Building Better WordPress Interfaces with the REST API

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Choice
What You Can Use WordPress For

WordPress started as just a blogging system, but has evolved to be used as full content management system and so much more through the thousands of plugins and widgets and themes, WordPress is limited only by your imagination. (And tech chops.)

- wordpress.org/about
Decisions, not Options

When making decisions [the non-technical majority] are the users we consider first... Every time you give a user an option, you are asking them to make a decision. When a user doesn’t care or understand the option this ultimately leads to frustration... It’s our duty as developers to make smart design decisions and avoid putting the weight of technical choices on our end users.

– wordpress.org/about/philosophy
Three Levels of Interface

- Application Programming Interface
- User Interface
- API Client Library Interface
“A Node CMS, with best-in-class editorial workflow”
Desktop-Oriented SPAs

Mobile-Oriented SPAs

Server-Rendered Content Pages
Aside: “GhostPress”
github.com/kadamwhite/ghostpress
Welcome to WordPress!
We've assembled some links to get you started:

**Get Started**
- Customize Your Site
- or, change your theme completely

**Next Steps**
- Write your first blog post
- Add an About page
- View your site

**More Actions**
- Manage widgets or menus
- Turn comments on or off
- Learn more about getting started

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**At a Glance**
- 38 Posts
- 18 Pages
- 29 Comments

WordPress 4.5.3 running Twenty Sixteen theme.

**Activity**
- Publishing Soon
  - Jan 1st 2020, 12:00 pm  Scheduled

**Quick Draft**

Title

What's on your mind?

Save Draft

**WordPress News**
Authoring Interface
11.1% of the sentences contain a transition word or phrase, which is less than the recommended minimum of 30%.

- The copy scores 80.7 in the Flesch Reading Ease test, which is considered easy to read.
- The amount of words following each of your subheadings doesn't exceed the recommended maximum of 300 words, which is great.
- None of your paragraphs are too long, which is great.
- 0% of the sentences contain more than 20 words, which is less than or equal to the recommended maximum of 25%.
- 0% of the sentences contain a passive voice, which is less than or equal to the recommended maximum of 10%.
Mother died today. Or maybe yesterday, I don't know. I had a telegram from the home: 'Mother passed away. Funeral tomorrow. Yours sincerely.' That doesn't mean anything. It may have been yesterday.

Agriculture is the cultivation of animals, plants, fungi, and other life forms for food, fiber, biofuel, medicinals and other products used to sustain and enhance human life. Agriculture was the key development in the rise of sedentary human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization. The study of agriculture is known as agricultural science. The history of agriculture dates back thousands of years, and its development has been driven and defined by greatly different climates, cultures, and technologies.
Allison Parrish, *Entropic Text Editor*, 2008
http://www.decontextualize.com/projects/nite/
Bonus Headlines

Facebook Camera Tech: Use to Bring Watch

Clean Apple Cars Vaunting Bees

This Giant Surfic Battery Could Steal War, Break Instagram

How the Web?

Star Wars Already Has Every Sand

Turning Great Will Drive Action Video

The Aircar of Netflix May Americanner With $19K

The Play of Thrones: Army Hackers

Check out “Machine Learning for Artists”: http://ml4a.github.io
Introducing

The New WordPress.com

A single interface to manage all your WordPress.com or jetpack-enabled sites, built with the latest web technologies and used by millions of people — and now it's open source.

GitHub Project

Download Desktop Apps

For OSX 10.8+, Windows 7+, and Linux.
I recommend Exploring (Semantic) Space with (Literal) Robots, Allison Parrish, Eyeo 2015

Icons from the Noun Project: Satellite by misirlou; Sputnik by Mourad Mokrane; Satellite by Dan Hetteix
Learn JS Deeply

(but pick your battles)
npm install wordpress-rest-api

var WP = require( 'wordpress-rest-api' );
Code Interface
From:

/wp-json/wp/v2/posts?filter[author_name]=kadam
&filter[tag]=art
&filter[year]=2014
&search=Chelsea

to:

var query = site.posts()
 .author('kadam')
 .tags('art')
 .year(2014)
 .search('Chelsea');
```javascript
site.posts()
  .get()
  .then( posts => posts.forEach( post => {
    console.log( post.title.rendered );
  }) );

site.posts()
  .create({
    title: 'Your Post Title',
    content: 'Your post content',
    status: 'publish'
  })
  // "response" will hold the `id` of the new post
  .then( response => console.log( response.id ) )
```
var site = new WP({
    endpoint: 'http://yoursite.com/wp-json'
});

site.posts()  site.taxonomies()
site.pages()   site.categories()
site.media()   site.tags()
site.types()   site.users()
site.statuses() site.comments()
Route List => Tree Structure

- posts
  - (\d+)
- revisions
  - (\d+)
- meta
  - (\d+)
Tree Structure => Setter Methods

- posts()
  - id( id )
  - revisions( rId )
  - meta( rId )
var site = new WP({
    endpoint: 'http://yoursite.com/wp-json'
});

site.posts()  site.taxonomies()
site.pages()   site.categories()
site.media()  site.tags()
site.types()  site.users()
site.statuses()  site.comments()
// Custom Route handling
var site = WP.site( 'my-url.com/wp-json' );

site.myCustomResource = site.registerRoute('myplugin/v1', '/author/(\d+)');

site.myCustomResource().id( 7 );
// => myplugin/v1/author/7
// Autodiscovery
var apiPromise = WP.discover( urlStr );

apiPromise.then(function( client ) {
    client.posts().then( worksAsNormal );
    client.namespace( ‘myplugin/v1’ )
        .mycustomresource().id( 7 )
        .then( nowAlsoSupported );
// Bootstrapping
var client = WP.site( urlStr, routesObj);
client.posts().then( worksAsNormal );
client.namespace( 'myplugin/v1' )
    .mycustomresource().id( 7 )
    .then( nowAlsoSupported );
wordpress-rest-api@0.8.0

Released today & dedicated to WCEU
HELP WANTED

▶ Co-maintainer wanted for JavaScript client for an up-and-coming REST API. Hazardous merge strategy, no wages, bitter cold, long months of complete darkness. Honor and recognition in case of success. (maybe.)
…WordPress is limited only by your imagination. (And tech chops.)

- wordpress.org/about
Thank You

npmjs.org/package/wordpress-rest-api

K. Adam White: @kadamwhite

Slides: http://talks.kadamwhite.com/wceu (pdf)

Bocoup: http://bocoup.com, @bocoup