



Front-End Developers

These people are all super important.

But they don't work directly on the thing.





Owners Managers Design & UX







Without any of the stuff we're going to talk about today,

FED's are already very powerful.

Without any of the stuff we're going to talk about today,

FED's are already very powerful.

• **UX** is in our hands!

• Performance is in our hands!

• Accessibility is in our hands!

• Execution of the design, animation, and interaction is in our hands!







You can make an avesome lifelong career out of this.



The FRONT END DEVELOPER SKILLSET only starts being LIMITED when you need custom back end development and server ops.



But that is getting less and less true with new tech



PUBLIC SERVICE ANNOUNCEMENT: THIS CAVEAT IS REQUIRED TO B

"Serverless" doesn't mean there aren't servers involved.

There will always be servers involved. **That's what the internet is.**









today. Let's not try to define it right now combined is basically serverless.

We're totally gonna talk about serverless

- because it's hard and that's boring. Instead,
- know that everything we talk about today



thepowerofserverless.info

	Chris
	Q 🛧 🛈 📚 👫 i
The Power of TERLESS	
nt-End Developers	
ldeas	Resources
Media Storage Email, SMS, & Notifications CMS's & Data Storage F	Real Time Auth
jor Providers s? Try the <mark>Serverless Cost Calculator</mark> .	

Let's look at one of the major ingredients.

Cloud Functions



aka "Functions as a Service"



WHY? Reasons.





Use case for Cloud Functions SAY YOUR THING NEEDS TO SEND A TEXT MESSAGE.

Say it's **a recipe site** and sending a text is a quick way to share a recipe with a friend or yourself for quick access.







10月10。日本 Thut's where my rort end skills stop and someone else's back end shills will need to come in

The reason we **can** do this ourselves isn't because Twilio has a client-side-*only* JavaScript API. They don't.

This is a common theme when integrating with other services, we need to **protect our API keys.**

You can't protect your API keys with entirely client-side applications. Sometimes that doesn't matter. Sometimes it does.







🗧 🔍 🎯 Gallery app with Fin	nite State Max	
\leftarrow \rightarrow C \triangleq Secure https://	/codepen.io/davidkpiano/pen/WZYXKv?editors=0010	
Gallery app with Fin	nite State Machines	
* HTML		
CSS (SCSS)		
JS (Babel)		
78 search(query 79 const enco encodeURICompo	y) { odedQuery = onent(query);	
80		
81 - setTimeout	t(() => <u>{</u>	
8Z IECCNJSC 8Z	onp(
<pre>`https://api hotos_public.g us&format=jsor 84 { jsor</pre>	<pre>.flickr.com/services/feeds/p gne?lang=en- n&tags=\${encodedQuery}`, npCallback: 'jsoncallback'</pre>	
})		
85 .then	<pre>(res => res.json())</pre>	
86then	(data => {	
87- this	<pre>s.transition({ type:</pre>	
SEARCH_SUCCES	<pre>>>', items: data.items {);</pre>	
	$h(arror -) \leq$	
90- thic	s transition({ type.	



Some API's don't need keys, or the keys don't need protection.





When your API key unlocks the ability to send an SMS message, it matters. **Bad guys** would love to steal that API key to use for evil.



We need a server to make this work.

This is what we're not going to do.



Not because this is bad, but because we're looking at serverless options on purpose.

1 GB RAM **30GB SSD STORAGE**

\$15/mo

Get Started











WAIT'A SECOND!

Isn't our recipe site already running on a server? Why can't we just use that?

We maybe could. to use a static file host.

And a damn fine idea!

But it's increasingly popular

GitHub Pages



CONDEPEN







Wonderful at hosting static files. Don't run any backend languages. On purpose.



- Very inexpensive (or free)
- Very fast (CDN)
- Very secure
- Very front-end developer friendly
- HTTPS, Git, Modern Build Process





friendly Process

Solet's do some SERVERLESS action!



Webtask is kinda like CodePen, but for cloud functions and minor data storage.

Make serverless endpoints





Code Editor

Command Line



	• Vebtask Editor ×			
← → C Secure https://webtask.io/make				
	webtask			
	<pre> P * module.exports = function(context, cb) { console.log(context.data); cb(null, { hello: context.data.name 'Anonymous' }); }; } // }; </pre>			



aScript function



	Webtask Editor ×	Chris
\leftarrow	C Secure https://webtask.io/make	☆ 🛈 🔓 📚 css 🔄 :
	webtask	Auth0 Extend Pricing Documentation
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₽	0.13 Kb out of 100 kb https://wt-8081b26e05bb4354f7d65ffc34cbbd67-0.run.webtask.io/empty-function	In 4, col 3



Chris ☆ 🛈 😤 📚 css 🔄 🗄 • Auth0 Extend Pricing Documentation \times (\mathbf{C}) Runner RUN AGAIN POST 🗘 / URL Params (0) \sim Ŵ key key Ŵ Headers (1) Body \sim Powered by 🛛 💭 Auth0 Extend -www-form-urlencoded form-data raw Ŵ foo bar Ŵ 🗹 autoscroll Ē key Run +History




Chris ☆ ③ 👫 📚 css 🔄 🗄 ? HELP $\stackrel{\circ}{\sim}$ CONSOLE \equiv MENU & PRODUCTS

Q

THE TWILIO NODE HELPER LIBRARY

Rate this page: $\cancel{A} \cancel{A} \cancel{A} \cancel{A} \cancel{A}$

Deprecation notice: New functionality will only be added to the new library (Node Helper Library 3.x). The old library (2.x) will be officially supported until 8/31/2017. After that day, Twilio will stop providing bug fixes and Support might ask you to upgrade before debugging issues. Learn how to migrate your existing application..

The twilio-node helper library lets you write Node.js code to make HTTP requests to the Twilio API.

This library is open source, so if you find a feature missing or a bug, we encourage you to file an issue or contribute

The easiest way to install twilio-node is from NPM. You can run the command below from your project directory to

```
ß
                                twilio >
                                                             'use latest';
    import twilio from 'twilio';
    module.exports = (context, callback) => {
 4 -
 5
      var message = context.body.message;
 6
      var from_number = '+1 608-260-7934';
      var to_number = context.body.to_number;
 8
 9
      const { TWILIO_SID, TWILIO_AUTH_

ÆN } = context.secrets;

10
      var client = new twilio.RestClient(TWILIO_SID, TWILIO_AUTH_TOKEN);
12
      client.messages.create({
13 -
14
        body: message,
15
        to: to_number,
        from: from_number
16
      }, (err, message) => {
        if (err) return callback(err);
18
        callback(null, message);
19
20
      });
21
22
    };
23
```

 \mathbf{C} **RUN AGAIN** \times

Runner

POST /

Headers

Response

STATUS 200

"sid": "SMd3e5a41147d64f7aa49562cb4ad7c8 "date_created": "Tue, 02 Jan 2018 15:37: "date_updated": "Tue, 02 Jan 2018 15:37: "date_sent": null, "account_sid": "ACe4ea502d75376d21242d29 "to": "+16082206884", "from": "+16082607934", "messaging_service_sid": null, "body": "Coooool!", "status": "queued", "num_segments": "1", "num_media": "0", "direction": "outbound-api" "ani version" \cdot "2010_0/_01

History

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History

"ani versio


```
modure.exports - (context, carrback) -> {
                                                                             STATUS 200
  var message = context.body.message;
                                                                             Headers
  var from_number = '+1 608-260-7934';
  var to_number = context.body.to_number;
                                                                             Response
  const { TWILIO_SID, TWILIO_AUTH_TOKEN } = context.secrets;
  var client = new twilio.RestClient(TWILIO_SID, TWILIO_AUTH_TOKEN);
  client.messages.create({
  }, (err, message) => {
    if (err) return callback(err);
    callback(null, message);
                                                                             History
                                               Powered by Auth0 Extend
```

"sid": "SMd3e "date_created "date_updated "date_sent": I "account_sid" "to": "+160822 "from": "+1608 "messaging_se "body": "Coood "status": "que "num_segments "num_media": ' "direction": "ani version"

<form method="POST"</pre> <label for="tel">Number to SMS to:<label> <input type="tel" name="tel" id="tel"> <input type="submit"> </form>

action="https://wt-8081b26e05bb4354f7d65ffc34cbbd67-0.ru <input type="hidden" name="message" value="Whatup.">

JavaScript!

- form.addEventListener("submit", function(e) { e.preventDefault(); axios.post(cloudless_function_url, { message: document.querySelector("#message").textContent, to_number: document.querySelector("#to_number").value
 - })
 - .then(function (response) { console.log(response); }) .catch(function (error) { console.log(error); *}*);

Probably a bit more realistic/practical, not that you shouldn't start with the baseline HTML functionality. Progressive enhancement!

C

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🚱 Webtask + Twilio: Send Recipe 🗙

Secure https://codepen.io/chriscoyier/pen/f7e2784c61ea818a196b9adf3e4c81b5?editors=1010

↔ Webtask + Twilio: Send Recipe over SMS 🖋

A PEN BY Chris Coyier PRO

		HTML
		51
		CSS (SCSS)
	51993 1 All & 16 //	⇔ JS
	The World's Best Oatmeal Cookies	1 const cl 0.run.we 2
	INGREDIENTS	3 let form
	1 cup (2 sticks) butter 1 cup brown sugar 1 cup white sugar 2 eggs 1 tsp vanilla 1.5 cups white flour	4
	1 tsp baking soda 1/2 tsp salt 3 cups oatmeal 1.5-2 cups chocolate chips	5 - form.add
	STEPS	6 e.prev
	1. Set oven to 350°F	7- axios
	 Mix sugars and butter together. You want the butter to be soft. I usually take it out of the fridge a few hours before I start making my cookies. You can microwave the butter but it just doesn't work out as well. 	8 mess
	3. Add eggs & vanilla, mix	9 to_r
	4. Mix in flour, salt, & baking soda	10 })
	5. Mix in the oatmeal	11then
	6. Stir in some semi-sweet chocolate chips l recommend between 1.5 – 2 cups. Mini chocolate chips work well too.	12 // 0
	7. The finished dough won't look like your typical non-oatmeal dough since there's less flour in it. That's fine and expected.	13 })
	8. I recommend 3 sheets of 12 cookies each, cooked one sheet at a time.	
	9. Depending on your oven and cookie size each batch should take about 10-15 minutes. I average about 12 minutes per cookie sheet.	15 // C 16 });
	10. Here's the most important part of this recipe and where I usually lose people. You have to take them out before they look totally done. People who haven't tried my cookies fight me on this, but trust me, you absolutely need to take them out earlier than you would expect. Judging exactly when is a skill but I'd recommend taking them out when you feel they could use another 3-4 minutes.	17 }); 18 19 // cons
	Send this recipe to you or a friend!	code=uu
	Text to this number: (555) 555-5555 Send	79
Console A	on this, but trust me, you absolutely need to take them out earlier than you would expect. Judging exactly when is a skill but I'd recommend taking them out when you feel they could use another 3-4 minutes. Send this recipe to you or a friend! Text to this number: (555) 555-5555 Send Assets Comments #	18 19 // co. code=

```
⊕ ☆ ① ₽2 📚 css 🔄 🗄
                                       Save
                                                🥆 Fork
                                                         🏟 Settings
                                                                    Change View
loudless_function_url = 'https://wt-8081b26e05bb4354f7d65ffc34cbbd67-
ebtask.io/twilio';
n = document.querySelector("#send-form");
dEventListener("submit", function(e) {
ventDefault();
.post(cloudless_function_url, {
sage: document.querySelector("#recipe").textContent,
number: document.querySelector("#sms-number").value
```

(function (response) {

```
console.log(response);
```

h(function (error) {

console.log(error);

url = `https://recipe-sender.azurewebsites.net/api/send-recipe? /fW4xYnk48WquYSBJbp8S2eBiZ1QX3t0xEXEP1Bet7xVeUW3B3pg==`;

UGGGGHGKH COMPLICATED.

LIKE ANYTHING COMPUTERS, SOME THINGS AREAND SOME THNGSARENT.

Some problems are easier to solve SAY YOUR THING NEEDS A DANG WEB FORM.

Like you need to ask some users to register for an event.

Male

Gender

Do we need to build a cloud function and deal with API keys and all that stuff?

No, because this is one of the oldest website needs in the book.

HTML, CSS, and JavaScript can build and submit a web form, but it doesn't do anything without a server to process it.

USE TI

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$\leftrightarrow \rightarrow \mathbf{C}$ \blacksquare Secure	https://usebasin.com			
BASIN				
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		Q.		
		_	_	
	Here's an example:			
write Rules				
	<form name="contact" ne<="" td=""><td>etlify></td><td></td><td></td></form>	etlify>		
Control	<label>Your Name: <</label>	input type="text"	name="name">	
sic Authentication				
ers	<	adama da mana lla mad	7	- 7.
	vrite Rules	Basin Simple form backend fr × Secure https://usebasin.com Stopp Collect submission data Fere's an example: write Rules Control sic Authentication rs Basin Simple form backend fr × Point of the secure of the secu	Basin I Simple form backend f: x Secure https://usebasin.com BASIN Collect submission data and track co Get s Get s Get s Control ic Control ic Control ic Authentication rs Control ic Authentication rs ic Authentication <td>Basin Simple form backend * Control ac Authentication region in the example: **********************************</td>	Basin Simple form backend * Control ac Authentication region in the example: **********************************

Pricing
nts. end coding

	A Pen by Chris Coyier ×	
Online Form Builder and Create ×	← → C	52ac7b68fdf98cd253?editors=1000 🛠 🛈 📚 🕽
$\leftrightarrow \rightarrow C$ Secure https://chriscoyier.wufoo.com/build/ord	Untitled A PEN BY Chris Coyier PRO	Save Save Settings Ochange View
V Add a Field Add a Field Field Settings Standard All Paragraph Text Paragraph Text Checkboxes Multiple Choice Dropdown Section Break Page Break Fancy Pants Name File Upload Address Email Time Phone Price Likert	Order CSS-Tricks Shirt (designed by Jon Burgerman)	<pre> HTML 1 ~ <div id="wufoo-z1r4s0k41y61vwd"> 2 ~ Fill out my online form. 3 </div> 4 ~ <script type="text/javascript"></script></pre>

Dolladollabillz

SAY YOU NEED TO TAKE MONEY FOR SOMETHING.

You want to sell custom scarves, tickets to an event, or your time.

6
MADISON 🔍 🕂 🚽 🚽
ISLAND
and throws.
Accent Pillow *
Titian Raw Silk Pillow +\$125.00
Shay Printed Pillow +\$210.00
Qty: 0
Decorative Throw *
Carnegie Alpaca Throw +\$275.00
Park Row Throw +\$120.00
Gramercy Throw +\$275.00
Qty: 0
Qty: 1 Add to Cart
-OR-
Check out with PayPal
r dyr di
Add to Wishlist Add to Compare
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Tito Simple, powerful, event $ hinspace imes$					

Team Tito Limited [IE] | https://ti.to/home

BLOG FEATURES PRICING

Simple, powerful, event software—just add people.

Over €250M worth of tickets sold online by thousands of organisers around the world.

Get started

🛣 🛈 🤗 📚 css

A GET route that displays the payment form

A **POST** route that receives the payment token ID and creates the charge

```
app.get("/", (req, res) =>
  res.render("index.pug", {keyPublishable}));
app.post("/charge", (req, res) => {
  let amount = 500;
  stripe.customers.create({
     email: req.body.stripeEmail,
    source: req.body.stripeToken
  .then(customer =>
    stripe.charges.create({
      description: "Sample Charge",
         currency: "usd",
        customer: customer.id
 .then(charge => res.render("charge.pug"));
```


Logs

201	7-1	1-2	25T	23	:00	:1	1	
201	7-1	1-2	251	23	:00	:4	9	•
201	7-1	1-2	251	23	:00	:5	0	•
201	7-1	1-2	25T	23	:00	:5	0	•
201	7-1	1-2	251	23	:00	:5	0	•
201	7-1	1-2	251	23	:00	:5	0	•

View	files	Tes	st		
HTTP m POST	ethod \$				
Query There a + Add p Headers	<i>re no q</i> parame	query p ter	parame	ters	
There a + Add h Request	<i>re no l</i> leader : body	neader	s		
1 2 3 4 5	2	strip strip strip	eEmai eToke eAmt:	1: " n: " "50	nobo tok_ .00"
Output					⊙ S
"This	has	been	comp]	leted	
				\square	

Home > sdras-stripe - stripe-handler

sdras-stripe - stripe-handler Function Apps

ndex	.js Savo
1	var stripe = re
2	
3	module.exports
	context.log(
6	//if we have
	if (
8	req.body &
9	req.body.st
	req.body.st
	req.body.st
12) {
13	stripe.cus
	.create(
15	email:
16	source
	})
18	.then (cu
19	context
20	stripe
21	amou
	desc
23	curr

Logs

20	17-	11-	25	T2	3:	00	:1	1	
20	17-	11-	25	T2	3:	00	: 4	9	•
20	17-	11-	25	T2	3:	00	: 5	0	•
20	17-	11-	25	T2	3:	00	:5	0	•
20	17-	11-	25	T2	3:	00	:5	0	
20	17-	11-	25	T2	3:	00	:5	0	•
20	17-	11-	25	T2	3:	00	:5	0	•

View	files	Tes	st		
HTTP m POST	ethod \$				
Query There a + Add p Headers	<i>re no q</i> parame	query p ter	parame	ters	
There a + Add h Request	re no l leader : body	neader	s		
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Output					⊙ S
"This	has	been	comp]	leted	
				\square	

Stripe even gives you a nice on-page checkout experience for free.

Still needs to talk to a backend thing. Like, say, a cloud function.

> Amex Express Checkout Powered by **Stripe** United States

Integration

You can integrate Checkout in as little as a single line of clientside code. As we release new Stripe features, we'll automatically roll them out to your existing Checkout integration, so that you will always be using our latest technology without needing to change a thing.

Example integrations

We have Checkout integration guides for several platforms and languages to get you up and running as quickly as possible:

• <u>Sinatra</u>

Checkout supports two different integrations:

<u>Rails</u>

Second Se	Tools Updates Case Studies	Q Search
JIDES CODE LABS SAMF	LES	
Overview	Note: Pay with Google is one of payment met account and payment tokens on the device. T	hods you can use to get cards from a user's Goo o learn more, read <u>the Google Pay API docs</u> .
Architectural Patterns	After the user authorizes the transaction all	E 🖄 O 🕈 🛛
Design & User Experience 🗸 🗸 🗸	the necessary payment details are sent directly back to the site. For example, for a	echrome.github.io/samples/paymentr
 Add to Home Screen Device APIs Search Optimization 	credit card payment, the site will get back a card number, a cardholder name, an expiration date, and a CVC.	PaymentRequest Free Shipping Sample Available in Chrome 53+ View on GitHub Brows
 Sign in and Credential Management Social Discovery User Input 	Payment Request can also be extended to return additional information, such as shipping addresses and options, payer email, and payer phone. This allows you to get all	Samples Background
Web Payments Intro to the Payment Request API Deep Dive into the Payment Request API	the information you need to finalize a payment without ever showing the user a checkout form.	PaymentRequest Free Shipping Sample googlechrome.github.io Order summary Donation USD \$
Payment Request UX considerations Set up Google Pay API	The beauty of the new process is threefold: from the user's perspective, all the previously tedious interaction—request, authorization,	Shipping Eiji Kitamura Ripping Hills Mori Tower 4ato-ku, TOKYO, 106- 1111-1111 Free shipping worldwide
/ledia & VR 🗸 🗸 🗸	single step; from the website's perspective, it	Payment Visa ••••4242, Eiji Kitamura
erformance V	from the payment method's perspective, there is no process change whatsoever.	EDIT PA
ecurity V	To start getting to grips with API itself, view	
ase Technologies 🗸 🗸 🗸	our deep dive here.	Payment Request Interface
Glossary		
	Except as otherwise noted, the content of this page is license code samples are licensed under the Apache 2.0 License. Fo of Oracle and/or its affiliates. Last updated January 9, 2018.	ed under the Creative Commons Attribution 3.0 Licen r details, see our <mark>Site Policies</mark> . Java is a registered tra

Speaking of which, browsers are stepping up their game here as well. The Web Payment API is essentially free check out UI/UX.

e transaction, all ails are sent ^r example, for a e will get back a name, an

be extended to n, such as tions, payer email, vs you to get all finalize a ring the user a

ess is threefold: , all the previously t, authorization, akes place in a te's perspective, it Script API call; perspective, whatsoever.

h API itself, view

Payment Request Interface

Request ALL

Payment transaction process

Speaking of which, browsers are stepping up their game here as well. The Web Payment API is essentially free check out UI/UX.

The Situation Room

SAY YOU NEED THREADS.

Paragraphs are the ultimate currency of the internet.

Comments

Reply Edit

Andy Bell

I've been using a .js- prefix for a few years now with jQuery and Vanilla stuff. That separation of concern is great for modularity, so you could have:

<div class="[component-name] [js-module-name]"></d

And then have:

<div class="[a-different-component-name] [js-module-If I changed component-name or a-different-componentname , it would only affect my CSS. That's a win in my books. I also use BEM style element selectors. So module-name could have a child element called js-module-name__button .

<div class="[component-name] [js-module-name]"> <button class="js-module-name__button">A button</bu</pre>

</div>

If that button were to suddenly become an <a> tag (plz don't do that), then it'd be all good as far as the JavaScript was concerned.

Unfeature Bury

I've been using prefixed classes for this (separation of concerns) polarbirke for years. I used .fx-* for a while but have moved to .js-* nowadays.

Feature Bury

Alice Wonder

I agree with this, it's what I always do - the data-whatever attributes are extremely useful for this purpose as well as holding bits of data. However css selectors aren't just for class so the title is a bit misleading. You can use any

Local.spf — (MySQL 5.6.34) PM - css-tricks.com/local/wp_comments

missions

4

M

Structure Content Relations Triggers Table Info Query

Search:	(comment_ID ♀) (= ♀) ●					Q Search
ment_ID	comment_post_ID comment_author	com co	comment_author_IP	comment_date	~ co	. comment_content
1615728	265938 Brian Sheridan	bria… ht…	86.45.80.103	2018-02-05 13:20:12	20	Very interesting article. The rise of NLP is certainly a bit of
1615727	203111 MR	spam	75.174.38.181	2018-02-05 12:59:34	20	So much for Microsoft's commitment to keep up with web standard
1615726	265869 Eric Bailey	eric… ht…	139.68.191.252	2018-02-05 12:40:55	20	I think "buttons do things (configure the download), links go p
1615725	265938 Jack Oliver	mrja	77.53.186.165	2018-02-05 12:07:26	20	I'm surprised to not see a reference to Golden Krishna and his
1615722	265938 Alex	mrun… ht…	81.170.171.5	2018-02-05 10:36:48	20	I would argue that voice commands is a form of UI, but it's som
1615721	266243 mazu	jose	79.108.229.247	2018-02-05 10:22:12	20	Oliver maybe you can start learning Gridd css / variables / and
1615720	265938 JK	jami…	108.182.45.9	2018-02-05 10:15:45	20	Hanging out with children while they use Alexa is informative,
1615717	265938 Michael Maaß	m.ma	185.90.129.6	2018-02-05 08:38:33	20	Boils down to choosing the right tool for the job.¶¶There are p
1615716	266243 Rodrigo Ibarra	hola… ht…	189.236.98.84	2018-02-05 08:37:09	20	This is very interesting, however I feel like sameness is not r
1615715	265938 Goose	goos… ht…	96.85.71.57	2018-02-05 07:56:20	20	"And this is how we end up with GLORIOUS UX fails like the one
1615714	266243 Phil Rae	phil… ht…	178.248.33.131	2018-02-05 07:35:19	20	They can. It just comes down to budget. Development of a unique
1615712	21208 rabi	rabi	188.118.51.201	2018-02-05 06:53:17	20	hello, i would to change the display date-year from top to bott
1615708	266243 Phil Rae	phil… ht…	178.248.33.131	2018-02-05 06:15:33	20	Over a decade ago we didn't have the constraints as people coul
1615706	266243 Dave Woods	dave… ht…	79.78.235.83	2018-02-05 03:13:19	20	As much as I love Wordpress, I think the emergence of themes al
1615704	266243 Jamie Lemon	lemo… ht…	212.20.245.10	2018-02-05 02:39:25	20	God, I can only blame Bootstrap* (* correct, I'm not real
1615703	206756 Benatar	bena	77.71.66.134	2018-02-05 01:32:24	20	Hello. If you don't put "undefined" in quotes it doesn't work f
1615701	191777 Ramesh	vrgu	27.7.127.144	2018-02-04 22:48:59	20	wouldn't the longer class names bloat the HTML markups?¶¶ <pre><</pre>
1615700	22040 posthumanist	johk… ht…	81.205.131.141	2018-02-04 22:00:38	20	thank you Louis!
1615696	266243 Digital Noises (@digitalnoisesco) digi… ht…	122.57.134.73	2018-02-04 18:24:06	20	One problem is, that people stop design websites at all. They s
1615692	263632 Nathan Renner	renn	73.34.109.90	2018-02-04 14:30:53	20	Thanks for posting this. I didn't realize these serverless func
1615691	22040 Louis Lazaris	laza… ht…	76.69.142.142	2018-02-04 13:52:41	20	You have to define that in your CSS.qq <pre><code>p {q font-fam</code></pre>
1615690	266243 Rick	rick…	73.225.76.21	2018-02-04 13:31:43	20	Olivier - I think CSS Grid will help that. Sure, a lot of peop
1615688	265869 Chris Boon	cboo	71.127.192.75	2018-02-04 11:20:36	20	What if your download UI element isn't just for a single static
1615687	266243 cd2central	code… ht…	86.30.167.161	2018-02-04 10:19:01	20	<blockquote>4 Sometimes they make me feel dumb, like I'm not i</blockquote>
1615686	266243 milobengtsson	reme… ht…	90.231.38.91	2018-02-04 09:59:22	20	I can totally understand the popularity though. It's minimalist
1615685	266243 Michael Cohen (@sandwich_hlp)	sand ht	77.127.154.134	2018-02-04 09:57:22	20	I like analogies. I think websites are approaching where cars o

But a traditional WordPress site with a MySQL database doesn't lend it self particularly well to this whole Serverless thing.

Support Home > Social > Jetpack Comments

Jetpack Comments

Jetpack Comments replaces your default comment form with a new comment system that has integrated social media login options.

We're breaking down the barriers between you and your audience. When someone reads an article on your site and wants to comment, they can now use one of their existing social networking accounts to post a comment. No longer do they need to create yet another account and profile!

Since it will replace the default WordPress comment form, Jetpack Comments are opt-in. To activate it, just visit **Jetpack** \rightarrow **Settings** on your Dashboard and click the Activate button next to the Comments module.

When activated, Jetpack Comments takes the place of your theme's comment form in this nifty, sleek form:

LEAVE A REPLY

Enter your comment here...

To leave a comment, just click in the box and start typing.

LEAVE A REPLY

Secure https://codex.wordpress.org/Comments_in_WordPress

Codex

Comments in WordPres

Languages: English・한국어・日本語・(Add your I

Comments allow your website's visitors to hav activate comments on a Page or post, WordPr where users can submit their comments. Once content. Whether you want to customize how y comments, WordPress provides a thorough se your site.

Discussion Settings

Before you enable comments on posts or Page Discussion can help make your life as a mode contains a list of options that change how Wor Experimenting with these settings can help you comments to reduce the amount of spam or le encouraging your users to actively participate

Notification

- Attempt to notify any blogs linked to from site to automatically notify the sites you link can then choose to tell their users that anot trackback or pingback.
- Allow link notifications from other blogs

We talked about static site hosting...

There is a whole world of **STATIC SITE BUILDERS** that go along with it.

jekyU

← → C 🌢 Secure https://jekyllrb.com

HOME

DOCS NEWS

HELP

Transform your plain text into static websites and blogs.

Simple

Static

No more databases, comment moderation, or pesky updates to HTML & CSS go in. Static sites install—just your content.

How Jekyll works \rightarrow

Markdown (or Textile), Liquid, come out ready for deployment.

Jekyll template guide \rightarrow

Get up and running in seconds.

Free hosting with GitHub Pages

Sick of dealing with hosting companies? GitHub Pages are powered by Jekyll, so you can easily deploy your site using GitHub for free—custom domain name and all.

Learn more about GitHub Pages \rightarrow

The contents of this website are © 2018 under the terms of the MIT License.

Blog-aware

Q Search the docs

Permalinks, categories, pages, posts, and custom layouts are all first-class citizens here.

Migrate your blog \rightarrow

Quick-start Instructions

∼ \$ gem install jekyll bundler ∼ \$ jekyll new my-awesome-site ∼ \$ cd my-awesome-site ~/my-awesome-site \$ bundle exec jekyll serve # => Now browse to http://localhost:4000

Proudly hosted by **GitHub**

A bunch of Markdown files for content

Some templates

Γ	Ъ

Makes a website

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A bunch of Markdown files for content

+

Some templates

Γ	Ъ

Makes a website

All this stuff lives in a Git repo. 100% of your website is in a repo.

• • • vihui/blogdown-jekyll: Automat ×			
$\leftrightarrow \rightarrow C$ GitHub, Inc. [US]	https://github.com/yihui		
T 38 commits	P 2 branches		
Branch: gh-pages - New pull re	quest		
yihui rename get_config to get_c	config2		
R	rename get_c		
_includes	a brand new		
_layouts	a brand new		
_posts	update read		
sass	some minor o		
CSS	a brand new		

But traditional databases don't go inside repos, so how are we gonna handle comments (and the structured data) if we go down this road?

Chris
Crins
☆ 🕄 🦂 📚 css 🗄

C () daverupert.com/2018/01/bad-month-for-the-main-thread/

main thread. That's good for websites. <u>I've heard Googlers talk about splitting logic into</u> <u>asynchronous Workers</u>. This is good for websites too. My UI and logic are so mixed up, I'm not sure where I can squeeze gains like these, but I'll be looking for opportunities. Web Assembly stands to revolutionize applications as well. So that future is exciting and new.

But darn it all, I just want to build modular websites using HTML and a little bit of JavaScript.

3 Comments Dave Rupert	9 chriscoyier 🔻
♥ Recommend 2 Share	Sort by Oldest 👻
Join the discussion	

bennypowers • 4 days ago

yeah pretty painful. Thanks for the review. ∧ | ∨ · Reply · Share ·

Tschoartschi • 3 days ago

I also think it is a problem to put everything into JavaScript. The folks from Ember are investigating an interesting approach how to transmit templates more efficient in terms of download size and parse speed to the client. They created some binary format for their templates. I think it's still not public available but they presented this "feature" at various conferences. If you want to read about it, the Ember blog is a good starting point: https://emberjs.com/blog/20...

∧ ∨ · Reply · Share ·

9

jolla • 3 days ago

Wait what? People are using so much js on their sites that performance is an actual issue on the UI side of things? You should trash your website if you get performance issues (I'm not talking about games or experimental or art websites). Wow. That's ridiculous.

Maybe I'm oldschool but the last thing I'm adding is JS. A Website has to deliver informations at all costs. And for that it has to work 100% without any client-side script. If it doesn't, the dev failed. I never got to the point where I had to worry about client-side performance. But I'm pretty sure that if you had to think about it, you already screwed it up. \sim Reply \cdot Share \cdot

 *	(8 4 :


Hugo is the fastest tool of its kind. At <1 ms per page the average site builds in less

	Chris		
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Number of Posts



C Secure https://posativ.org/isso/



a commenting server similar to Disgus



by Randall Munroe, CC BY-NC 2.5

» Links

Isso @ PyPi Isso @ GitHub

» Help

Join **#isso** on Freenode or open an issue on GitHub.

Or join the mailing list, just send an email to isso@librelist.com.

» Contribute

Write Code, Translate or Flattr 💋.

» Quick search



Comments written in Markdown

Users can edit or delete own comments (within 15 minutes by default). Comments in moderation queue are not publicly visible before activation.

SQLite backend

Because comments are not Big Data.

Disqus & WordPress Import

You can migrate your Disqus/WordPress comments without any hassle.

Configurable JS client

Embed a single JS file, 40kb (12kb gzipped) and you are done. Supports Firefox, Safari, Chrome and IE10.

» Demo

7 Comments





Anonymous • 17 hours ago

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium at commodi cum deserunt dolore, error fugiat harum incidunt, ipsa ipsum mollitia nam provident rerum capionto quecipit tomporo vitao? Est. qui?



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sso Comments to Hugo 190, Isso, Caddy & Ubuntu"





puthon

AWS Lambda is a cloud function service, just like we looked at with Webtask and Azure cloud functions. Lambda is probably the biggest player.

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Documentati Search What Is AWS Lambda? **Getting Started** Lambda Functions Model(Node.js) (Java) (Python) Handler (Go) (C#) Package

Terms of Use | © 2018, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Secure https://docs.aws.amazon.com/lambda/latest/dg/python-programming-model-handler-types.html



AWS Lambda	Q
Developer Guide	
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Search	٩

- Building Lambda Functions
- Programming Model
- **Programming**
- Programming Model
- Programming Model
 - (Python)
- □ The Context Object (Python)
- Logging (Python)
- Function Errors (Python)
- Programming Model
- Programming Model
- Creating a Deployment
- Test Your Serverless Applications Locally Using SAM Local (Public Beta)

AWS Documentation » AWS Lambda » Developer Guide » Lambda Functions » Building Lambda Functions » Programming Model » Programming Model for Authoring Lambda Functions in Python » Lambda Function Handler (Python)

English

Lambda Function Handler (Python)

At the time you create a Lambda function, you specify a *handler*, which is a function in your code, that AWS Lambda can invoke when the service executes your code. Use the following general syntax structure when creating a handler function in Python.

def handler_name(event, context):

return *some_value*

In the syntax, note the following:

- event AWS Lambda uses this parameter to pass in event data to the handler. This parameter is usually of the Python dict type. It can also be list, str, int, float, or NoneType type.
- context AWS Lambda uses this parameter to provide runtime information to your handler. This parameter is of the LambdaContext type.
- Optionally, the handler can return a value. What happens to the returned value depends on the invocation type you use when invoking the Lambda function:
 - If you use the RequestResponse invocation type (synchronous execution), AWS Lambda returns the result of the Python function call to the client invoking the Lambda function (in the HTTP response to the invocation request, serialized into JSON). For example, AWS Lambda console uses the RequestResponse invocation type, so when you invoke the function using the console, the console will display the returned value.

If the handler returns NONE, AWS Lambda returns null.

• If you use the Event invocation type (asynchronous execution), the value is discarded.

For example, consider the following Python example code.

```
def my_handler(event, context):
    message = 'Hello {} {}!'.format(event['first_name'],
                                    event['last_name'])
    return {
        'message' : message
```



Say we want to roll our own system

Firebase

Part of the build process is reaching out to Firebase to pull in approved comments.

Here's a wildly extravagant with a serverless workflow for comments.



Triggering build processes is easy and cheap on Netlify.



Secure https://jamstack-comments.netlify.com

home where the links are

about where the info is

Jamstack Comments Engine

This example site demonstrates a comments system build by combining form handling, serverless functions, and build triggers on Netlify. Try it out by exploring one of the pages listed below, and then perhaps learn more or get a version of your own to experiment with.



REAL LIFE EXAMPLE of Cloud Functions

C C D E P E N

🗧 🔍 🔿 A Pen I	by Chris Coyier ×	
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Babel









The boss needs it SAY YOU NEED TO BUILDASINPLE (BUT CUSTOM) CRM.

We're not re-building Salesforce or Batchbook here. Just a spreadsheet with a web app.







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The real situation is you need a CRUD app. You need to store a little data, look at it, and be able to change it.

{[1: { name: "Chidi", email: "chidi@chidi.chidi", gift_box: true, }, 2: { name: "Sally", email: "sally@sally.sally", gift_box: false,]}

Airtable has very powerful and modern spreadsheets and forms.

And great **CRUD APIs!**

	🗧 🗧 🗧 🖻 📋 Airtable API	- Project Tr
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	Create a record	remov
	Update a record	
Take	Delete a record	To link Team
D.	TASKS TABLE	all exis
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	ERRORS	"@me
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table.com/appBGh6PVdarxktDi/api/docs#curl/table:design%20projects:update

ct Tracker" \smallsetminus

ate a Design Projects record

date some (but not all) fields of a **Design Projects** record, issue a H request to the record endpoint. Any fields that are not included ot be updated.

ld attachments to **Project Photos**, add new <u>attachment objects</u> to kisting array. Be sure to include all existing attachment objects that ish to retain. For the new attachments being added, url is ed, and filename is optional. To remove attachments, include the ng array of attachment objects, excluding any that you wish to /e.

to new records in Client, Project Lead, Tasks and Project , add new linked record IDs to the existing array. Be sure to include sting linked record IDs that you wish to retain. To unlink records, le the existing array of record IDs, excluding any that you wish to

s may contain "mention tokens". A *mention token* corresponds to a ention" in Airtable's user interface; here in the API it will look like able:mention

nenE1i9oBaGX3DseR">@Alex</airtable:mention>. Mention s cannot be created via this API and should be left intact (or wholly ed) when updating long text fields.

```
node.js
curl
EXAMPLE REQUEST
$ curl -v -XPATCH
https://api.airtable.com/v0/appBGh6PVdarxktDi/
ecIxlw3dYaPyP6y0 \
-H "Authorization: Bearer YOUR_API_KEY" 🔪
-H "Content-type: application/json" \
-d '{
  "fields": {
    "Name": "Tea Packaging"
EXAMPLE RESPONSE
    "id": "recIxlw3dYaPyP6y0",
    "fields": {
        "Name": "Tea Packaging",
        "Project Photos": [
                "id": "attD7CkzgA7c7tJ0j",
                "url":
"https://dl.airtable.com/FAU9xPuwR2WD5BVh2lnQ_
64_626px.jpg",
                "filename": "Bigelow_Location1
                "size": 115957,
                "type": "image/jpeg",
                "thumbnails": {
                    "small": {
"https://dl.airtable.com/wT5T3wzJS3Cm02TIsjQg_
ion16464_626px.jpg",
```









USE CASE

"We all speak a lot, as it's part of a developer advocate's job, and we're also frequently asked where we'll be speaking. For the most part, we each manage our own sites where we list all of this speaking, but that's not a very good experience for people trying to explore, so I made a demo that makes it easy to see who's speaking, at which conferences, when, with links to all of this information." Sarah Drasner

Cloud Developer Advocate Speaking Microsoft Azure

Filter By			
Name	Conference	From	То
Abel Wang	Visual Studio Live	3/13/2017	3/17/2017
Abel Wang	Tech Summit 2017 Amsterdam	3/20/2017	3/21/2017
Abel Wang	Tech Summit 2017 Milan	3/20/2017	3/21/2017
Abel Wang	TechSummit 2017 Seoul	4/26/2017	4/27/2017
Abel Wang	Velocity	6/19/2017	6/21/2017
Abel Wang	VSLive Redmond	8/15/2017	8/16/2017
Abel Wang	Jenkins World	8/29/2017	8/31/2017
Abel Wang	Minneapolis Azure Conference	9/7/2017	9/7/2017
Abel Wang	Visual Studio Partner Summit	9/20/2017	9/21/2017
Abel Wang	MSIgnite 2017	9/24/2017	9/29/2017
Abel Wang	Minnesota Developer Conference	10/2/2017	10/2/2017
Abel Wang	AppConn - Budapest	10/10/2017	10/11/2017
Abel Wang	VS Live -Anaheim	10/16/2017	10/17/2017
Abel Wang	AppConn - Houston	11/1/2017	11/2/2017
Abel Wang	AppConn - Thailand	11/9/2017	11/10/2017
Abel Wang	MS Connect	11/15/2017	11/17/2017
Abel Wang	Tech Summit 2017 Amsterdam	3/20/2017	3/21/2017
Abel Wang	Tech Summit 2017 Milan	3/20/2017	3/21/2017
Abel Wang	TechSummit 2017 Seoul	4/26/2017	4/27/2017
	MSIgnite 2017	0/24/2017	0/20/2017

Location

Las Vegas

Amsterdam

Milan

Seoul

San Jose

Redmond

San Francisco

Minneapolis

Redmond

Orlando, FL

Minneapolis

Budapest

Anaheim

Houston, TX

Bangkok

NYC

Amsterdam

Milan

Seoul

Orlando El



🔍 🔍 🔆 Exploring Data with Server	less ×
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*****CSS-TRICKS

Exploring Data with Serverless and Vue: Automatically Update GitHub Files With Serverless Functions

BY **SARAH DRASNER** ON OCTOBER 10, 2017 **Azure, data visualization, serverless**

I work on a large team with amazing people like Simona Cotin, John Papa, Jessie Frazelle, Burke Holland, and Paige Bailey. We all speak a lot, as it's part of a developer advocate's job, and we're also frequently asked where we'll be speaking. For the most part, we each manage our own sites where we list all of this speaking, but that's not a very good experience for people trying to explore, so I made a demo that makes it easy to see who's speaking, at which conferences, when, with links to all of this information. Just for fun, I made use of three.js so that you can quickly visualize how many places we're all visiting.

Cloud Deve	eloper Advocate Speaki	ng		
Microsoft Azu	re	0		
Filter By	\$			
Name	Conference	From	То	Location
Abel Wang	Visual Studio Live	3/13/2017	3/17/2017	Las Vegas
Abel Wang	Tech Summit 2017 Amsterdam	3/20/2017	3/21/2017	Amsterdam
Abel Wang	Tech Summit 2017 Milan	3/20/2017	3/21/2017	Milan
Abel Wang	TechSummit 2017 Seoul	4/26/2017	4/27/2017	Seoul
Abel Wang	Velocity	6/19/2017	6/21/2017	San Jose
Abel Wang	VSLive Redmond	8/15/2017	8/16/2017	Redmond
Abel Wang	Jenkins World	8/29/2017	8/31/2017	San Francisco
Abel Wang	Minneapolis Azure Conference	9/7/2017	9/7/2017	Minneapolis
Abel Wang	Visual Studio Partner Summit	9/20/2017	9/21/2017	Redmond
Abel Wang	MSIgnite 2017	9/24/2017	9/29/2017	Orlando, FL
Abel Wang	Minnesota Developer Conference	10/2/2017	10/2/2017	Minneapolis
Abel Wang	AppConn - Budapest	10/10/2017	10/11/2017	Budapest
Abel Wang	VS Live -Anaheim	10/16/2017	10/17/2017	Anaheim
Abel Wang	AppConn - Houston	11/1/2017	11/2/2017	Houston, TX
Abel Wang	AppConn - Thailand	11/9/2017	11/10/2017	Bangkok
Abel Wang	MS Connect	11/15/2017	11/17/2017	NYC
Abel Wang	Tech Summit 2017 Amsterdam	3/20/2017	3/21/2017	Amsterdam



Store the data from here as JSON

CRUD functions

Display the data





C��DEPEN Pens Projects ~

+ New Pen

← BACK TO BLOG

How to Build a Serverless Blog on CodePen

JANUARY 15, 2018

@kitt



Serverless.

kind of a phenomenon. All sorts of web elopers can make use of it, including nt-end developers! Here's one way to ik about it: they allow you to take your nt-end skills and do things that typically y a back-end can do. Depending on what all make use of, serverless is possibly re accurately referred to as Cloud Functions Functions as a Service.

e's a rather remarkable thing serverless make possible on the client: saving and







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Secure https://codepen.io/team/codepen/full/WdJyPv/

A Serverless Blog

A SERVERLESS BLOG

All the code that powers this blog is right here.

INTRODUCTION TO THE THESIS OF THESEUS

MON JAN 02 2017

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Read Post

EXPANDING ON THE THESIS OF THESEUS

TUE FEB 28 2017

Etiam tempus scelerisque lacinia. Sed tempor magna id congue sagittis. Nullam tellus lorem, mattis quis justo in, facilisis hendrerit magna. Sed facil...

Read Post

CONSEQUENCES OF THE THESIS OF THESEUS

TUE OCT 31 2017

Nullam ut nibh sed diam pharetra pharetra. Vestibulum metus odio, maximus et







Like modern websites do. YOUR SITE NEEDS TO SEND NOTIFICATIONS











Say it's a bug tracker application. When a bug happens, it should trigger a Slack notification, email, and SMS.



Bug happens!

As a front-end developer, not only can you design that experience, but **you can make it work.**



Secure https://api.slack.com/incoming-webhooks



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Start here

Building Slack apps Recent updates Best practices App blueprints

App features

Internal integrations

Incoming webhooks

Slash commands

Bot users

Dialogs

- Shared Channels
- **Enterprise Grid**
- Legacy custom integr...
- Developer preview

Messages

Introduction

Incoming Webhooks

Send data into Slack in real-time.

Incoming Webhooks are a simple way to post messages from external sources into Slack. They make use of normal HTTP requests with a JSON payload that includes the message text and some options. Message Attachments can also be used in Incoming Webhooks to display richlyformatted messages that stand out from regular chat messages.

Start by setting up an incoming webhook integration in your Slack workspace to try these features out:

- 1. Sending messages
- 2. Adding links
- **3.** Make it fancy with advanced formatting
- 4. Putting it all together
- 5. Packaging as a Slack app

Use **curl**, a simple, ubiquitous tool for sending HTTP requests on the command line, for the *curl examples* that follow.

Webhook = URL

They make use of normalHTTP requests (Ajax) with a JSON payload that includes the message text and some options.



These are essentially APIs for sending emails





Partner with the email service trusted by developers and marketers for time-savings, scalability, and delivery expertise.

See Plans and Pricing

Try for Free

Hitting APIs with secret keys? Hitting webhooks with JSON?

These are jobs for cloud functions!



Webtask



Azure Cloud Functions





Firebase or Google Cloud Functions



Let's look at our little baby infrastructure.





Serverless **Cloud Function**

Serverless **Cloud Function**

Serverless **Cloud Function** Twilio

Sparkpost

Slack



Open source abstraction!



Iambda-mailer ■

AWS Lambda for sending emails. Ready for deployment in 60 seocnds.

This lambda gives your browser (or any client) a backend for sending emails.

Features

- Email Attachments

Quick Usage

// install node-lambda npm install -g node-lambda

// clone the lambda and get inside! git clone https://github.com/eahefnawy/lambda-mailer.git cd lambda-mailer

// install dependencies npm install

// create deployment files (to hold your env vars) touch .env deploy.env event.json

.env file is used by your local machine to test and deploy the lambda, deploy.env is used by your lambda function after deployment. So there might be some duplicate env vars.

open .env and fill it with your AWS credentials: (make sure you have proper IAM permissions)

AWS_ENVIRONMENT=dev

GitHub, Inc. [US] https://github.com/eahefnawy/lambda-mailer

• 30+ pre-configured services (Gmail, Hotmail, SendGrid...etc)

• HTML content as well as plain text alternative

• 30+ supported HTML template engines (handlebars, jade, haml...etc)

• Easy HTML styling with Juice

• Embedded images in HTML

• Unicode to use any characters



Your Thing!

Serverless **Cloud Function**



Your Thing!

Serverless **Cloud Function**

Hey we've become architects!!

Serverless **Cloud Function**

Twilio

Serverless **Cloud Function**

Sparkpost (or whatev)

Serverless **Cloud Function**

Slack



One reason you might reach for a "traditional" server

TO BE A WAY FOR NON-CODERSTO UPDATETHS

Like some kind of "Content" "Management" "System". Let's say CMS for short.

Lorem Ipsum

1. Lorem Ipsum

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1.1 Quis Autem?

Quis autem uel eum iure reprehenderit, qui in ea, qui dolorem eum fugiat, quo uoluptas nulla pariatur?

-1-


Using a "traditional" CMS like WordPress, CraftCMS, or Perch is a classic solution to this.



Drupod **



E ghost



But let's look at other solutions. SERVERLESS

There is another whole class of CMSs called Static Site generators. They fit very nicely into the serverless movement.



	Middleman: Hand-crafted front ×
test framework ×	← → C
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Blazing-fast stat site generator fo ReactGet Started →	A fast, si





Static site generators tend to edge a bit **too nerdy**. Everyone can learn, but you gotta admit learning Markdown and text editors and Git and all that is a bit much to change a phone number.







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Adding elements on the page

New elements are added by dragging toolbar icons down on your page. Don't click them, drag them down.



A newer version of that by Lea Verou.



What is Mavo?

and transform data.

A new, approachable way to create Web applications

Demos

Docs

t started

FAQ

Plugins

Get Mavo

Mavo helps you turn your static HTML into reactive web applications without a single line of programming code and no server backend. Developed in the Haystack Group at MIT CSAIL and led by Lea Verou.

GET MAVO



• Mavo extends the syntax of HTML to describe Web applications that manage, store,

Chris

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☆

🚖 Star

Play!

C i https://mavo.io

MVO

A new, approachable way to create Web applications

Mavo helps you turn your static HTML into reactive web applications without a single line of programming code and no server backend. Developed in the Haystack Group at MIT CSAIL and led by Lea Verou.

GET MAVO

What is Mavo?

 Mave extends the syntax of HTML to describe Web applications that manage, store, and transform data.







"Headless CMS"

A CMS that has no front end at all. It just exposes content via API.







delete your data

Chrie	
	Chris
o/v2/posts	☆ 💿 📚 🦓 🗔 ᠄
	+ - <u>View source</u> 🏶

rendered: "Gonzalo García takes a crack at why webpack (not capitalized like npm) exists at all. No particular disagreements here, but here's my crack at it... We use webpack because we need to <code>import stuff from place;</code>. This is a good pattern. We can use webpack to interpret those statements, as native support for them isn't what it needs to be yet, and it's not clear whether the native version will be smart for performance or not (probably not, at the scope of projects webpack is usually used for). We use webpack because we know we need to concatenate and compress our JavaScript anyway, and managing load order isn't something you wanna handle manually. use webpack because of npm. Powerful features are a <code>yarn</code> or <code>npm i</code> away and so our projects are loaded with stuff to <code>import</code>. We use webpack because we're sure it performs fancy magic that results in good performance-related things for our websites. We cross our fingers we have that right, and we've done our part right. We use webpack because there is a hive mind in this industry and it leads to a lot of us hopping on the trains with the most people on them, and people are hanging out of the windows of the webpack train. I'm very very (very) far from being a webpack expert, but I essentially get it, especially after the screencast Sean Larkin and I did right here, and I know enough my projects benefit from it. ",

rendered: "Gonzalo García takes a crack at why webpack (not capitalized like npm) exists at all. No particular disagreements here, but here's my crack at it… We use webpack because we need to import stuff from place;. This is a good pattern. We can use webpack to interpret those statements, as native support for them isn't

Cloud-Managed Headless CMSs Gives people a CMS with a UI, but delivers content via API so you can work with serverlessly.





We'd better wrap this up.



SERVERLESS



It's not all in. It's a flexible ingredients list.











Media storage

Form processing

Auth services







SERVERLESS

You can build any size of website

Small & Simple

Large & Complex



SERVERLESS

You can build any kind of website



SERVERLESS

You can have any sort of content



There are speed benefits

80% of performance is front-end concerns.

Your own servers: that's on you.

Serverless: companies are incentives to be fast and reliable

20% back-end

There are security benefits



How do I protect and back up my database? What file permissions should PHP files be again? Where do I keep my secrets? What are breach points I should be extra careful about? Why is this my job?



APPLICATION

RUNTIME

HARDWARE

INTEL

INFRASTRUCTURE

AS A SERVICE





-•

APPLICATION

RUNTIME

HARDWARE

INTEL

PLATFORM

AS A SERVICE



-•

APPLICATION

RUNTIME

HARDWARE

INTEL

FUNCTIONS

AS A SERVICE



Serverless isn't 100% better all the time for everything. If you don't like it or it isn't right for, no big deal. Knowing about things is pretty valuable.





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The Power of TERLESS nt-End Developers					
Ideas		Resource	S		
Media Storage Email, SMS, & Notifications CMS's &	Data Storage	Real Time A	uth		
jor Providers					
s? Try the Serverless Cost Calculator.					





@codepen Ochriscoyier

The ALL-POWERFULL FRONT-END Developer

