

Full Static with Nuxt





Debbie O'Brien

 Frontend Tech Lead @Patterson Agency

 Contributor @webpack

 Writer @Ultimate Courses

 Teacher @Vue School

Organiser @MallorcaJS, Vue Spain

 @Nuxt Team Member



Debbie O'Brien



@debs_obrien



Debbie O'Brien



Nuxt Benefits

What Jake said



Vue Storefront

Nuxt



Best-in-class SSR



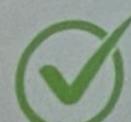
Best practices out of the box



Tons of community modules



Significant reduction in development time



Excellent extensibility



Excellent docs

@filrakowski



It is performance oriented

Automatic code splitting for pages

Resources hints + Http2 support

Smart prefetching -> prefetch links in the viewport

Modern build -> target evergreen browsers



Gridsome or Nuxt?

Whatever
just go Static

Why Static?

No server: cheaper, safer

Better offline support

Better performance

Reduces Carbon footprint

Climate change and the tech community

@callummacrae



Vue.js Amsterdam

Climate change and
the tech community

Callum Macrae

Author of *Vue.js: Up and Running*



orbitadores transmitirán datos del rover 'Mars Curiosity'.

trata de intentar sensibilizar un poco al mundo sobre la necesidad de viajar sin barreras», dijo Ebel en la ciudad alemana de Hanau.



La Antártida, en riesgo por el calentamiento global. El calentamiento global está llevando a un derretimiento masivo «irreversible» del hielo antártico y la eliminación de carbono de la atmósfera es la única solución para retrasar el proceso, dijo ayer una científica. La actividad humana ha intensificado el calentamiento global, lo que podría terminar en un derretimiento de la Antártida, señaló.



Climate
the tec

Callum

What has this
got to do with us?







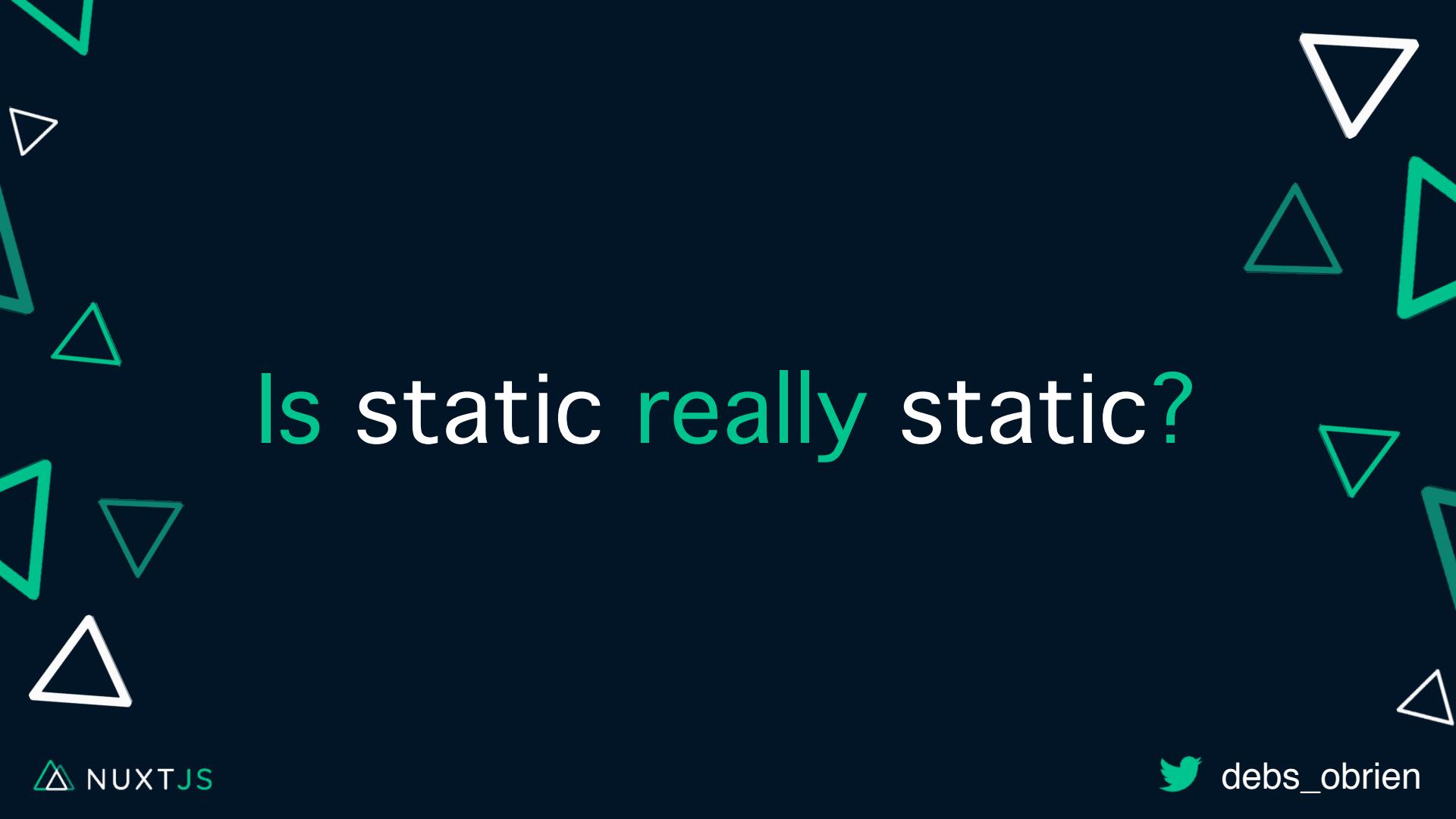
But Static is very Static

Or is it?









Is static **really** static?

API's

Forms

CMS

Auth

e-commerce

Headless CMS

Contentful

CraftCMS

Storyblok

Sanity

Wordpress

Netlify CMS

Contents

Media

Quick add ▾



Collections

Search all

Blog

Blog

New Blog

View as:

GraphQL and Nuxt

Netlify Hooks

Netlify CMS

← Writing in Blog collection
CHANGES SAVED

Delete entry

Published ▾



TITLE

Netlify Hooks

PUBLISH DATE

02/09/2020 6:30 PM

DESCRIPTION

Rebuild your static site automatically with Netlify hooks

BODY

B I <> ⚡ H „ “ ½ ± +

Rich Text Markdown

For static sites we want the site to rebuild depending on a certain actions such as saving data in a database. In order to do this we need to first setup a webhook. With Netlify this is really easy. Once your site is setup and running on Netlify just go to the Build and deploy section of your Netlify account under the settings tab and then scroll to "Build Hooks".

Netlify Hooks

2020-02-09T17:30:50.720Z

Rebuild your static site automatically with Netlify hooks

For static sites we want the site to rebuild depending on a certain actions such as saving data in a database. In order to do this we need to first setup a webhook. With Netlify this is really easy. Once your site is setup and running on Netlify just go to the Build and deploy section of your Netlify account under the settings tab and then scroll to "Build Hooks".

Click on the button "Add build hook" and give your hook a name. Choose the branch you would like it to use, master for production or dev for testing for example. Netlify then generates a Netlify build hook URL. This is all you need as Netlify will take care of the rest by triggering a build and deployment of your site when this hook is called.

Build hooks

Build hooks give you a unique URL you can

Netlify CMS

```
✓ static
  ✓ admin
    {...} config.yml
    ⚡ index.html
```

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Content Manager</title>
    <script src="https://identity.netlify.com/v1/netlify-identity-widget.js"></script>
  </head>
  <body>
    <!-- Include the script that builds the page and powers Netlify CMS -->
    <script src="https://unpkg.com/netlify-cms@^2.0.0/dist/netlify-cms.js"></script>
  </body>
</html>
```

config.yml

```
collections:  
  - name: 'blog'  
    label: 'Blog'  
    format: 'json'  
    folder: 'assets/content/blog'  
    create: true  
    slug: '{{slug}}'  
    fields:  
      - { label: 'Title', name: 'title', widget: 'string' }  
      - { label: 'Publish Date', name: 'date', widget: 'datetime' }  
      - { label: 'Body', name: 'body', widget: 'markdown' }
```

blog

```
└── blog
    ├── _blog.vue
    └── index.vue
```

index.vue

BLOG LIST

GRAPHQL AND NUXT

Setting up your query with GraphQL, Apollo and Nuxt

NETLIFY HOOKS

Rebuild your static site automatically with Netlify hooks

_blog.vue

GraphQL and Nuxt
Netlify Hooks

NETLIFY HOOKS

For static sites we want the site to rebuild depending on a certain actions such as saving data in a database. In order to do this we need to first setup a webhook. With Netlify this is really easy. Once your site is setup and running on Netlify just go to the Build and deploy section of your Netlify account under the settings tab and then scroll to "Build Hooks".

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Build hooks

Build hooks give you a unique URL you can use to trigger a build.

Nuxt Dynamic Routes

```
generate: {
  routes() {
    return fs.readdirSync('./assets/content/blog')
      .map((file) => {
        return {
          route: `/blog/${path.parse(file).name}`,
          payload: require(`./assets/content/blog/${file}`),
        }
      })
  }
}
```

Nuxt Crawler

```
generate: {
  routes() {
    return fs.readdirSync('./assets/content/blog')
      .map((file) => {
        return {
          route: `/blog/${path.parse(file).name}`,
          payload: require(`./assets/content/blog/${file}`),
        }
      })
  }
}
```

Nuxt Crawler

```
<div v-for="post in blogPosts">
  <nuxt-link :to=`/blog/${post.slug}`>
    {{ post.title }}
  </nuxt-link>
</div>
```

Nuxt Crawler

- ✓ Generated /blog/netlify-hooks
- ✓ Generated /blog/graphql-and-nuxt



Not just for blogs

Data



London, UK

SPEAKER
IJS London
2020-04-21



Bern and
Lucerne,
Switzerland

SPEAKER
Switzerland Meetup
2020-04-06
From zero to hero bursting through barriers with
many years of anguish



Texas, USA

SPEAKER
VueConf USA
2020-03-02



Amsterdam,
Holland

SPEAKER
Vue Amsterdam, Frontend Developer Love
2020-02-19



Get realtime GraphQL APIs *instantly*

Hasura is an [open source](#) engine that connects to your databases & microservices
and auto-generates a production-ready GraphQL backend.

Add a new table

The screenshot shows the Hasura GraphQL Engine interface with the 'DATA' tab selected. On the left sidebar, the 'Schema' dropdown is set to 'public'. The main area displays the 'Add a new table' form. The 'Table Name' field contains 'table_name'. In the 'Columns' section, there are three input fields: 'column_name' (empty), 'column_type' (dropdown menu open), and 'default_value' (empty). Below these fields are two checkboxes: 'Nullable' and 'Unique'. A button '+ Frequently used columns' is also present. The 'Primary Key' section has a dropdown menu with the option '-- select --'.

HASURA v1.0.0

GRAPHQL DATA REMOTE SCHEMAS EVENTS SECURE YOUR ENDPOINT

Schema: public

search table/view/function

Tables (2) Add Table

conferences

workshops

SQL

Add a new table

Table Name

table_name

Columns

column_name column_type default_value

+ Frequently used columns

Primary Key

-- select --

Browse, Modify, Delete

Hasura v1.0.0

Schema: public

GraphQL DATA REMOTE SCHEMAS EVENTS SECURE YOUR ENDPOINT

You are here: Data > Schema > public > workshops > Browse Rows

workshops

Browse Rows (9) Insert Row Modify Relationships Permissions

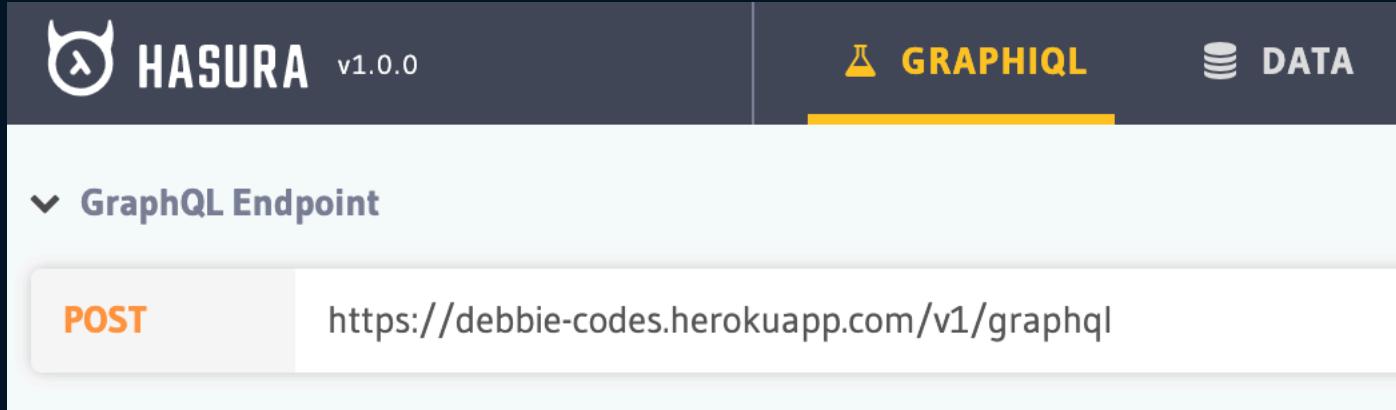
Filter Sort

-- column -- -- op -- -- value -- -- column -- --

Run query

| | id | name | title |
|--|--------------------------------------|-----------------------------|---|
| | 0516ee9c-1fb7-44b1-b732-25aaed29ff92 | Marion Schleifer | Modern and Serverless Web Applications with GraphQL |
| | c480c841-1da9-49a3-a489-99ad9da06738 | Rolf Haug & Alex Kyriakidis | Scaling applications with Vuex |
| | a583ac9b-386a-4a0e-8984-538fea258e15 | Swizec Teller | Build and launch a modern JAMstack web app with React, Grap |
| | 798f9f63-51de-4325-8f40-50f53a26a65c | Evan You | Deep Dive with Vue 3.0 |
| | 16679bef-c684-4c84-b4c6-3a0af720a18b | Harry Roberts | Frontend Performance Building Faster Websites |

GraphQL Endpoint



A screenshot of the Hasura GraphQL interface. At the top, there's a dark header bar with the Hasura logo and version v1.0.0 on the left, and three tabs: 'GRAPHQL' (which is highlighted with a yellow underline), 'DATA', and another tab whose icon is partially visible. Below the header, a section titled 'GraphQL Endpoint' has a dropdown arrow icon and the text 'GraphQLEndpoint'. At the bottom of this section, there are two buttons: 'POST' on the left and a URL 'https://debbie-codes.herokuapp.com/v1/graphql' on the right.

GraphQL Playground

Explorer X GraphiQL  Prettify History Analyze Explorer Voyage

query MyQuery

▶ conferences
▶ conferences_aggregate
▶ conferences_by_pk
▼ workshops
 distinct_on:
 limit:
 offset:
 ▶ order_by:
 ▶ where:
 alt
 blogUrl
 date
 duration
 id
 img
 name
 place
 slidesUrl
 title
 topic
 url

```
1  {  
2    workshops {  
3      alt  
4      duration  
5      id  
6      img  
7      name  
8      place  
9      title  
10     topic  
11     date  
12   }  
13 }  
14 }
```

QUERY VARIABLES

| 1 |
|---|
| |

```
{  
  "data": {  
    "workshops": [  
      {  
        "alt": "Evan You",  
        "duration": "1 day",  
        "id": "798f9f63-51de-4325-8f40-50f53a26a65c",  
        "img": "evan_you_s7n7nc",  
        "name": "Evan You",  
        "place": "Vue Toronto",  
        "title": "Deep Dive with Vue 3.0",  
        "topic": "Vue 3",  
        "date": "2019-11-09"  
      },  
      {  
        "alt": "Rolf Haug & Alex Kyriakidis",  
        "duration": "1 day",  
        "id": "c480c841-1da9-49a3-a489-99ad9da06738",  
        "img": "rolf-alex_rbnn1z.png",  
        "name": "Rolf Haug & Alex Kyriakidis",  
        "place": "Vue London",  
        "title": "Scaling applications with Vuex",  
        "topic": "Vuex",  
        "date": "2019-10-04"  
      },  
      {  
        "alt": "Dmitry Karpov",  
        "duration": "1 day",  
        "id": "d0a2a2e0-1a20-4a20-8a00-1a20a20a20a",  
        "img": "dmitry_karpov_1a20a20a20a.png",  
        "name": "Dmitry Karpov",  
        "place": "Vue Berlin",  
        "title": "The State of the Art in JavaScript",  
        "topic": "JavaScript",  
        "date": "2019-10-05"  
      }  
    ]  
  }  
}
```

Call the GraphQL API

```
modules: [  
  '@nuxtjs/apollo',  
],
```

Apollo

```
import { HttpLink } from ...
import { InMemoryCache } from ...

const GRAPHCMS_API = 'https://yourEndpoint'

export default () => ({
  link: new HttpLink({ uri: GRAPHCMS_API }),
  ...
})
```

Add our Query

```
import gql from 'graphql-tag'

export const workshops = gql`  
query workshops {  
    workshops(order_by: { date: desc }) {  
        title  
        topic  
        date  
        ...  
    }  
}
```

Apollo

```
apollo: {  
    $loadingKey: 'loading',  
    workshops: {  
        query: workshops,  
    },  
},
```

Network Tab - Call API



graphql

debbie-codes.herokuapp.com/v1

▼ General

Request URL: <https://debbie-codes.herokuapp.com/v1/graphql>

Request Method: POST

Status Code: ● 200 OK

Remote Address: 52.19.225.66:443

Referrer Policy: no-referrer-when-downgrade

Generate on Update

GRAPHIQL

DATA

REMOTE SCHEMAS

EVENTS

Create a new event trigger

Create your trigger

trigger_name

Schema/Table [?](#)

public Select table

Trigger Operations [?](#)

Insert Update Delete Via console [?](#) (*Know more*)

Webhook URL [?](#)

URL [▼](#) http://httpbin.org/post

Netlify Build Hooks

Build hooks

Build hooks give you a unique URL you can use to trigger a build.

Build hook name

Branch to build

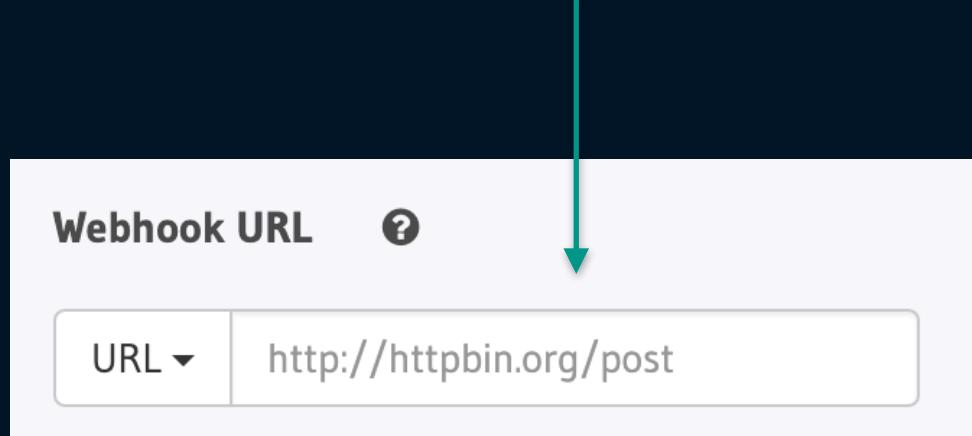
master

[Learn more about build hooks in the docs ↗](#)

Save Cancel

Add the URL to Hasura

`https://api.netlify.com/build_hooks/5e4c190828324653346571ad`



Netlify Deploys

→ Production deploys

Production: master@HEAD Published

Feb 18: Deploy triggered by hook: hasura-event-trigger

Nuxt Hydration

Static Site **becomes** dynamic

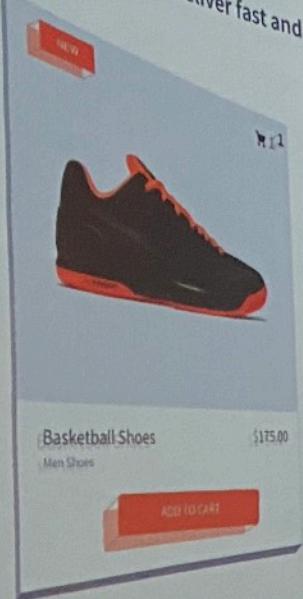


An Animated G Reactivity and

Sarah Drasner

Head of DX at Netlify

Hydration lets us deliver fast and secure sites and still have a reactive UI!! 🎉



```
export default {  
  data() {  
    return {  
      count: 0,  
      new: true,  
    }  
  },  
  methods: {  
    addToCart() {  
      this.count++  
    }  
  }  
};
```

codepen.io/sdrasner/poNyxGKQY

@sarah_edo









Nuxt Static Module

Call the ~~API~~ on page change

Call the payload on page change

Call the payload



payload.js

debbie.codes/_nuxt/__payloads/40653440a7cf32df8f5e/conferences

▼ General

Request URL: https://debbie.codes/_nuxt/__payloads/40653440a7cf32df8f5e//conferences/payload.js

Request Method: GET

Status Code: ● 200

Remote Address: 167.99.137.12:443

Referrer Policy: no-referrer-when-downgrade

Nuxt Static Module

Instead of Apollo smart queries use `AsyncData`
until `target static` is released

Async Data

```
async asyncData({ app, route, error }) {
  try {
    const client = app.apolloProvider.defaultClient
    const response = await client.query({
      query: conferencesQuery,
    })
    return {
      conferences: response.data.conferences,
    }
  } catch (err) {
    if (error.statusCode === 401) {
      router.push('/login')
    }
  }
}
```

Nuxt Static Module

You don't have to **expose** your API to the public

Decide when to publish **new content** from your API by
re-generating your website

Fully static is much **faster**

API calls have latency - always takes longer

Payload files are **cached** and **offline** support with PWA module

Convert to a static site

mode: 'universal',

nuxt generate

`target: 'static'`

Static Hosting Platforms: Netlify, Surge.sh, Now...

`nuxt dev` // start dev server (process.static)

`nuxt build` // bundle the vue app in .nuxt/dist/

`nuxt export` // create dist/ and pre-render routes

SPA inside a Static site

```
generate: {  
    fallback: true,  
    exclude: [/booking/] } 
```

Why Static Sites

- Not having a single point of origin server
- Doesn't need to make subsequent requests
- Better security because they don't have access to the server



- Amazing performance
- Better security



@sarah_edo



Vue.js

An Animated
Reactivity and

Sarah Drasner
Head of DX at Netlify an

Why Static?

No server: cheaper, safer

Better offline support

Better performance

Reduces Carbon footprint



Think Static

Are you ?
NUXT







Thank you



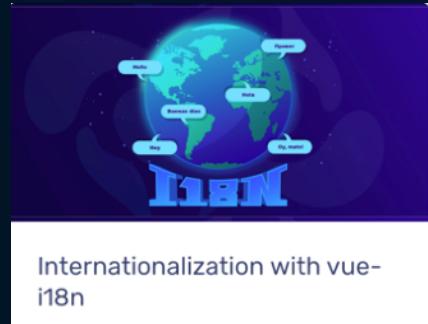
Debbie O'Brien

Frontend Tech Lead
Consultant
Open Source Contributor

<https://github.com/debs-obrien/nuxt-boilerplate-project>



Vue Router for Everyone



Internationalization with vue-i18n