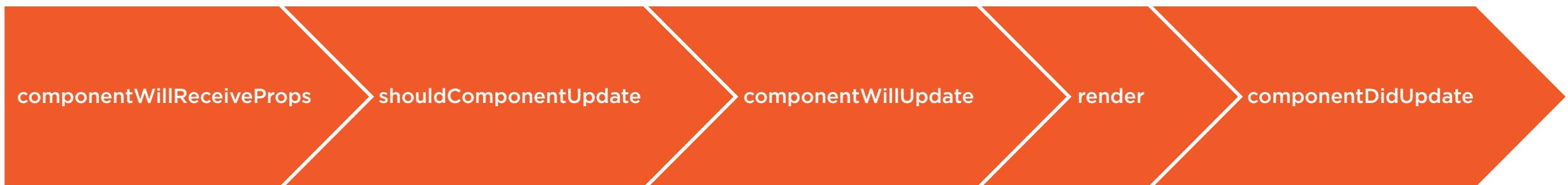


Component Lifecycle

Mounting



Updating



State

Alternative component data container
State is local, mutable data
More complex



State

```
class ClickCounter extends React.Component {  
  constructor(props) {  
    super(props);  
    this.state = {clicks: 0};  
  }  
  
  render() {  
    return <div onClick={() =>  
      { this.setState({clicks: this.state.clicks + 1}); }}>  
      This div has been clicked {this.state.clicks} times.  
    </div>;  
  }  
}
```



setState

Previous state + **State change** = **New state**

```
{  
  a: 1,  
  b: 2  
}
```

```
this.setState({  
  b: 3,  
  c: 4  
});
```

```
{  
  a: 1,  
  b: 3,  
  c: 4  
}
```



Prop Validation

```
function Sum(props) {  
  return <h1>{props.a} + {props.b} = {props.a + props.b}</h1>;  
}  
  
ReactDOM.render(<Sum a={4} b={2} />,  
  document.getElementById('root')  
);
```



Prop Validation

```
function Sum(props) {  
  return <h1>{props.a} + {props.b} = {props.a + props.b}</h1>;  
}  
  
ReactDOM.render(<Sum a={"key"} b={"board"} />,  
  document.getElementById('root')  
);
```



Prop Validation

```
function Sum(props) {  
  return <h1>{props.a} + {props.b} = {props.a + props.b}</h1>;  
}  
  
ReactDOM.render(<Sum a={"a"} b={2} />,  
  document.getElementById('root')  
);
```



Prop Validation

```
import PropTypes from 'prop-types';

function Sum(props) {
  return <h1>{props.a} + {props.b} = {props.a + props.b}</h1>;
}

Sum.propTypes = {
  a: PropTypes.number.isRequired,
  b: PropTypes.number.isRequired,
};

ReactDOM.render(<Sum a={"a"} b={2} />,
  document.getElementById('root')
);
```



TypeScript and Flow

```
interface SumProps {  
  a: number;  
  b: number;  
}
```

```
function Sum(props: SumProps) {  
  return <h1>{props.a} + {props.b} = {props.a + props.b}</h1>;  
}
```

```
ReactDOM.render(<Sum a={"a"} b={2} />,  
  document.getElementById('root')  
);
```

Argument of type '{ a: string; b: number; }' is not assignable to parameter of type 'SumProps'.
Types of property 'a' are incompatible.
Type 'string' is not assignable to type 'number'.



**Focus testing on
application logic**

**Function components
are easily testable**

Testing Components



Summary



React applications are built from components

Function or class syntax

Props and state

PropTypes and TypeScript



Author Course Template



These **black** slides with the light bulb icon are guidelines only.
Please **do not use them** in your course.





Design Guidelines





General Guidelines

Tips

It is recommended not to use transitions between slides.

Keep your presentation moving to hold the viewer's interest. Have a visual change several times each minute.

Do not put any visuals in the lower right corner - it will be obscured by the watermark.

Use animations and visuals that are simple, straightforward, and have a clear purpose.

Aim for a flat style (avoid gradients and drop shadows).

Use only high resolution visuals that are not blurry or pixelated.

Follow copyright rules for all visuals.

Less Is More

We understand that course content can include highly technical information which requires a lot of important details.

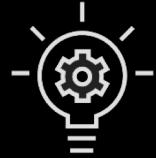
Minimizing your slide design doesn't necessarily mean you'll be providing less content in your course. The same amount of information can be displayed but should be split up between multiple slides.

Also, be sure to use sentence fragments instead of complete sentences on your slides.



This slide is **NOT** an example of a good course slide!





Typography

The official typeface for Pluralsight course content is **Gotham**. For code slides, **Roboto Mono** is included.

You received copies packaged with this presentation.
Please take a moment to install them.

If both words below look the same, then you've successfully installed Gotham. Hooray!

Gotham **Gotham**

Type size and weight standards

Slide Title

36 pt - Gotham Light

All slide titles must be in Titlecase. For help, visit:
<https://authors.pluralsight.com/titlecase-converter/>

Headings and Bullet Points

24 pt minimum - Gotham Medium

Body Copy

20 pt minimum - Gotham Medium





Color

Color is a powerful tool to help highlight talking points or objects.

Primary Colors

| | | |
|-------------------|-----------------------|---------------------------------------|
| Orange #F15B2A | R 240 G 90 B 40 | Uses: -Highlight text -Graphics |
|-------------------|-----------------------|---------------------------------------|

| | | |
|-----------------|------------------------|---------------------------------------|
| Blue #2A9FBC | R 42 G 159 B 188 | Uses: -Highlight text -Graphics |
|-----------------|------------------------|---------------------------------------|

| | | |
|----------------------|----------------------|---|
| Dark Gray #404040 | R 64 G 64 B 64 | Uses: -Text on light background -Graphics |
|----------------------|----------------------|---|

| | | |
|------------------|-------------------------|--|
| White #FFFFFF | R 255 G 255 B 255 | Uses: -Text on dark background -Graphics |
|------------------|-------------------------|--|

Secondary Colors

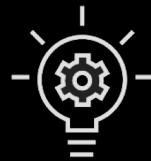
| | | |
|-----------------|-----------------------|--------------------|
| Plum #A62E5C | R 166 G 46 B 92 | Uses: -Graphics |
|-----------------|-----------------------|--------------------|

| | | |
|------------------|------------------------|--------------------|
| Green #9BC850 | R 155 G 200 B 80 | Uses: -Graphics |
|------------------|------------------------|--------------------|

| | | |
|-------------------|------------------------|--------------------|
| Purple #675BA7 | R 103 G 91 B 167 | Uses: -Graphics |
|-------------------|------------------------|--------------------|

| | | |
|------------------|-------------------|--------------------|
| Black #000000 | R 0 G 0 B 0 | Uses: -Graphics |
|------------------|-------------------|--------------------|





Pluralsight Icon Library

A Constant Look and Feel

Please use the Pluralsight icon library as your default source for visuals in your courses. Any supplemental graphics you choose must follow all standard legal and copyright rules.

Two Ways to Access Icons

1. A fully searchable library on the Author Kit: authors.pluralsight.com/icon-library-search. New icons are added every few weeks. Just search, choose your color, then copy/paste the graphic into your slide.
2. A quarterly-updated .zip package available from the downloads page of the website. The .zip includes the most recent version of the slide deck template, the fonts, and all the available icons. This is great for working offline.

The Icon Library Is Always Growing

Authors are our best source for new icon ideas. Submit yours from the link at the top of the icon search page of the Author Kit.

Abstract Ideas



Tech Objects



Non Tech Objects



People



Roles



Files





Changing the **Background Color**

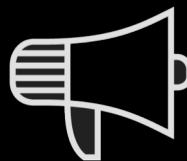
Changing the background color of a slide or shape can be a great way to add variety and emphasis to your courses.

However, it can also create clashes in colors between graphics and the background. Here are a few simple guidelines to help.

To change the slide background color, simply right-click. From the menu, select “Format Background.”

1. Use white/black graphics and type.

White graphics and type always look good on a dark color. If the background color is light enough, black graphics and text work as well. If you need to use a lot of color, then a colored slide might not be the best option.



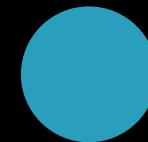
Big Announcement

2. Use colors in the color palette for the background color.

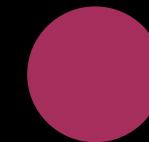
They're easily accessed in the “Format Background” menu.



#F15B2A



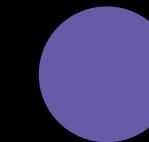
#2A9FBC



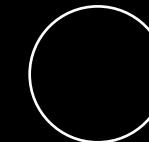
#A62E5C



#9BC850



#675BA7



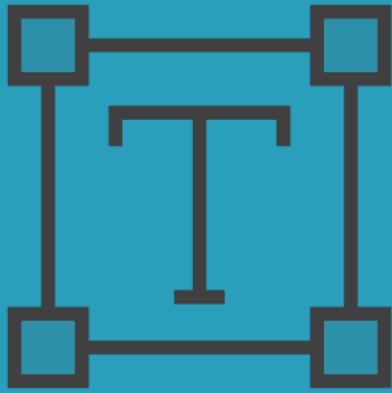
#000000



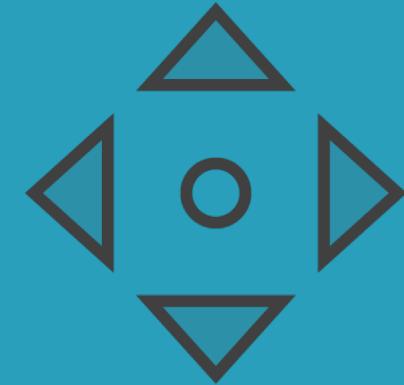
Example of Changing the Background Color



Make sure you choose a white or black icon, not another color



Change your font color to either black or white



Adjust the size and position of your graphics and text to fit your space





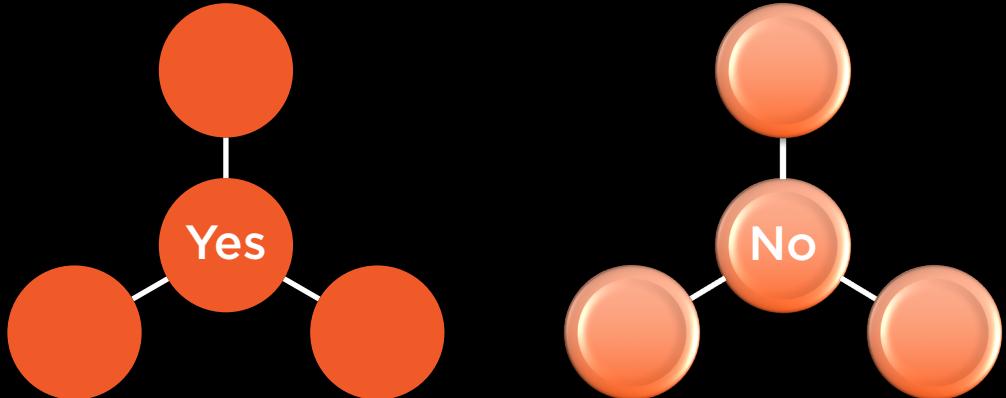
Using SmartArt



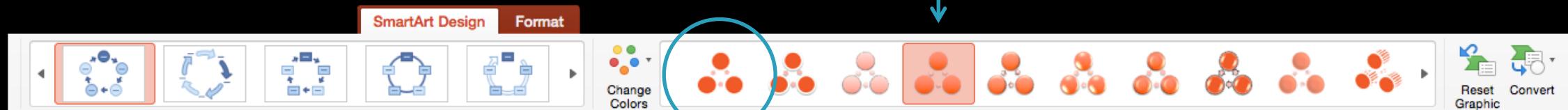
Available under the “Insert” menu, SmartArt provides a large variety of diagram options.

Please use a simple/flat design for your SmartArt. Reference the “yes” diagram to the right to see a good example of this. Compare the examples and be mindful of the following things:

- Do not use gradients
- Do not use 3-D effects
- Do not use drop shadows or inner shadows



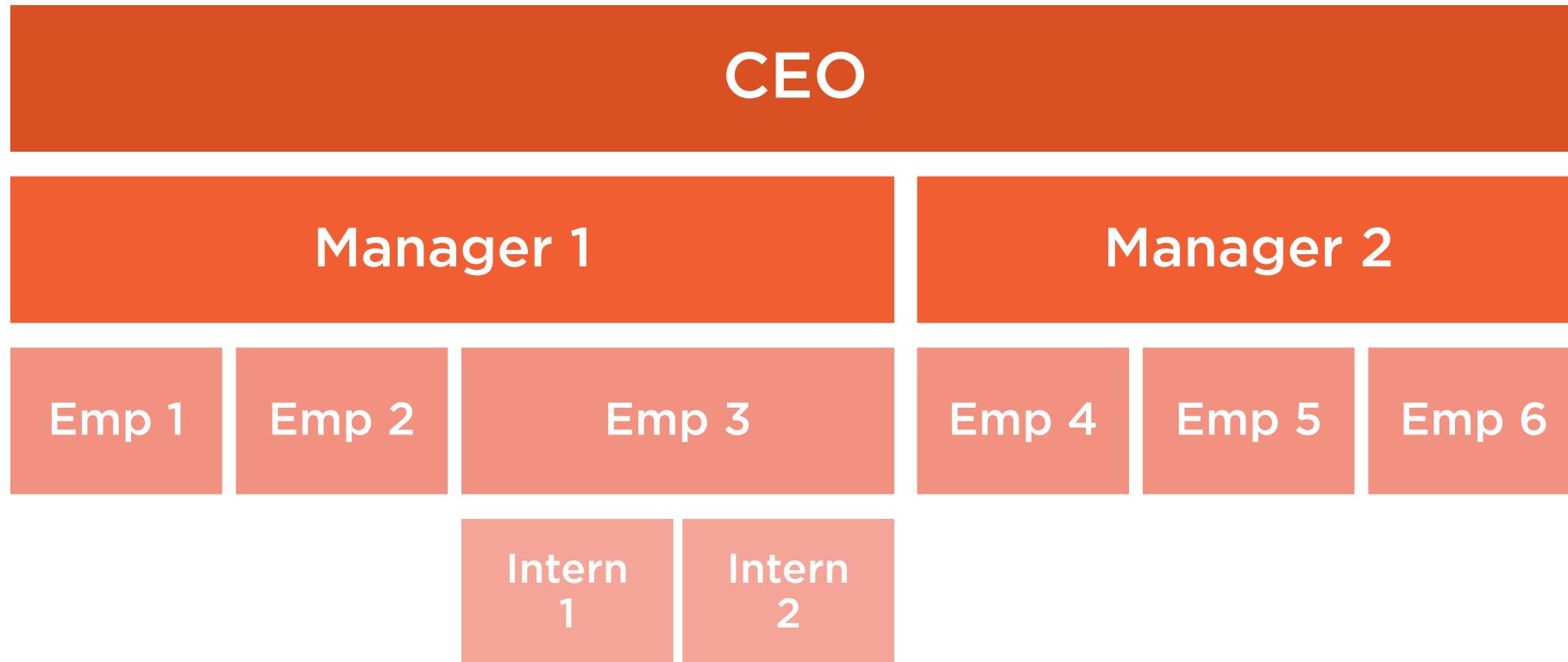
On some versions of PowerPoint,
this gradient-filled style is selected by default.

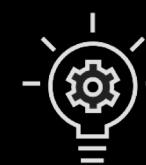


Choose this far left option.
It provides simple solid shapes.



SmartArt Example





Using the Layouts





How to Add a New Slide

Option 1

Look through all the example slides in this document and rework them to fit your own purposes.

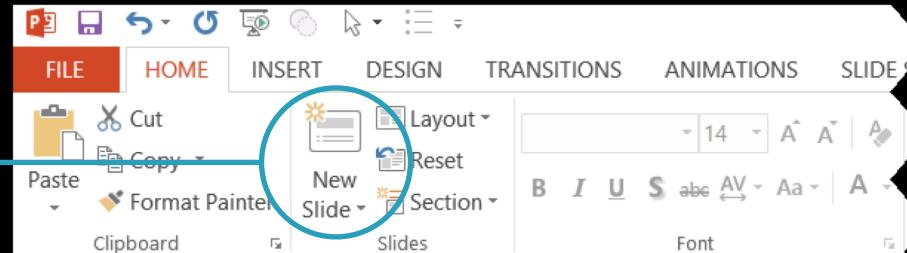
Option 2

1. From the “Home” tab, click on the arrow next to “New Slide.”
2. A dropdown menu of all the layouts will appear.

Alternatively:

Ctrl+M = New Slide

Ctrl+D = Duplicate Slide





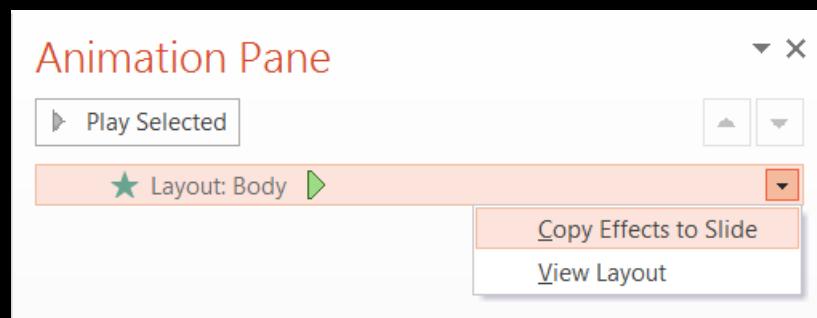
Some Slides Have **Animations Built In**

Switch to **Slide Show View** to preview the animations.

If you want to edit or remove the “built-in” animation:

PowerPoint for PC

From the Animation Pane, **right-click** on “Layout Body” and choose “Copy Effects to Slide”. You should now be able to make changes.



PowerPoint for Mac

While the Mac version of PowerPoint does not have the same option in the Animation Pane, you can do the same thing manually:

1. Create a blank slide
2. Go to the Master Slide you want to change
3. Select all using (CMD+A)
4. Go back to your new blank slide and paste (CMD+V)
5. Now the animation is editable from the animation pane





How to Choose Your **Author Headshot**

Requested Image Specifications

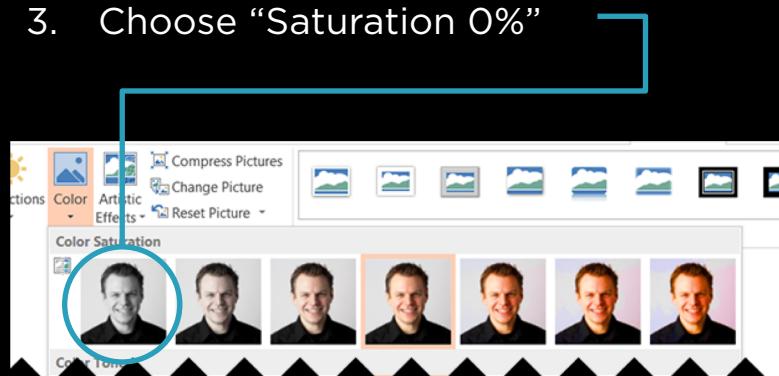
Image Size: 600 x 600 pixels or larger

Color Mode: RGB or Greyscale

File Type: JPEG or PNG

Desaturate your headshot

1. With the image selected click the “Picture Format” tab.
2. Click the “Color” tab
3. Choose “Saturation 0%”



Do's

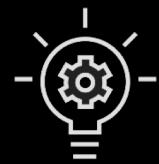
- White background or wall
- Professional clothing
- Centered on face
- Shot at eye level



Don'ts

- Busy or dark backgrounds
- Poor lighting
- Artistic, iconic, or illustrated
- Poor resolution or focus
- No other beings in photo





Using the **Title Slide**

Module number **ONE**



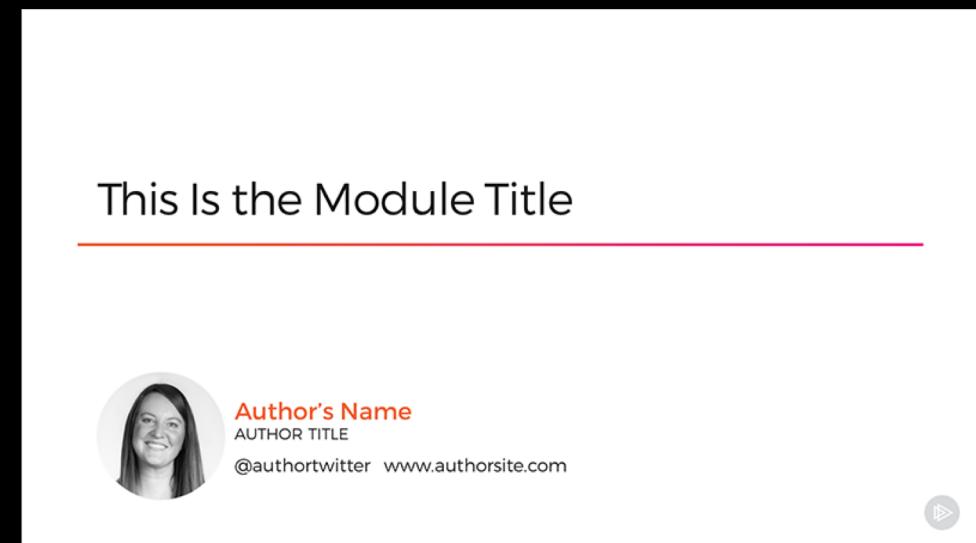
This Is the Title of Your Course

THIS IS THE FIRST MODULE TITLE

 Author's Name
AUTHOR TITLE
@authortwitter www.authorsite.com



Module number **TWO** and up



This Is the Module Title

 Author's Name
AUTHOR TITLE
@authortwitter www.authorsite.com





This Is the Module Title in Titlecase



Author Name

AUTHOR TITLE

@authortwitter www.authorsite.com





Using **Summary** and **Demo** Layouts

A screenshot of a slide titled "Slide Title" featuring a clipboard icon. The main content area contains the text "Click to add text" followed by a nested list:

- Second level
 - Third level
 - Fourth level
 - Fifth level

Overview/Summary Layout

Only use the Overview/Summary Layout at the beginning and ending of your module.

Keep the title of this slide to **two lines or less**.

A screenshot of a slide titled "Demo" featuring a laptop icon. The main content area contains the text "Click to add text" followed by a nested list:

- Second level
 - Third level
 - Fourth level
 - Fifth level

Demo (Optional) Layout

Only use the **Demo Layout** when introducing a demonstration.



Summary



This bullet list is preset with animations

Use this layout to introduce and/or summarize the module

Don't just read a list of topics

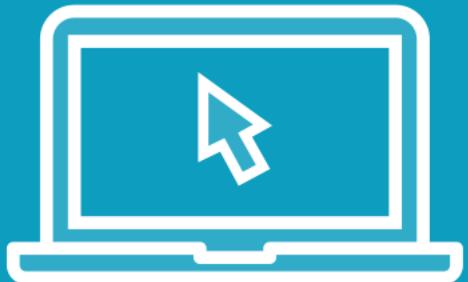
Build excitement

Tell the viewer why this is important

- Where would they use this info on the job?



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**

A presentation slide with a title bar "Click to Add Slide Title in Title Case". Below it are two columns of content. Each column contains a placeholder box labeled "Click to add image" with a gear icon, followed by a text box labeled "Click to add text". A small circular navigation arrow is at the bottom right.

Two Image Chunking

A presentation slide with a title bar "Click to Add Slide Title in Title Case". Below it are three columns of content. Each column contains a placeholder box labeled "Click to add image" with a gear icon, followed by a text box labeled "Click to add text". A small circular navigation arrow is at the bottom right.

Three Image Chunking

A presentation slide with a title bar "Click to Add Slide Title in Title Case". Below it are four columns of content. Each column contains a placeholder box labeled "Click to add image" with a gear icon, followed by a text box labeled "Click to add text". A small circular navigation arrow is at the bottom right.

Four Image Chunking

A presentation slide with a title bar "Click to Add Slide Title in Title Case". Below it are six columns of content. Each column contains a placeholder box labeled "Click to add image" with a gear icon, followed by a text box labeled "Click to add text". A small circular navigation arrow is at the bottom right.

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

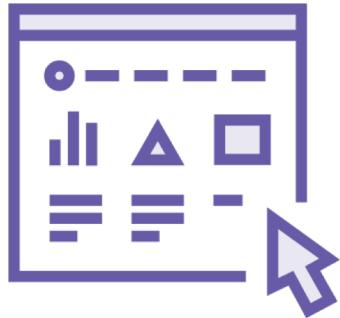


John Doe

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



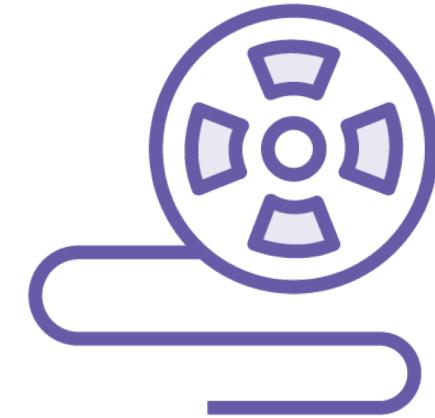
Example of Image Chunking Three Items



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



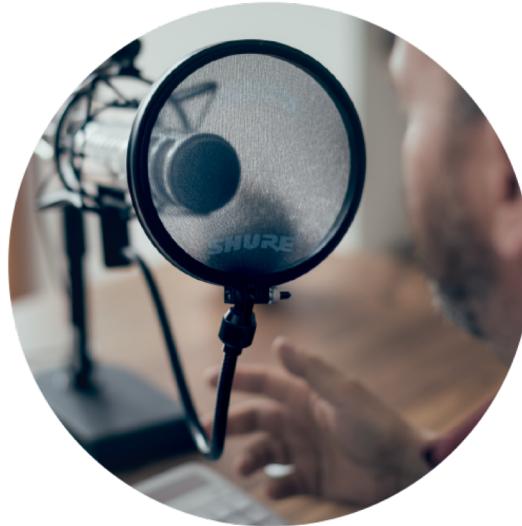
Example of Image Chunking Four Items



Write



Create



Record



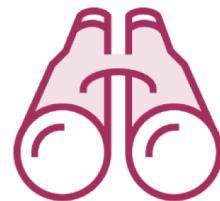
Learn



Example of Image Chunking Six Items



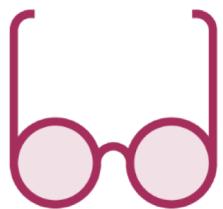
Address book



Binoculars



Camera



Eyeglasses



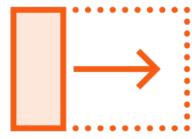
Megaphone



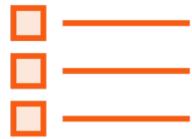
World



Icons with Bullets



An image chunking option for when you have longer text



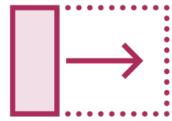
Be concise and keep the text to 3 lines or shorter



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



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

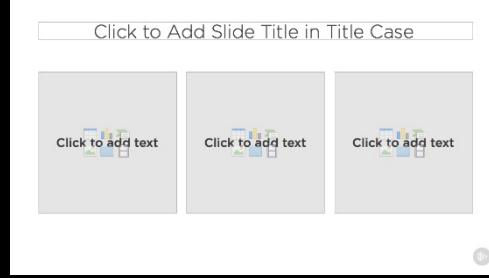




Using the **Text Chunking Slides**



Two Text Chunking



Three Text Chunking

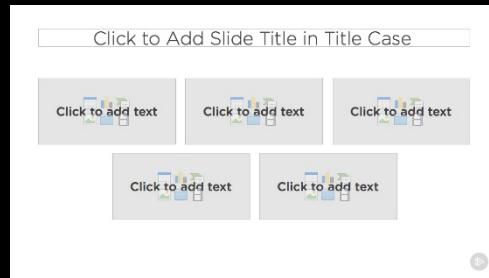
These layouts are intended to group chunks of text. Among other uses, they can be a great alternative to a bullet list.

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

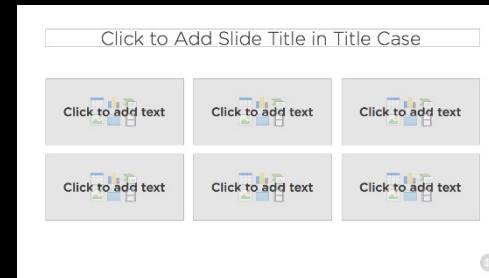
If you have more than six points to discuss, you may want to use a standard bullet list.



Four Text Chunking



Five Text Chunking



Six Text Chunking

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

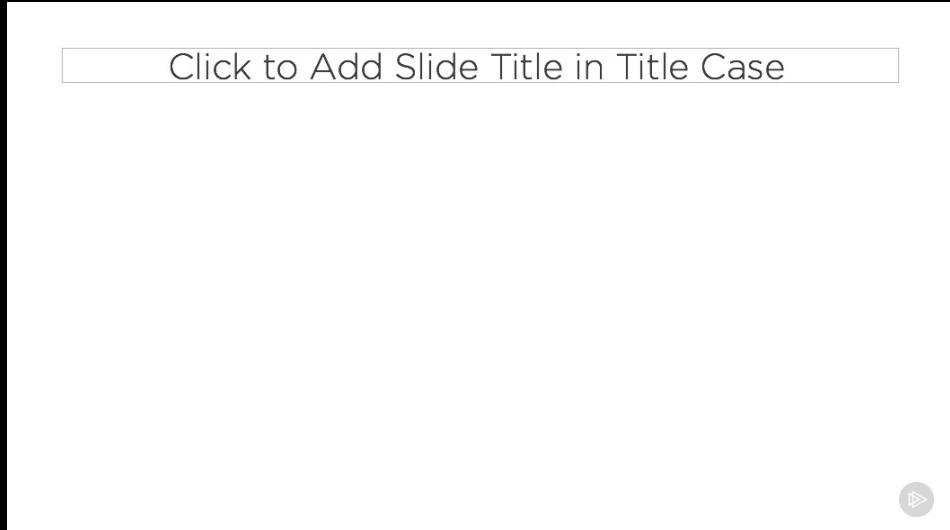
Nexus 7

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

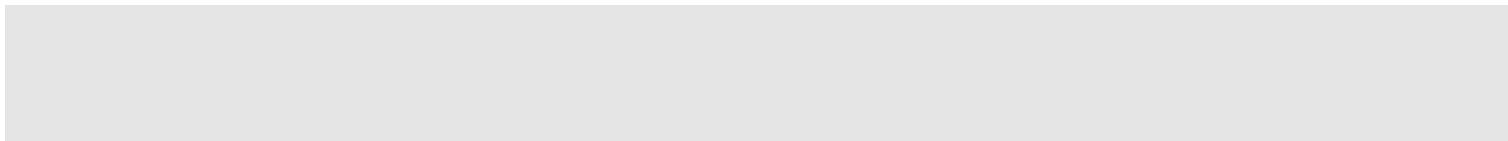
Observed higher sales



42%



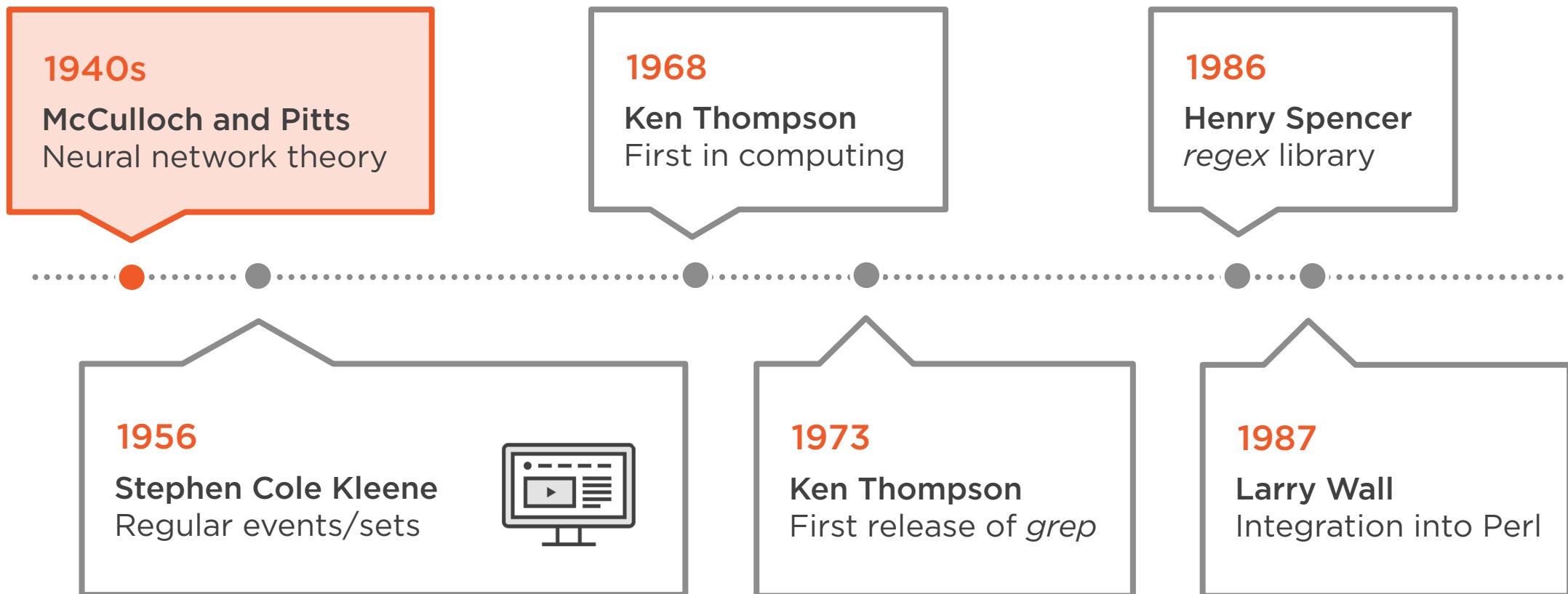
Observed more loyal customers



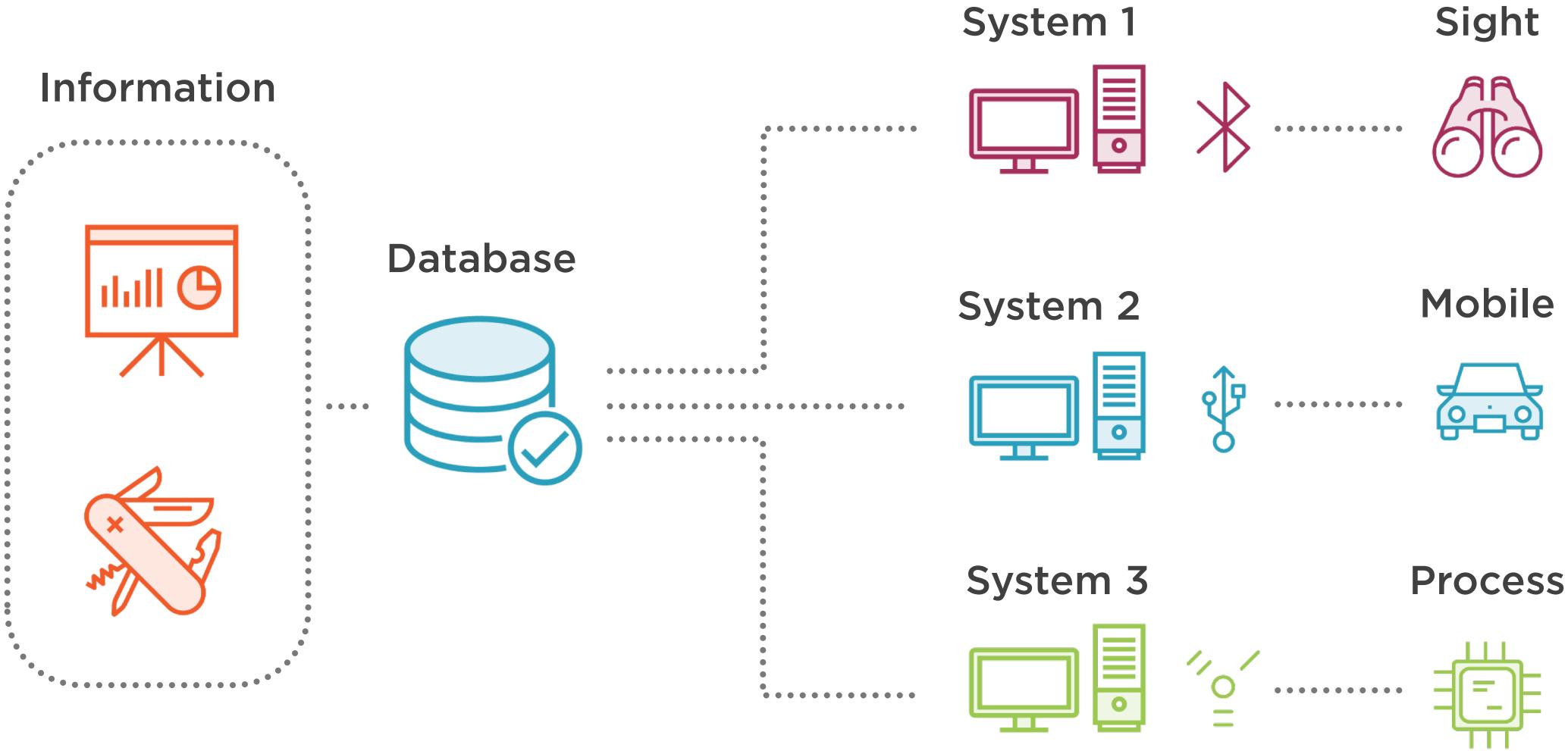
70%



Timeline of Events



Title Only Layout Example





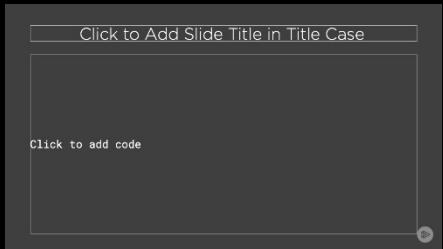
Using the **Code Slides**



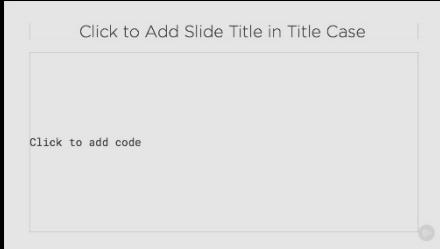
Code Top (Dark)



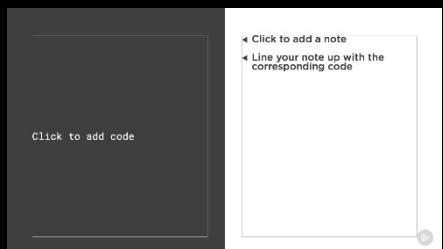
Code Top (Light)



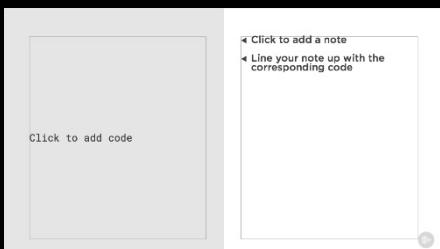
Code (Dark)



Code (Light)



Code Notes (Dark)



Code Notes (Light)

Code Top Layouts

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



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.

Code Layouts

Best for larger code snippets

Code Left Layouts

Great for annotating code structure



```
<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



Put code on this side

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

◀ Line up with these notes

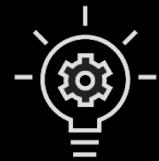
◀ Set up prototype object

◀ Constructor function
and set prototype property

◀ Create instance

◀ Call inherited member



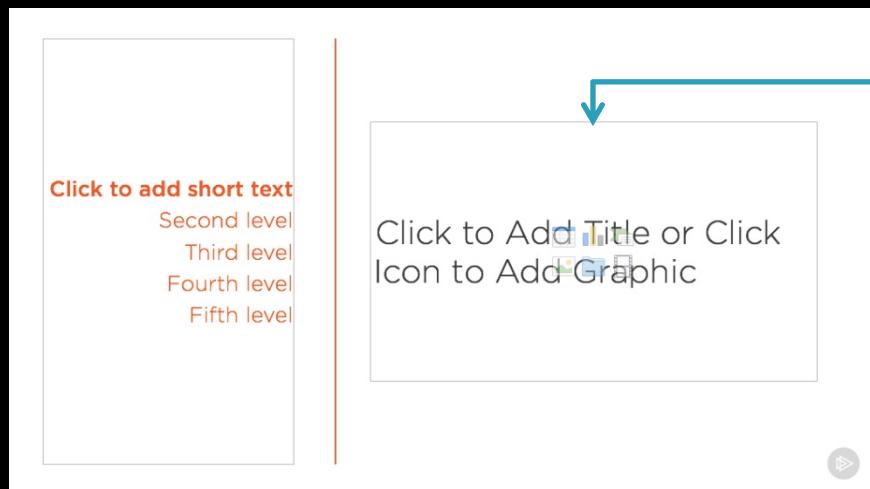


Using Bullet List Slides

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

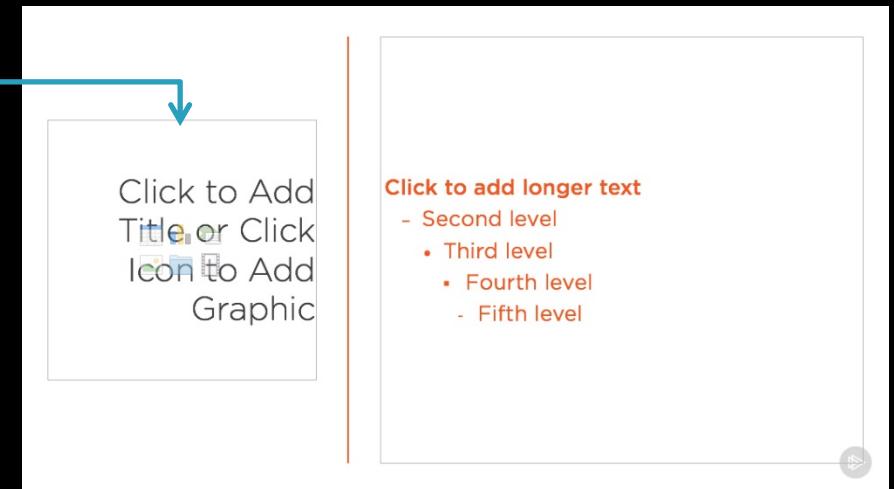


This diagram shows a slide layout with two main sections. On the left, there is a large white box containing placeholder text: "Click to add short text", "Second level", "Third level", "Fourth level", and "Fifth level". To its right is another large white box with the placeholder "Click to Add Title or Click Icon to Add Graphic". A blue arrow points from the text in the first box down to the second box, indicating they are part of the same slide. A small circular navigation icon is at the bottom right.

Content | Image/Title

Title/Image left | Content right

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



This diagram shows a slide layout with two main sections. On the left, there is a large white box containing placeholder text: "Click to Add Title or Click Icon to Add Graphic", followed by a blue arrow pointing down to another box with the placeholder "Click to add longer text". This second box contains a bulleted list: "- Second level", "• Third level", "• Fourth level", and "- Fifth level". A small circular navigation icon is at the bottom right.

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

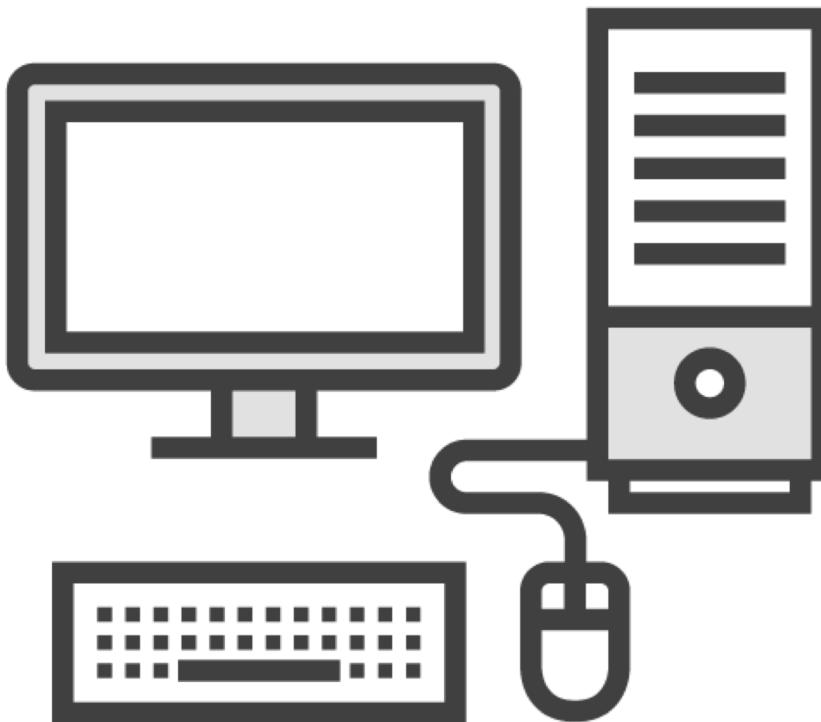
Bullet alternative

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





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



Title Space with Image



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

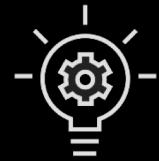
| Compare item one | Compare item two |
|-------------------|-------------------|
| Click to add text | Click to add text |



Comparison Example

| Functional group | Objectives |
|-----------------------------------|---|
| Configure and administer security | Manage vSphere storage virtualization |
| Configure advanced networking | Configure software-defined storage |
| Configure advanced storage | Configure vSphere storage multipathing and failover |
| Administer and manage resources | Perform advanced VMFS and NFS configurations and upgrades |
| Configure availability solution | |
| Deploy and consolidate vSphere | |





Other Slides

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

Use them purposefully.

A white slide template with a large empty rectangular area for content. A thin red horizontal line with the text "Click to Add Section Header in Title Case" is positioned above the main area.

Section Header

A white slide template featuring a green header bar with the text "Word to define". Below it is a smaller white box with the placeholder "Click to add definition".

Definition

A teal slide template with a white rectangular content area containing the text: "This is a short, important statement to bring attention to something."

Important Statement

A white slide template with a pink header bar containing the placeholder "Click to add quote. Don't forget quotation marks". Below it is a smaller white box with the placeholder "Person Quoted".

Quotation



Section Heading



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

