Creating a Testimonials Block.

This group of talks will teach you:

- Setting up the development environment
- Setting up a block
- Creating a static Testimonials block
- Making the Testimonials block have editable content
- Extending the functionality of the block
- Creating a Testimonials Custom Post Type with Gutenberg templates
- Creating a Dynamic Block
- Other useful features

All the code I'm going to use is here: so you can follow along if you wish. https://github.com/verytwisty/vt_gutenberg_testimonials

And all the presention files are located here https://github.com/verytwisty/GutenbergTalk

Getting started

Development Environment

Node and NPM

NPM is a package manager that lets you install the packages and dependancies you need to have a working development environment.

Webpack

Webpack is a bundler / task runner that was originally designed for packaging up Javascript files, but has been extended with modules run sass and other files. It is similar to gulp and grunt in that you can use it to take your raw files and it will run tasks including error linting and minification and export production ready code.

Getting set up

NPM

https://docs.npmjs.com/downloading-and-installing-node-js-and-npm

Webpack

https://webpack.js.org/guides/installation/

Getting setup with npm and webpack

package.json

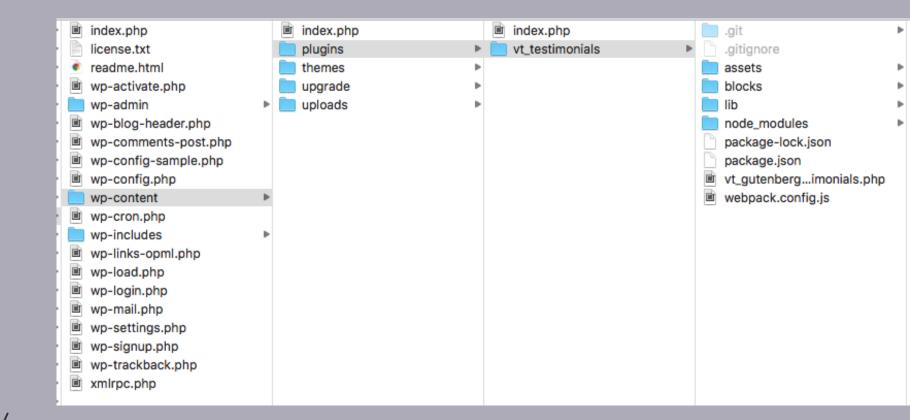
```
https://github.com/verytwisty/
vt_gutenberg_testimonials/blob/master/
package.json
```

webpack.config.js

```
https://github.com/verytwisty/
vt_gutenberg_testimonials/blob/master/
webpack.config.js
```

In the terminal

```
cd /wp-content/plugins/your-gutenberg-plugin/
npm i -D
```



Sublime text users

Sublime text has problems with syntax highlighting JSX, Visual Studio and Atom have built in syntax highlighting.

To get round this you can install a sublime text package called Babel which will display it for you correctly

https://packagecontrol.io/packages/Babel

Creating a plugin.

Backend JS and CSS files

```
add_action( 'enqueue_block_editor_assets', 'enqueue_block_editor_assets' );
function enqueue_block_editor_assets() {
    wp_enqueue_script( 'testimonial-block-js', _get_plugin_url() . '/assets/js/editor.blocks.js', array( 'wp-editor', 'wp-blocks', 'wp-il8n', 'wp-element'), '1.0');
    wp_enqueue_style( 'testimonial-block-css', _get_plugin_url() . '/assets/css/blocks.editor.css', [ ], '1.0' );
}
add_action( 'enqueue_block_assets', 'enqueue_assets' );
function enqueue_assets() {
    wp_enqueue_style( 'testimonial-block', _get_plugin_url() . '/assets/css/blocks.style.css', [ ], '1.0' );
}
add_action( 'enqueue_block_assets', 'enqueue_frontend_assets' );
function enqueue_frontend_assets() {
    if ( is_admin() ) {
        return;
    }
    wp_enqueue_script( 'testimonial-js-frontend', _get_plugin_url() . '/assets/js/frontend.blocks.js', [], '1.0' );
}
```

Front & Back End CSS

```
add_action( 'enqueue_block_editor_assets', 'enqueue_block_editor_assets');
function enqueue_block_editor_assets() {
    wp_enqueue_script( 'testimonial-block-js', _get_plugin_url() . '/assets/js/editor.blocks.js', array( 'wp-editor', 'wp-blocks', 'wp-il8n', 'wp-element'), 'l.0');
    wp_enqueue_style( 'testimonial-block-css', _get_plugin_url() . '/assets/css/blocks.editor.css', [], 'l.0' );
}
add_action( 'enqueue_block_assets', 'enqueue_assets' );
function enqueue_assets() {
    wp_enqueue_style( 'testimonial-block', _get_plugin_url() . '/assets/css/blocks.style.css', [], 'l.0' );
}
add_action( 'enqueue_block_assets', 'enqueue_frontend_assets' );
function enqueue_frontend_assets() {
    if ( is_admin() ) {
        return;
    }
    wp_enqueue_script( 'testimonial-js-frontend', _get_plugin_url() . '/assets/js/frontend.blocks.js', [], 'l.0' );
}
```

Front end JS

```
add_action( 'enqueue_block_editor_assets', 'enqueue_block_editor_assets');
function enqueue_block_editor_assets() {
    wp_enqueue_script( 'testimonial-block-js', _get_plugin_url() . '/assets/js/editor.blocks.js', array( 'wp-editor', 'wp-blocks', 'wp-il8n', 'wp-element'), '1.0');
    wp_enqueue_style( 'testimonial-block-css', _get_plugin_url() . '/assets/css/blocks.editor.css', [], '1.0' );
}
add_action( 'enqueue_block_assets', 'enqueue_assets' );
function enqueue_assets() {
    wp_enqueue_style( 'testimonial-block', _get_plugin_url() . '/assets/css/blocks.style.css', [], '1.0' );
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    if ( is_admin() ) {
        return;
    }
    wp_enqueue_script( 'testimonial-js-frontend', _get_plugin_url() . '/assets/js/frontend.blocks.js', [], '1.0' );
}
```

Basic Block Architecture

```
import './editor.scss';
import './style.scss';
const {      } = wp.i18n;
const { registerBlockType } = wp.blocks;
export default registerBlockType(
    'namespace/blockname',
       title: ('Block Name', 'vt'),
       description: ('Description of the block', 'vt'),
       category: 'common',
       icon: dashicon || svgIcon,
       keywords: [
           __( 'Key Word 1', '_vt' ),
           __( 'Key Word 2', '_vt' ),
           __( 'Key Word 3', '_vt'),
       edit: props => {
           const { className } = props;
           return (
               <div className={ className }>Block Back End </div>
           );
       save: props => {
            const { className } = props;
           return (
               <div className={ className }>Block Front End</div>
           );
       },
   },
);
```

```
import './editor.scss';
import './style.scss';
const { __ } = wp.i18n;
const { registerBlockType } = wp.blocks;
export default registerBlockType(
    'namespace/blockname',
       title: ('Block Name', 'vt'),
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           __( 'Key Word 1', '_vt' ),
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           ( 'Key Word 3', ' vt' ),
       edit: props => {
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           ) ;
       },
       save: props => {
           const { className } = props;
               <div className={ className }>Block Front End</div>
           );
       },
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```

```
import './editor.scss';
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export default registerBlockType(
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           __( 'Key Word 1', '_vt' ),
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       edit: props => {
           const { className } = props;
               <div className={ className }>Block Back End </div>
           ) ;
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       save: props => {
           const { className } = props;
               <div className={ className }>Block Front End</div>
           ) ;
       },
) ;
```

Example of translatable String

```
__('This string is ready for translations in the .pot file', '_vt');
```

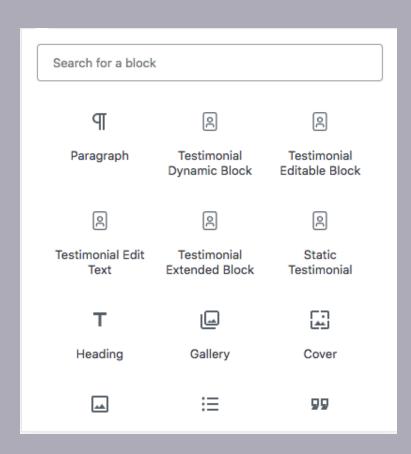
```
import './editor.scss';
import './style.scss';
const { __ } = wp.i18n;
const { registerBlockType } = wp.blocks;
export default registerBlockType(
    'namespace/blockname',
       title: ('Block Name', 'vt'),
       description: ('Description of the block', 'vt'),
       category: 'common',
       icon: dashicon | svgIcon,
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           __( 'Key Word 1', '_vt' ),
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           const { className } = props;
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           const { className } = props;
               <div className={ className }>Block Front End</div>
           );
       },
) ;
```

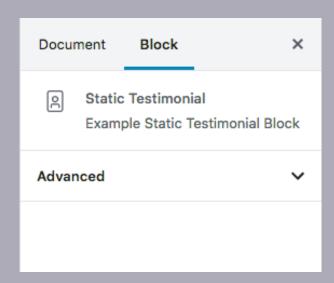
Gotchas

- Block names must contain a namespace and be in the namespace/blockname format
- Blocknames can only lowercase alphanumerical letters.

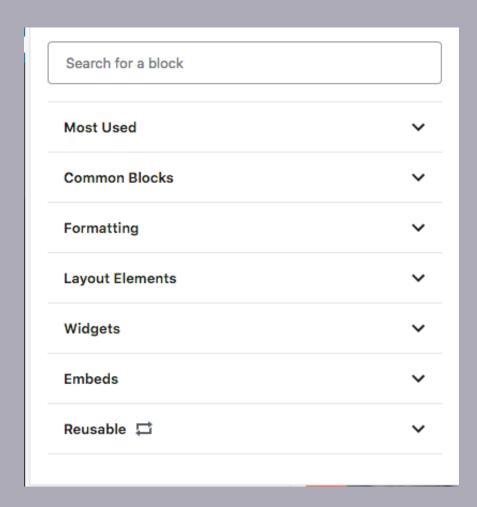
```
import './editor.scss';
import './style.scss';
const { __ } = wp.i18n;
const { registerBlockType } = wp.blocks;
export default registerBlockType(
    'namespace/blockname',
       title: __('Block Name', '_vt'),
       description: ('Description of the block', '_vt'),
       category: 'common',
       icon: dashicon | svgIcon,
       keywords: [
           __( 'Key Word 1', '_vt' ),
           __( 'Key Word 2', '_vt'),
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       edit: props => {
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           ) ;
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       save: props => {
           const { className } = props;
               <div className={ className }>Block Front End</div>
           ) ;
       },
) ;
```



```
import './editor.scss';
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const { __ } = wp.i18n;
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export default registerBlockType(
    'namespace/blockname',
       title: ('Block Name', 'vt'),
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```
import './editor.scss';
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    'namespace/blockname',
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           const { className } = props;
               <div className={ className }>Block Front End</div>
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```
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export default registerBlockType(
    'namespace/blockname',
       title: ('Block Name', 'vt'),
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       edit: props => {
           const { className } = props;
               <div className={ className }>Block Back End </div>
           ) ;
        },
       save: props => {
           const { className } = props;
               <div className={ className }>Block Front End</div>
           ) ;
       },
) ;
```

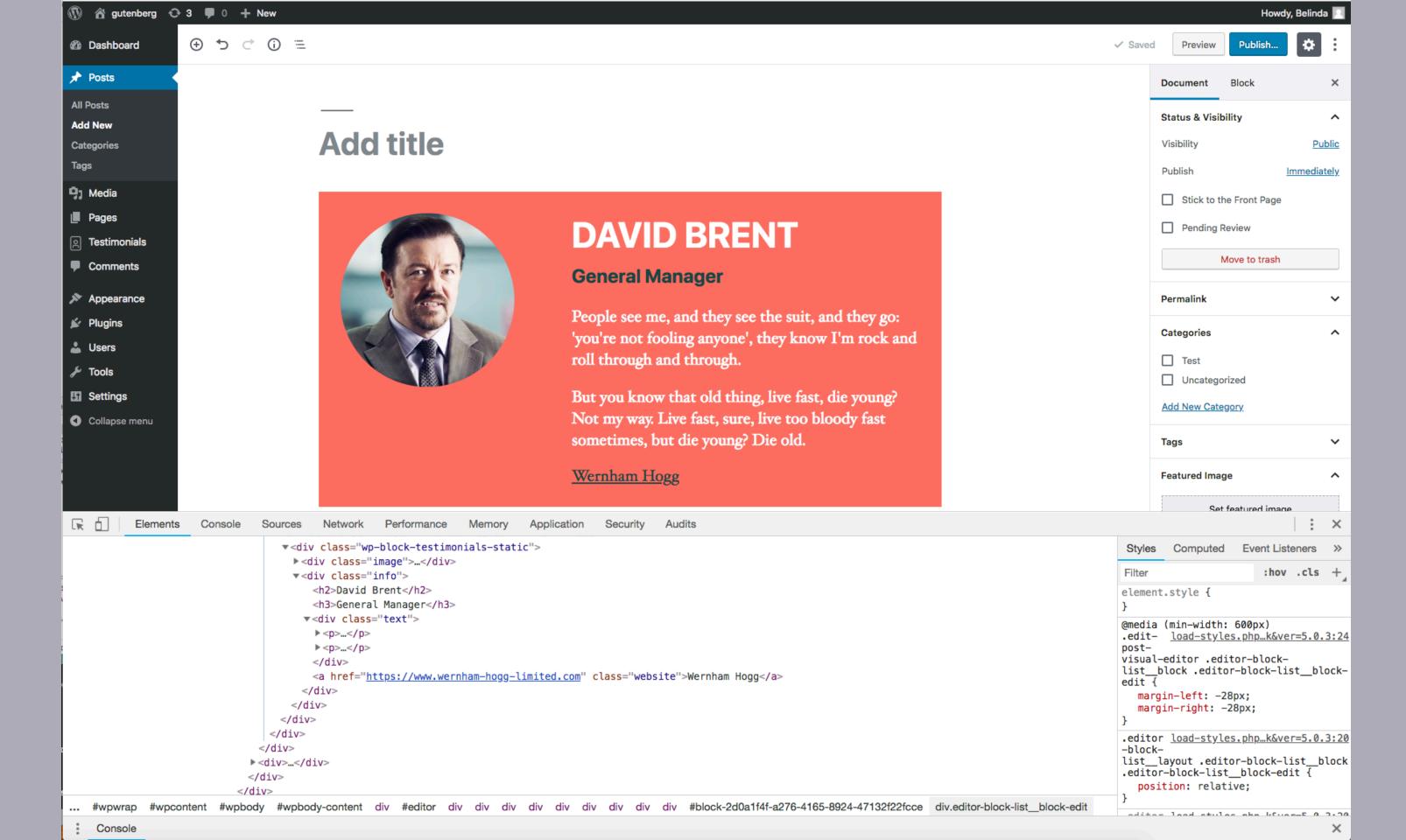
Icons can be either:

- A Dashicon
 - https://developer.wordpress.org/resource/dashicons/#dashboard
- An JSX svg icon
 - svg to jsx converter https://svg2jsx.herokuapp.com/

```
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           ) ;
        } ,
       save: props => {
           const { className } = props;
               <div className={ className }>Block Front End</div>
           ) ;
       },
) ;
```

Common Blocks		•
2	2	00
Static Testimonial	Testimonial Dynamic Block	
2	2	
Testimonial Edit Text	Testimonial Extended Block	

```
import './editor.scss';
import './style.scss';
const { __ } = wp.i18n;
const { registerBlockType } = wp.blocks;
export default registerBlockType(
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       description: ('Description of the block', 'vt'),
       category: 'common',
       icon: dashicon | svgIcon,
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           __( 'Key Word 1', '_vt' ),
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       edit: props => {
           const { className } = props;
           return (
               <div className={ className }>Block Back End </div>
           );
        },
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           const { className } = props;
               <div className={ className }>Block Front End</div>
           );
       },
) ;
```



```
import './editor.scss';
import './style.scss';
const { __ } = wp.i18n;
const { registerBlockType } = wp.blocks;
export default registerBlockType(
    'namespace/blockname',
       title: ('Block Name', 'vt'),
       description: ('Description of the block', 'vt'),
       category: 'common',
       icon: dashicon | svgIcon,
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           __( 'Key Word 1', '_vt' ),
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       edit: props => {
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               <div className={ className }>Block Back End </div>
           ) ;
       save: props => {
            const { className } = props;
            return (
               <div className={ className }>Block Front End</div>
           );
        },
) ;
```

Testimonials



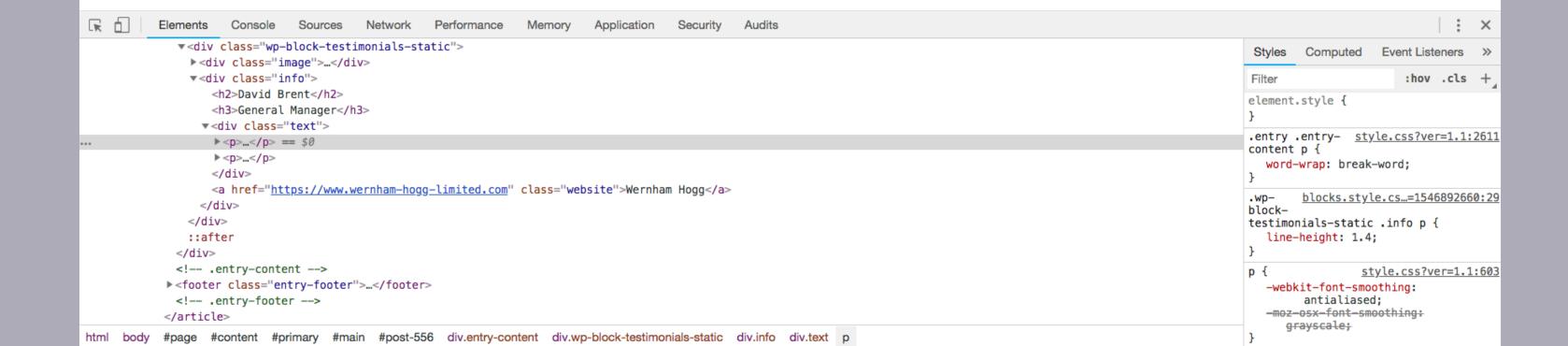
DAVID BRENT

General Manager

People see me, and they see the suit, and they go: 'you're not fooling anyone', they know I'm rock and roll through and through.

But you know that old thing, live fast, die young? Not my way. Live fast, sure, live too bloody fast sometimes, but die young? Die old.

Wernham Hogg



Static Testimonial Block

```
edit: props => {
   const { className, isSelected } = props;
   return (
       <div className={ className }>
           <div className="image">
               <img src="/wp-content/plugins/vt testimonials/assets/images/David-Brent.jpg" />
           </div>
           <div className="info">
               <h2>David Brent</h2>
               <h3>General Manager</h3>
               <div className="text">
                   People see me, and they see the suit, and they go: 'you're not
                   fooling anyone', they know I'm rock and roll through and through.
                   But you know that old thing, live fast, die young? Not my way.
                   Live fast, sure, live too bloody fast sometimes, but die young? Die old.
               </div>
               <a href="https://www.wernham-hogg-limited.com" className="website">Wernham Hogg</a>
           </div>
               isSelected && (
                   <div className="warn">Sorry you can't edit this block</div>
       </div>
},
```

```
edit: props => {
   const { className, isSelected } = props;
   return (
               <h2>David Brent</h2>
               <h3>General Manager</h3>
                   People see me, and they see the suit, and they go: 'you're not
                   fooling anyone', they know I'm rock and roll through and through.
                   But you know that old thing, live fast, die young? Not my way.
                   Live fast, sure, live too bloody fast sometimes, but die young? Die old.
               <a href="https://www.wernham-hogg-limited.com" className="website">Wernham Hogg</a>
               isSelected && (
                   <div className="warn">Sorry you can't edit this block</div>
},
```

Let's Talk Props

JavaScript Object

attributes: {} // where to store variables

Generated Strings

className: "wp-block-testimonials-static" 👍 // Unique Class Name so styles don't conflict

clientId: "2e1f42d4-9c2f-434a-9b68-b037a545c438"

name: "testimonials/static"

Boolean

isSelected: false $\frac{1}{2}$ // If the block is selected or not

isSelectionEnabled: true

Functions

insertBlocksAfter: f () mergeBlocks: f () onReplace: f ()

setAttributes: *f* () $\stackrel{1}{\downarrow}$ // function to call to set variables

toggleSelection: f ()

Deconstructed Variables

```
props{ // JavaScript Object
    attributes: {},
    className: "wp-block-testimonials-static",
    clientId: "2e1f42d4-9c2f-434a-9b68-b037a545c438",
    insertBlocksAfter: function( ... ),
    isSelected: false,
    isSelectionEnabled: true,
   mergeBlocks: function( ... ),
    name: "testimonials/static",
    onReplace: function( ... ),
    setAttributes: function( ... ),
    toggleSelection: function( ... ),
const { className } = props; // ES6 variable a param from a JS object
var className = props.className; // JavaScript variable a param from a JS object
$className = props->className; // php variable calling a param from a php object
```

```
edit: props => {
   const { className, isSelected } = props;
   return (
               <h2>David Brent</h2>
               <h3>General Manager</h3>
                   People see me, and they see the suit, and they go: 'you're not
                   fooling anyone', they know I'm rock and roll through and through.
                   But you know that old thing, live fast, die young? Not my way.
                   Live fast, sure, live too bloody fast sometimes, but die young? Die old.
               <a href="https://www.wernham-hogg-limited.com" className="website">Wernham Hogg</a>
               isSelected && (
                   <div className="warn">Sorry you can't edit this block</div>
},
```

```
edit: props => {
   const { className, isSelected } = props;
   return (
       <div className={ className }>
           <div className="image">
               <img src="/wp-content/plugins/vt testimonials/assets/images/David-Brent.jpg" />
           </div>
           <div className="info">
               <h2>David Brent</h2>
               <h3>General Manager</h3>
               <div className="text">
                   People see me, and they see the suit, and they go: 'you're not
                   fooling anyone', they know I'm rock and roll through and through.
                   But you know that old thing, live fast, die young? Not my way.
                   Live fast, sure, live too bloody fast sometimes, but die young? Die old.
               </div>
               <a href="https://www.wernham-hogg-limited.com" className="website">Wernham Hogg</a>
           </div>
               isSelected && (
                   <div className="warn">Sorry you can't edit this block</div>
       </div>
```

Gotchas when writing JSX

- If you forget a closing tag, the build will fail
- Class is a protected word in JS, use className instead
- You can write JS and call variables within curly braces in the JSX { javascript }
- All the JSX must be contained within one parent element no adjacent elements

```
edit: props => {
   const { className, isSelected } = props;
   return (
               <h2>David Brent</h2>
               <h3>General Manager</h3>
                   People see me, and they see the suit, and they go: 'you're not
                   fooling anyone', they know I'm rock and roll through and through.
                   But you know that old thing, live fast, die young? Not my way.
                   Live fast, sure, live too bloody fast sometimes, but die young? Die old.
               <a href="https://www.wernham-hogg-limited.com" className="website">Wernham Hogg</a>
               isSelected && (
                   <div className="warn">Sorry you can't edit this block</div>
},
```

Confusing Syntax?

- {} denotes there will be some JS
- isSelected && is equivalent to if(isSelected == true)
- () denotes that there will be some JSX to display if the condition is met

```
save: props => {
   const { className } = props;
    return (
       <div className={ className }>
           <div className="image">
               <img src="/wp-content/plugins/vt_testimonials/assets/images/David-Brent.jpg" />
           </div>
           <div className="info">
               <h2>David Brent</h2>
               <h3>General Manager</h3>
               <div className="text">
                   People see me, and they see the suit, and they go: 'you're not fooling anyone', they know I'm rock and roll through and through.
                   But you know that old thing, live fast, die young? Not my way. Live fast, sure, live too bloody fast sometimes, but die young? Die old.
               </div>
               <a href="https://www.wernham-hogg-limited.com" className="website">Wernham Hogg</a>
           </div>
       </div>
    );
},
```

Congratulations > 5



All information from this talk has been learnt on Zac Gordon's Gutenberg Block Development Course, please check it out for more detail and information

https://javascriptforwp.com/product/gutenberg-block-development-course/

Resources

Gutenberg Handbook

Gutenberg starter theme

Gutenberg block reference

Gutenberg starter tutorial on CSS Tricks

Coding a Custom Block Type for Gutenberg Block Editor (video)

WordPress Webinar: Building your First Gutenberg Block (video)

Learn React Tutorial

About Bable

Gutenberg Git Hub Repro

Come back for the rest of the talk next month