JavaScript for WordPress

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javascriptforwp.com

Whatcha Need for Today

- Local WP Environment (DesktopServer, Local, Chassis)
- Running WordPress Site with Dummy Content
- Code Editor / IDE
- Node & NPM Running
- Comfortable with JavaScript, webpack, command line
- https://github.com/zgordon/frontend-masters-jsforwp

Why Should (JavaScript) Developers Care About WordPress?

Adam Silverstein:

JavaScript in WordPress Core – Past, Present and Future

https://wordpress.tv/2017/06/16/adam-silverstein-javascript-in-wordpress-core-past-present-and-future/

Saved

You are customizing
Menus

Menu Locations

+ Add a Menu

WordPress

Just another WordPress site

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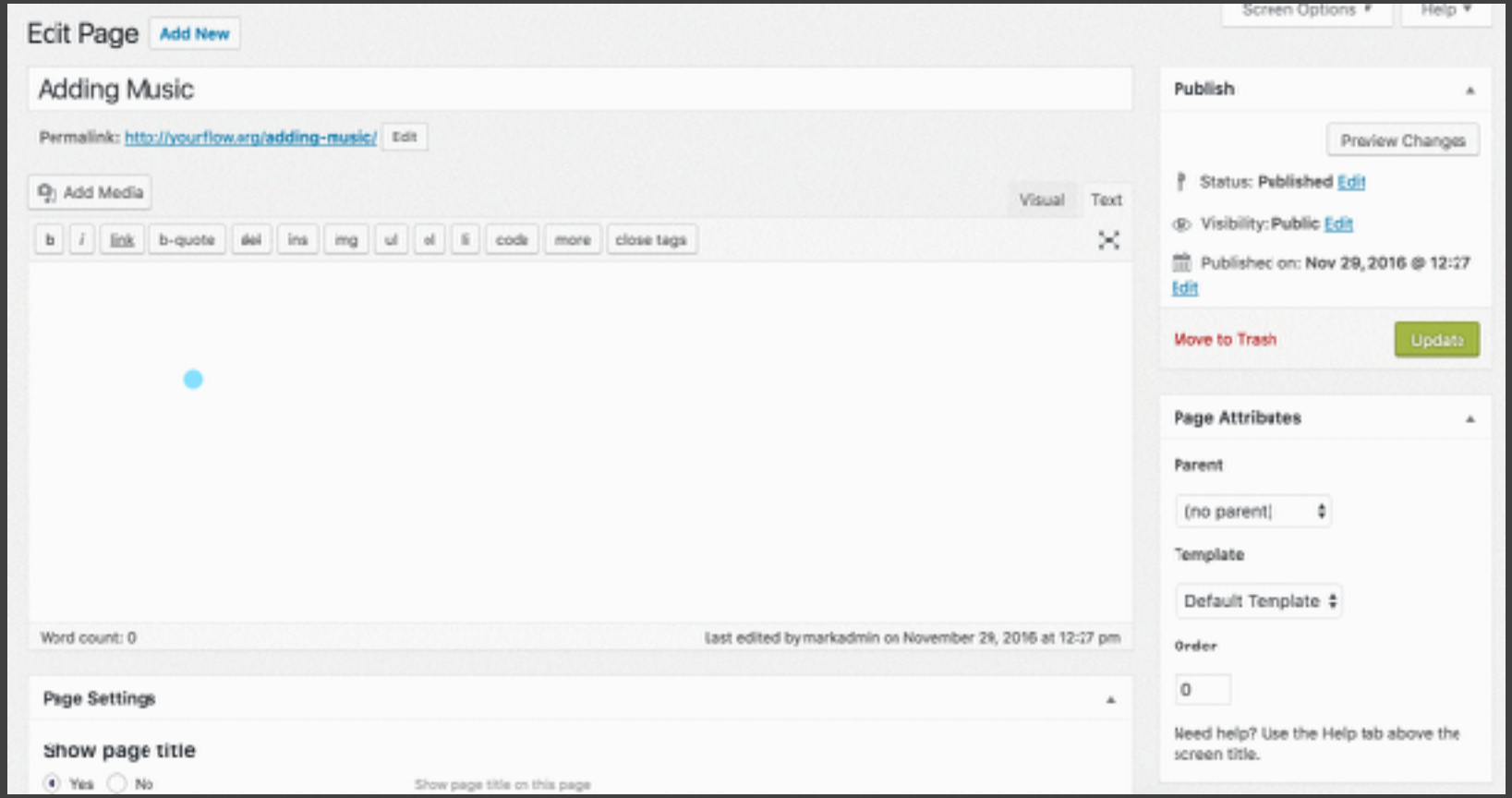
Ecit Page
Add New
Screen Options
Help
Adding Music
Permalink: http://yourflow.org/adding-music/
Edit
Add Media
Visual
Text
b
i
link
b-quote
del
ins
img
ul
ol
li
code
more
close tags
Word count: 0
Last edited by markadmin on November 29, 2016 at 12:27 pm
Page Settings
Show page title
Yes
No
Show page title on this page
Publish
Preview Changes
Status: Published Edit
Visibility: Public Edit
Published on: Nov 29, 2016 @ 12:27
Edit
Move to Trash
Update
Page Attributes
Parent
(no parent)
Template
Default Template
Order
0
Need help? Use the Help tab above the screen title.

f “Sample Post”
Revision Slider
Autosave by Bob Writer
1 min ago (4 Apr @ 07:52)

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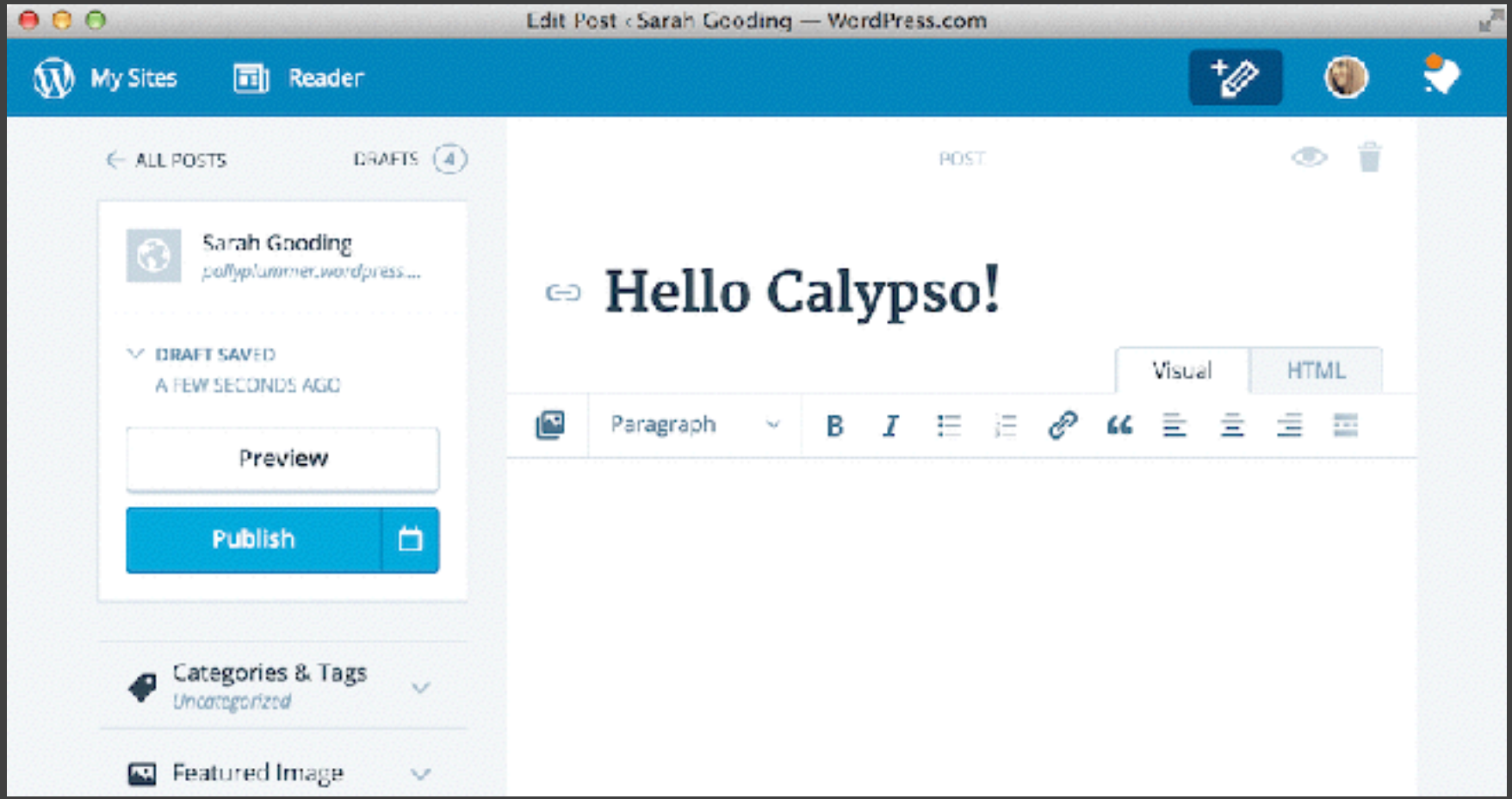
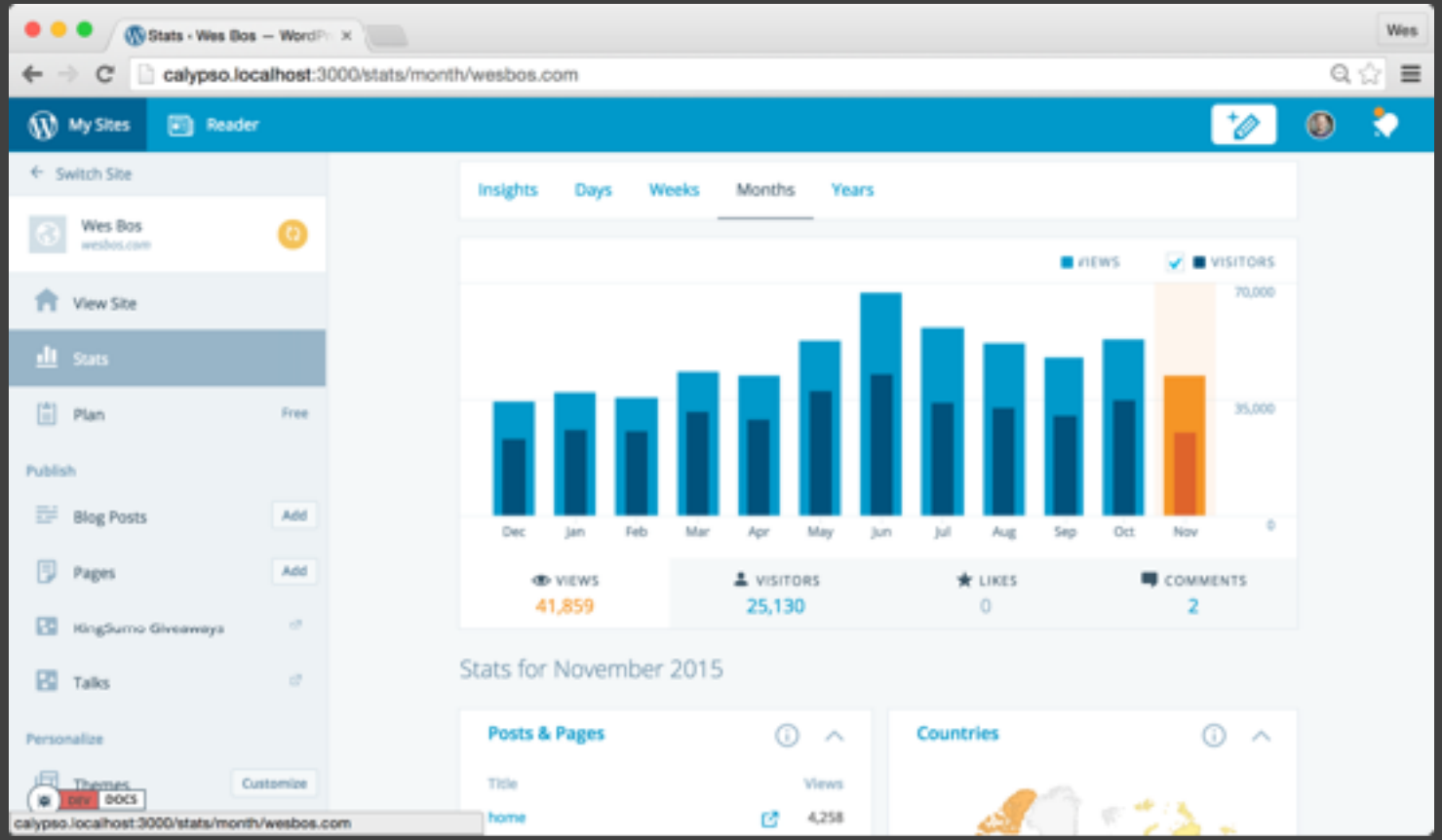
Revision Slider
Autosave by Bob Writer
1 min ago (4 Apr @ 07:52)


Edit Post ‹ Sarah Gooding — WordPress.com
My Sites
Reader
ALL POSTS
DRAFTS 4
Sarah Gooding
pollyplummer.wordpress....
DRAFT SAVED
A FEW SECONDS AGO
Preview
Publish
Categories & Tags
Uncategorized
Featured Image
POST
Hello Calypso!
Visual
HTML
Paragraph


Stats - Wes Bos — WordP
Wes
calypso.localhost:3000/stats/month/wesbos.com
My Sites
Reader
Switch Site
Wes Bos
wesbos.com
View Site
Stats
Plan
Free
Publish
Blog Posts
Add
Pages
Add
KingSumo Giveaways
Talks
Personalize
Themes
Customize
DEV
DOCS
calypso.localhost:3000/stats/month/wesbos.com
Insights
Days
Weeks
Months
Years
VIEWS
VISITORS
70,000
35,000
0
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
VIEWS
41,859
VISITORS
25,130
LIKES
0
COMMENTS
2
Stats for November 2015
Posts & Pages
Title
Views
home
4,258
Countries

Home Manage

Managing 2 blogs
out of 2

All Public Private

Blogs +

Posts +
Comments
Pages +

Stats
Upgrades
Sharing
Users

KTLA 5
ktla.wordpress.com
5 New Comments · 43759 Posts · 172 Followers
Customize Settings Upgrades

Audibles - SI.com
si.wordpress.com
5 New Comments · 2845 Posts · 225 Followers
Customize Settings Upgrades

ProBasketballTalk
http://probasketballtalk.nbcsports.com
5 New Comments · 613,632 Posts · 4752 Followers
Customize Settings Upgrades

Travel eggo
travelegg.wordpress.com

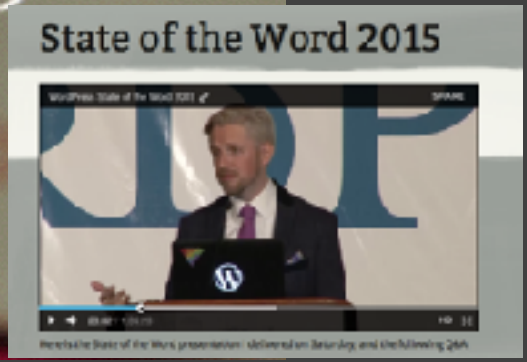
Editors' Picks
Light in the Dark
Thanks for Reading

The **Influence** of

Calypso should **NOT be Underestimated**

HOMEWORK ASSIGNMENT:

Learn JavaScript, deeply.



The JavaScript for WordPress Master Course

javascriptforwp.com

LEARN

JAVASCRIPT

DEEPLY

Current JS + WP Projects

Core:

Customizer Improvements

JS Widgets & Hooks

“Gutenberg” - SPA Editor

Real World:

JS Plugins w API Support

JS Driven Themes

Decoupled Integrations

What **JS Framework** Do We Adopt **Next?**

JavaScript is becoming

More Important & Integrated

with **WordPress**

Course Outline

- Intro to JavaScript in WordPress
- Enqueuing JavaScript in a Theme
- Enqueuing JavaScript in a Plugin
- AJAX in WordPress
- The WordPress REST API
- Using the WP REST API Inside WordPress
- Using the WP REST API Outside of WordPress

Enqueuing JavaScript

Enqueuing JavaScript

The process of loading JavaScript into a theme or the admin area via PHP functions.

wp_enqueue_script();

wp_localize_script();

```
wp_enqueue_script(
  ‘unique-handle-name‘,
  get_stylesheet_directory_uri() . ‘/path/to/file.js’,
  [ ‘dependency-handles’ ],
  ‘version’,
  loadInFooter // boolean true/false
);
```

```
wp_enqueue_script(
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  ‘unique-handle-name‘,
  get_stylesheet_directory_uri() . ‘/path/to/file.js’,
  [ ‘dependency-handles’ ],
  ‘version’,
  loadInFooter // boolean true/false
);
```

```
wp_localize_script(
  ‘js-handle',
  ‘name_for_js’,
  [
    'site_url' => esc_url( home_url() ),
    'site_name'=> get_bloginfo( 'name' )
  ]
);
```

```
wp_localize_script(
  ‘js-handle',
  ‘name_for_js’,
  [
    'site_url' => esc_url( home_url() ),
    'site_name'=> get_bloginfo( 'name' )
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);
```

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  ]
);
```

```
wp_localize_script(
  ‘js-handle',
  ‘name_for_js’,
  [
    'site_url' => esc_url( home_url() ),
    'site_name'=> get_bloginfo( 'name' )
  ]
);  // Can use name_for_js.site_url in our JS
```

functions.php:

```
function my_enqueue_scripts() {
    wp_enqueue_script();
    wp_localize_script();
}
add_action( 'wp_enqueue_scripts', ‘my_enqueue_scripts' );
```

Enqueuing JS in a Theme

1. Enqueuing JavaScript
2. Enqueuing Multiple Files (& Using Dependencies)
3. Making jQuery a Dependency (& jQuery Wrapper)
4. Enqueuing External JavaScript (remove Version)
5. Conditionally Enqueuing JavaScript
6. Localizing Scripts

Enqueuing JS in a Theme Docs

1. wp_enqueue_script - https://developer.wordpress.org/reference/functions/wp_enqueue_script/
2. JS Included in WP - https://developer.wordpress.org/reference/functions/wp_enqueue_script/#default-scripts-included-and-registered-by-wordpress
3. jQuery noConflict - https://developer.wordpress.org/reference/functions/wp_enqueue_script/#comment-1473
4. WP Conditionals - https://developer.wordpress.org/themes/basics/conditional-tags/
5. wp_localize_script - https://developer.wordpress.org/reference/functions/wp_localize_script/

PRACTICE - Enqueuing JS in a Theme

1. Enqueuing JavaScript
2. Enqueuing Multiple Files (& Using Dependencies)
3. Making jQuery a Dependency (& jQuery Wrapper)
4. Enqueuing External JavaScript (remove Version)
5. Conditionally Enqueuing JavaScript
6. Localizing Scripts

Course Outline

- ~~Intro to JavaScript in WordPress~~
- ~~Enqueuing JavaScript in a Theme~~
- Enqueuing JavaScript in a Plugin

```
wp_enqueue_script(
  ‘unique-handle-name‘,
  plugins_url( ‘/path/to/file.js’, __FILE__ ),
  [ ‘dependency-handles’ ],
  ‘version’,
  loadInFooter // boolean true/false
);
```

plugin-file.php:

```
function my_enqueue_scripts() {
    wp_enqueue_script();
    wp_localize_script();
}
add_action( 'wp_enqueue_scripts', ‘my_enqueue_scripts' );
```

plugin-file.php:

```
function my_enqueue_scripts() {
    wp_enqueue_script();
    wp_localize_script();
}
add_action( 'wp_enqueue_scripts', ‘my_enqueue_scripts' );
add_action( 'admin_enqueue_scripts', ‘my_enqueue_scripts' );
```

```
function my_enqueue_scripts( $hook ) {
    if( $hook != ‘toplevel_page_my-admin-page’ ) {
        return;
    }
    wp_enqueue_script();
}
add_action( 'admin_enqueue_scripts', ‘my_enqueue_scripts' );
```

```
$main_menu_url = ‘my-admin-page’;
function my_enqueue_scripts( $hook ) {
    global $main_menu_url;
    if( $hook != ‘toplevel_page_' . $main_menu_url ) {
        return;
    }
    wp_enqueue_script();
}
add_action( 'admin_enqueue_scripts', ‘my_enqueue_scripts' );
```

Enqueuing JS in a Plugin

1. Enqueuing JavaScript on Frontend in Theme
2. Enqueuing JavaScript in Admin Area
3. Enqueuing JavaScript in Admin Area on Plugin Page

Enqueuing JS in a Plugin

1. plugins_url - https://developer.wordpress.org/reference/functions/plugins_url/
2. Admin Enqueue Hook - https://developer.wordpress.org/reference/hooks/admin_enqueue_scripts/
3. Enqueue on Admin Page - https://codex.wordpress.org/Plugin_API/Action_Reference/admin_enqueue_scripts#Example:_Target_a_Specific_Admin_Page

PRACTICE - Enqueuing JS in a Plugin

1. Enqueuing JavaScript on Frontend from Plugin
2. Enqueuing JavaScript in Admin Area
3. Enqueuing JavaScript in Admin Area on Plugin Page

Course Outline

- ~~Intro to JavaScript in WordPress~~
- ~~Enqueuing JavaScript in a Theme~~
- ~~Enqueuing JavaScript in a Plugin~~
- AJAX in WordPress

AJAX in WordPress

AJAX in WordPress is **A Little Weird**

AJAX in WordPress

1. Need to pass Nonce & URL from PHP to JS
2. Need to make AJAX call with Nonce and URL
3. Need WordPress Hooks to route the call
4. Need a PHP function to process the call
5. Need JS respond to the call

Step 1: In Plugin / Theme functions.php File

```
wp_localize_script(
  'jsforwp-frontend-js',
  'jsforwp_globals',
  [
    'ajax_url'    => admin_url( 'admin-ajax.php' ),
    'nonce'       => wp_create_nonce( ‘nonce_name’ )
  ]
);
```

Step 2: In Frontend JavaScript

```
$.ajax({
  type : 'post',
  dataType : 'json',
  url : jsforwp_globals.ajax_url,
  data : {
    action: 'jsforwp_add_like',
    _ajax_nonce: jsforwp_globals.nonce
  }, ...
```

Step 3: In Plugin / Theme functions.php File

```
function jsforwp_add_like( ) {
    check_ajax_referer( 'nonce_name' );
    // Do whatevs...
    $response[ ‘success’] = true;
    $response = json_encode( $response );
    echo $response;
    die();
}
add_action( 'wp_ajax_jsforwp_add_like', 'jsforwp_add_like' );
```

Step 4: In Frontend JavaScript

```
$.ajax({
    ...
    success: function( response ) {
        if( 'success' === response.type ) {
            // Do something with response.whatevs
        }
        else {
            // Something went wrong
        }
    }
```

AJAX in WordPress

1. Need to pass Nonce & URL from PHP to JS
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PRACTICE - AJAX in WordPress

1. Make a “Like This Site” Plugin
2. Save likes as number in wp_options table
3. Have a link to “Like this Site” show up on front end
4. Display total number of likes next to link
5. When click on link increase count with AJAX
6. Do it first with jQuery then with Axios

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- ~~Intro to JavaScript in WordPress~~
- ~~Enqueuing JavaScript in a Theme~~
- ~~Enqueuing JavaScript in a Plugin~~
- ~~AJAX in WordPress~~
- The WordPress REST API

The WP REST API

The WordPress REST API

/wp-json/wp/v2/posts
/wp-json/wp/v2/revisions
/wp-json/wp/v2/categories
/wp-json/wp/v2/tags
/wp-json/wp/v2/pages
/wp-json/wp/v2/comments

/wp-json/wp/v2/taxonomies
/wp-json/wp/v2/media
/wp-json/wp/v2/users
/wp-json/wp/v2/types
/wp-json/wp/v2/statuses
/wp-json/wp/v2/settings

/wp-json/custom/v1/something
/wp-json/another/v3/else

The WordPress REST API

To access all of the posts for your site:

https://yoursite.com/wp/v2/posts

To access a **post with an ID** of “1” for your site:

https://yoursite.com/wp/v2/page/1

The WordPress REST API

To access all of the pages for your site:

https://yoursite.com/wp/v2/pages

To access a **page with an ID** of “1” for your site:

https://yoursite.com/wp/v2/pages/1

You can pass **arguments** to API URLs to **customize** **what you get** back.

The WordPress REST API

To access all of the pages for your site:

https://yoursite.com/wp/v2/pages

To access a **page with an ID** of “1” for your site:

https://yoursite.com/wp/v2/pages/1

The WordPress REST API

https://yoursite.com/wp/v2/posts

? per_page=10

&_embed

&search=hello%20world

&orderby=title

&order=asc

https://developer.wordpress.org/rest-api/reference/posts/#arguments

PRACTICE - WP REST API

1. Access API endpoints in the browser
2. Access API endpoints w arguments
3. Access custom API endpoints in the browser