Build a blog with Vue, Strapi and Apollo

Our community is looking for talented writers who are passionate about our ecosystem (Jamstack, open-source, javascript) and willing to share their knowledge/ experiences through our Write for the community program.

Install and configure…

- Vite
- Vue Router passing props…
- Vue3
- Vue Apollo
- Strapi Backend Authentication API

Introduction

Note: The content of this tutorial was revised and updated on February 8, 2022. Some other information such as the title might have been updated later.

If you are familiar with our blog you must have seen that we've released a series of tutorials on how to make blogs using Strapi with a lot of frontend frameworks:

- Next.js
- Gatsby
- React
- Nuxt.js

- Angular

Blogging is excellent to let you share experiences, beliefs, or testimonials. And Strapi is useful at helping you create your blog! So, I am pretty sure that you now understand what this post is about. Let’s learn how to create a blog with your favorite tech: Strapi.

Vue.js is an open-source approachable, performant and versatile framework for building web user interfaces. It was created by Evan You, and is maintained by him and the rest of the active core team members.

Goal

The goal here is to be able to create a simple static blog website using Strapi as the backend and Vue.js for the frontend We will make this tutorial shorter and more efficient by using our new templates.

Prerequisites

This tutorial will always use the **latest version of Strapi**. That is awesome right!? You'll understand why below. You need to have node v.12 installed and that's all.

Setup

- Create a blog-strapi folder and get inside!

```
take blog-strapi
```

Back-end setup

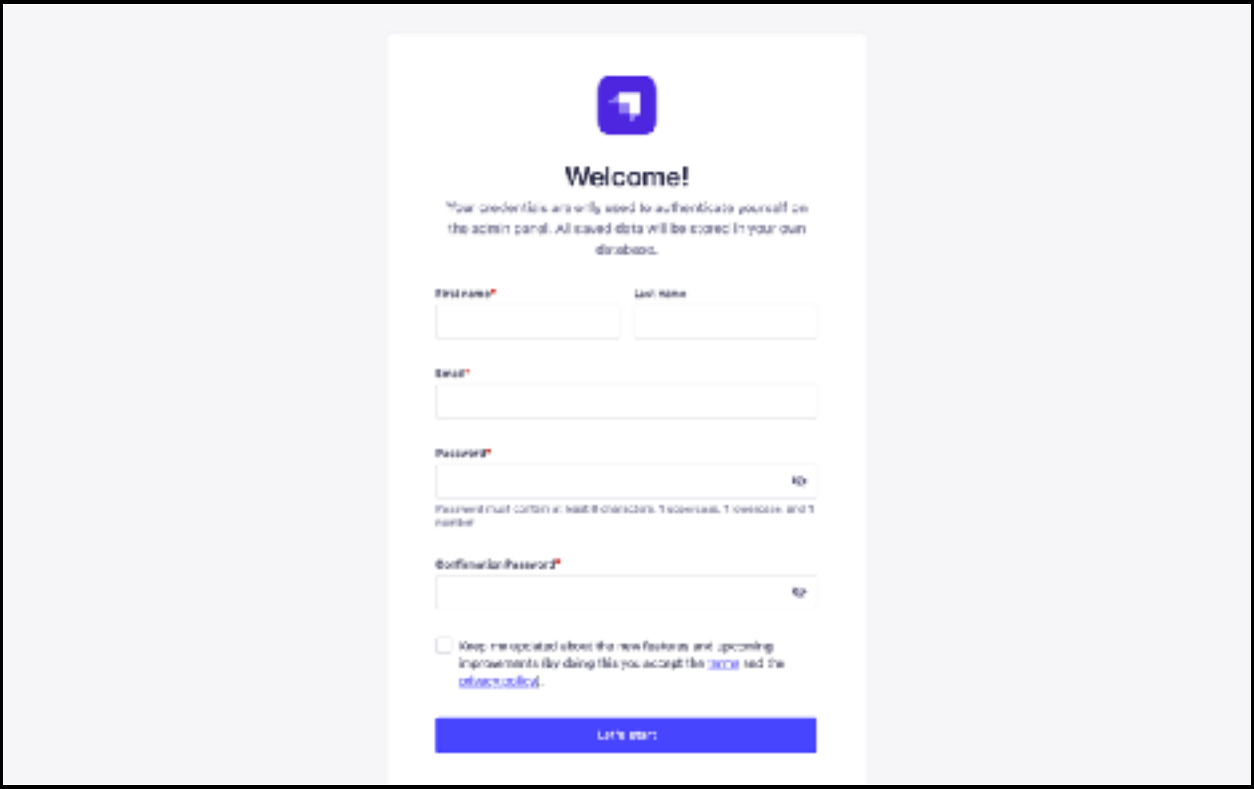
This is the easiest part of this tutorial and it’s all thanks to our expansion team who developed a series of Strapi templates that you can use for some different use case.

These templates are Strapi applications containing existing collection types and single-types suited for the appropriate use case, and data. In this tutorial, we'll use the Blog template and connect a React application to it.

- Create your Strapi backend folder using the Blog template.

```
# Using yarn
yarn create strapi-app backend  --
quickstart --template @strapi/template-
blog@1.0.0 blog

# Using npm
npx create-strapi-app backend  --quickstart
--template @strapi/template-blog@1.0.0 blog
```



Welcome!

Your credentials are only used to authenticate yourself on the admin panel. All saved data will be stored in your own database.

First name*

Last name

Email*

Password*

Password must contain at least 8 characters, 1 uppercase, 1 lowercase and 1 number

Confirmation Password*

Keep me updated about the new features and upcoming improvements (by doing this you accept the terms and the privacy policy).

Let's start

Don't forget that Strapi is running on http://localhost:1337. Create your admin user by signing up!

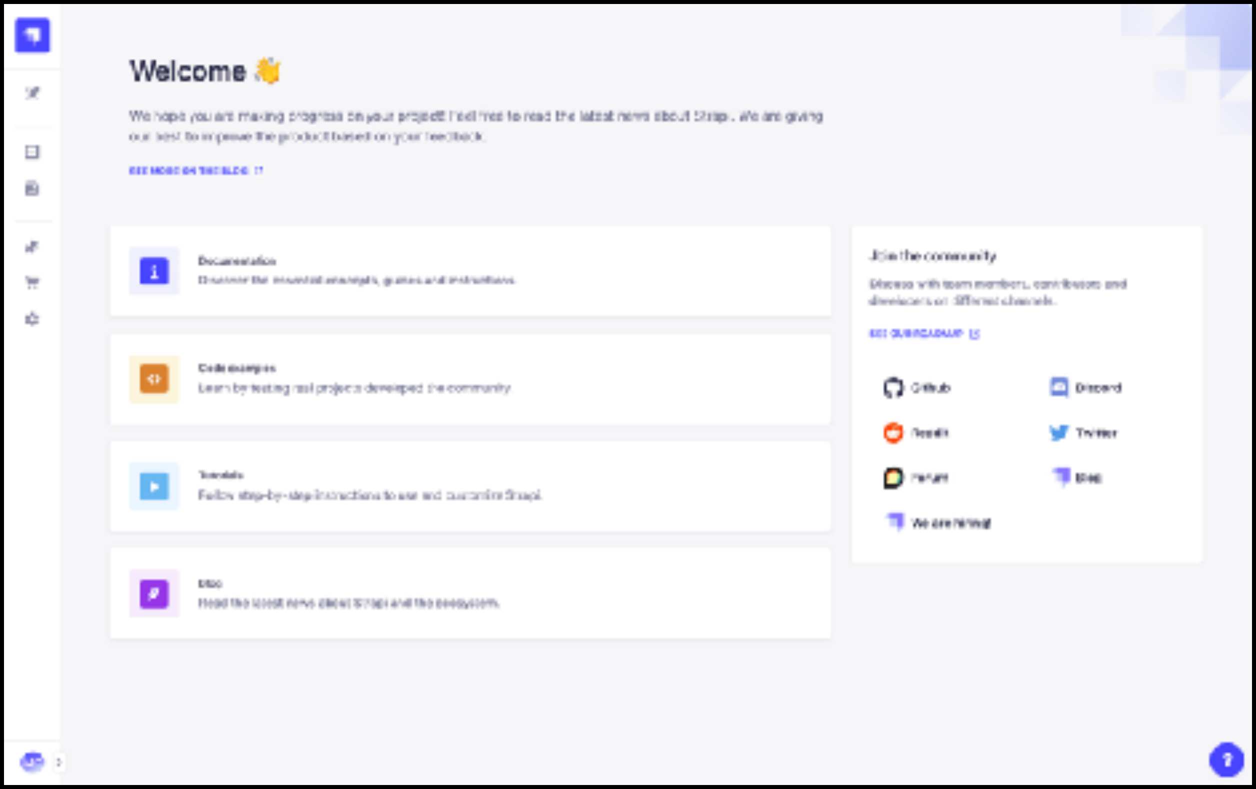
That's it! You're done with Strapi! I'm not kidding, we can start to create our React application now in order to fetch our content from Strapi.

Ok ok wait, let's talk about this amazing template you just created.

You should know that before we had starters and templates we only had tutorials. The idea of creating starters came to us when we realized that we could do something with the end result of our tutorials. Thus our starters were born. However, Strapi evolves quickly, very quickly. At the time, starters were made up of a repository that included the backend as well as the frontend. This meant that updating the Strapi version on all our starters took time, too much time. Therefore we decided to develop templates that are always created with the latest versions of Strapi. This was achieved quite simply by passing the parameter of the repository to the desired template like you just did. This method also gives a recommended architecture for your Strapi project.

These templates provide a solid basis for your Strapi application and include the following:

- 3 Collection types are already created. Article, Category, Writer.
- 2 Single types are already created. Global, Homepage.
- Find and FindOne permissions are open for all of your collection-types and single-types.
- Mock data.



Welcome 👋

We hope you are making progress on your project! Feel free to read the latest news about Strapi. We are giving our best to improve the product based on your feedback.

SEE MORE ON THE BLOG

Documentation
Discover the essential concepts, guides and instructions.

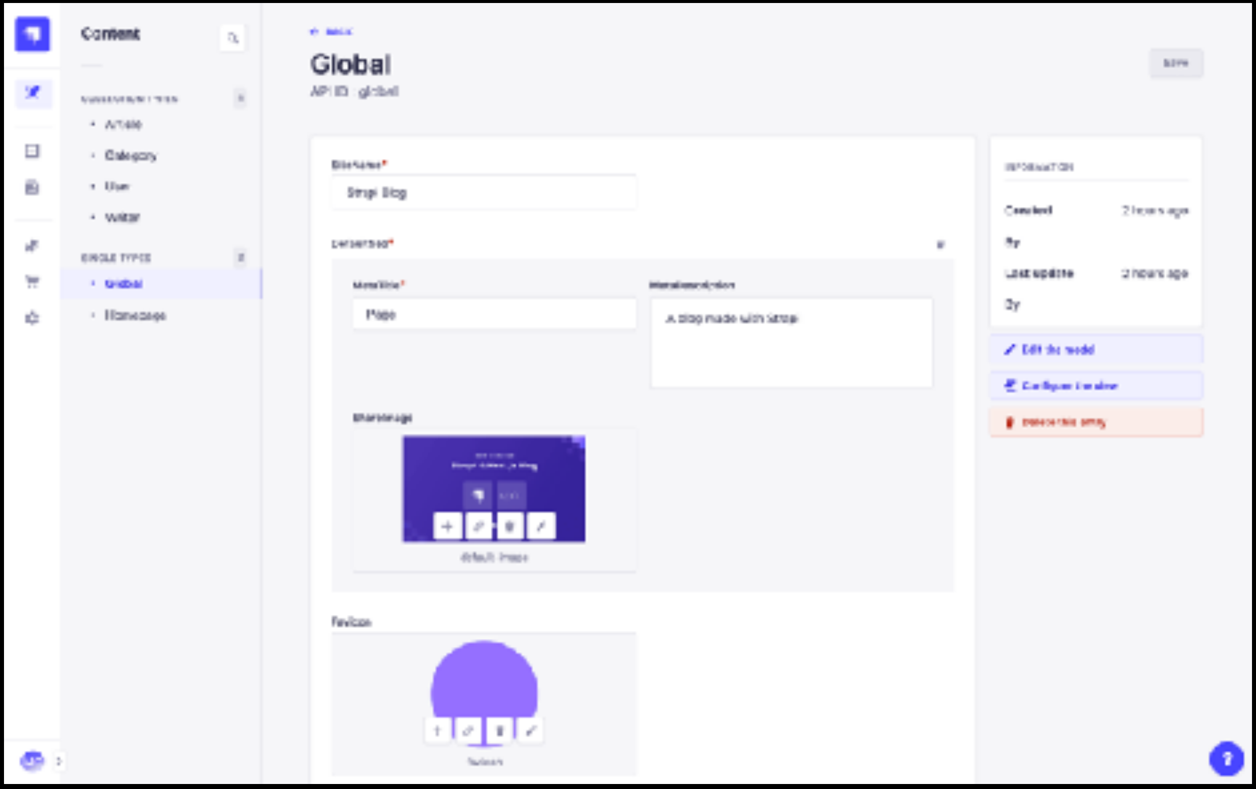
Code examples
Learn by testing real projects developed the community.

Tutorials
Follow step-by-step instructions to use and customize Strapi.

Blog
Read the latest news about Strapi and the ecosystem.

Join the community
Discuss with team members, contributors and developers on different channels.

SEE OUR ROADMAP



Global
API ID : global

SiteName* Strapi Blog

DefaultSeo*

MetaTitle* Page

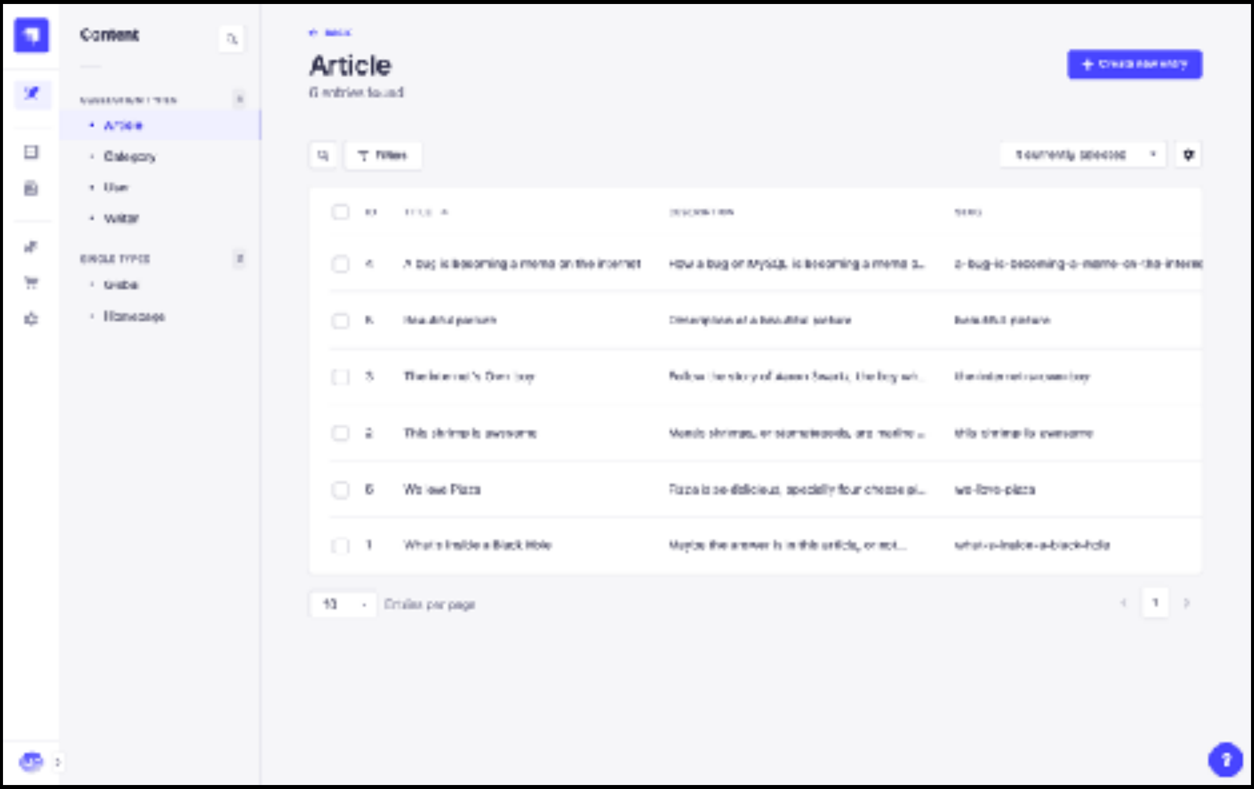
MetaDescription A blog made with Strapi

ShareImage

Favicon

INFORMATION

Created 2 hours ago
By
Last update 2 hours ago
By



Content

COLLECTION TYPES

- Article
- Category
- User
- Writer

SINGLE TYPES

- Global
- Homepage

← Back

Article

6 entries found

+ Create new entry

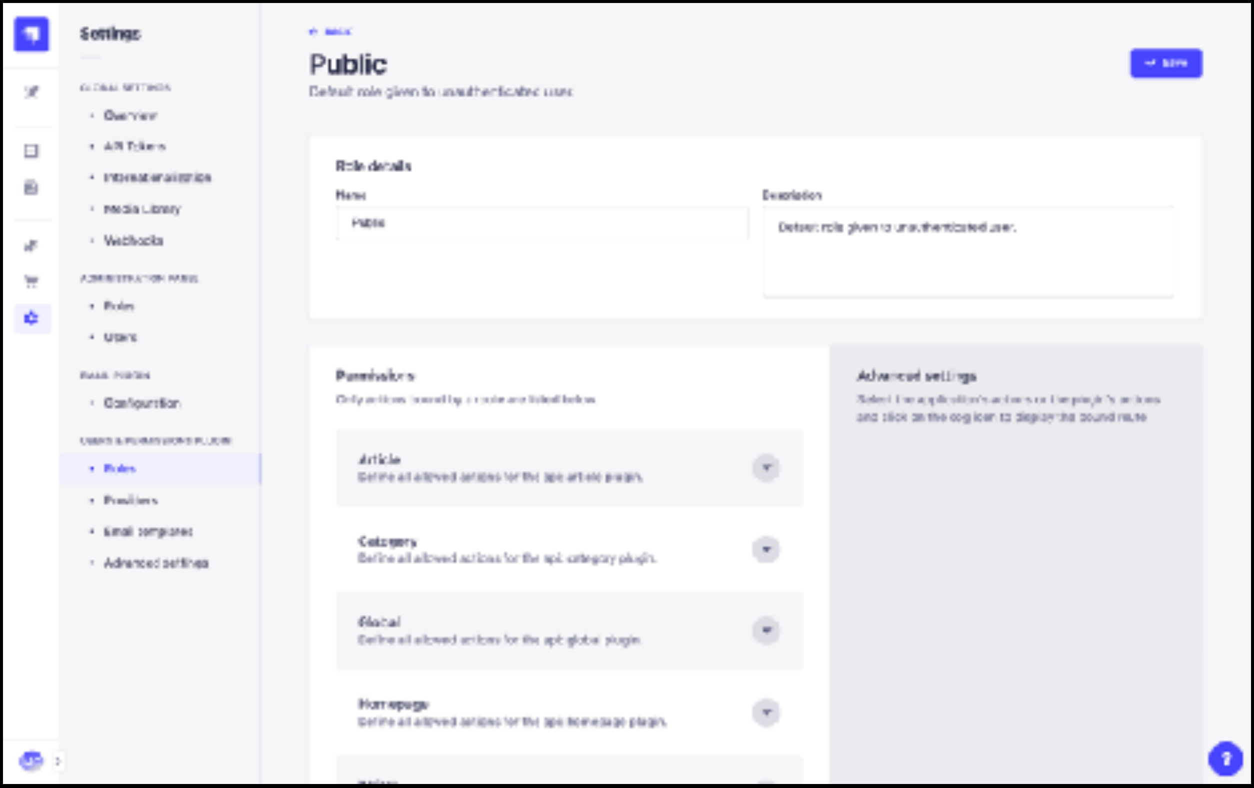
Filters

5 currently selected

ID	TITLE	DESCRIPTION	SLUG
4	A bug is becoming a meme on the internet	How a bug on MySQL is becoming a meme o...	a-bug-is-becoming-a-meme-on-the-interne
5	Beautiful picture	Description of a beautiful picture	beautiful-picture
3	The internet's Own boy	Follow the story of Aaron Swartz, the boy wh...	the-internet-s-own-boy
2	This shrimp is awesome	Mantis shrimps, or stomatopods, are marine ...	this-shrimp-is-awesome
6	We love Pizza	Pizza is so delicious, specially four cheese pi...	we-love-pizza
1	What's inside a Black Hole	Maybe the answer is in this article, or not...	what-s-inside-a-black-hole

10 Entries per page

1



Settings

GLOBAL SETTINGS

- Overview
- API Tokens
- Internationalization
- Media Library
- Webhooks

ADMINISTRATION PANEL

- Roles
- Users

EMAIL PLUGIN

- Configuration

USERS & PERMISSIONS PLUGIN

- Roles
- Providers
- Email templates
- Advanced settings

← Back

Public

Default role given to unauthenticated user.

✓ Save

Role details

Name	Description
Public	Default role given to unauthenticated user.

Permissions

Only actions bound by a route are listed below.

Article
Define all allowed actions for the api::article plugin.

Category
Define all allowed actions for the api::category plugin.

Global
Define all allowed actions for the api::global plugin.

Homepage
Define all allowed actions for the api::homepage plugin.

Advanced settings

Select the application's actions or the plugin's actions and click on the cog icon to display the bound route

Feel free to modify any of this if you want. However, for the purposes of this tutorial, this initial setup should be enough.

Nice! Now that Strapi is ready, you are going to create your React application.

Front-end setup

Well, the easiest part has been completed, let's get our hands dirty developing our blog!

Vue setup

- Install the vue cli by running the following command in your terminal:

```
yarn global add @vue/cli
```

Create a Vue `front-end` server by running the following command:

- `vue create frontend`

Note: The terminal will prompt for some details about your project. Chose `default Vue 3 (babel, eslint)`. Go ahead, and press enter all the way!

Once the installation is over, you can start your frontend app to make sure everything went ok.

```
cd frontend
yarn serve
```

As you might want people to read your blog or to make it "cute & pretty" we will use a popular CSS framework for styling: `UiKit` and also `Apollo` to query Strapi with **GraphQL:**

Dependencies setup

Make sure you are in the `frontend` folder before running the following commands:

Apollo setup

- Install all the necessary dependencies for apollo by running the following command:

```
yarn add graphql graphql-tag @apollo/client
@vue/apollo-option
```

- Create a `vue-apollo.js` file inside your `src` folder containing the following code:

```
import { ApolloClient } from "apollo-
client";
import { createHttpLink } from "apollo-
link-http";
import { InMemoryCache } from "apollo-
cache-inmemory";

// HTTP connection to the API
const httpLink = createHttpLink({
  // You should use an absolute URL here
  uri: process.env.VUE_APP_GRAPHQL_URL ||
"http://localhost:1337/graphql",
});

// Cache implementation
const cache = new InMemoryCache();

// Create the apollo client
const apolloClient = new ApolloClient({
  link: httpLink,
  cache,
});

export default apolloClient;
```

As you can see we are using a `VUE_APP_GRAPHQL_URL` env variable, let's create it in a `.env` file:

- Create a `./env` file at the root of your frontend application containing the following line:

```
VUE_APP_STRAPI_API_URL=http://
localhost:1337
VUE_APP_GRAPHQL_URL=http://localhost:1337/
graphql
```

You are going to use the `VUE_APP_STRAPI_API_URL` later on. Now let's head to our `main.js` file

- Update your `./src/main.js` file to include apollo in your project:

```
import { createApp, h } from "vue";
import { createApolloProvider } from "@vue/
apollo-option";
import apolloClient from "./vue-apollo";

const apolloProvider =
createApolloProvider({
  defaultClient: apolloClient,
});

import App from "./App.vue";

const app = createApp({
  render: () => h(App),
});

app.use(apolloProvider);
app.mount("#app");
```

Basically here you are defining the apollo configurations in the `vue-apollo.js` and then you simply create the provider that you include in your Vue 3 application.

Great, apollo is ready now!

UIkit setup

UIkit is a lightweight and modular frontend framework for developing fast and powerful web interfaces.

- Add UIkit css and js in your `public/index.html` file by adding the following lines:

```
...
<!-- UIkit CSS -->
<link
  rel="stylesheet"
  href="https://cdn.jsdelivr.net/npm/
uikit@3.3.1/dist/css/uikit.min.css"
/>

<link
  rel="stylesheet"
  href="https://fonts.googleapis.com/css?
family=Staatliches"
/>
```

```
<!-- UIkit JS -->
<script src="https://cdn.jsdelivr.net/npm/
uikit@3.3.1/dist/js/uikit.min.js"></script>
<script src="https://cdn.jsdelivr.net/npm/
uikit@3.3.1/dist/js/uikit-icons.min.js"></
script>
...
```

Awesome! It's time to structure our code a little bit!

- Replace the generated code by Vue inside your `App.vue` with the following one:

```
<template>
  <div id="app">Hello world</div>
</template>

<script>
export default {
  name: "App"
};
</script>

<style lang="css">
a {
  text-decoration: none;
}

h1 {
  font-family: Staatliches;
  font-size: 120px;
```

```css
}

#category {
  font-family: Staatliches;
  font-weight: 500;
}

#title {
  letter-spacing: 0.4px;
  font-size: 22px;
  font-size: 1.375rem;
  line-height: 1.13636;
}

#banner {
  margin: 20px;
  height: 800px;
}

#editor {
  font-size: 16px;
  font-size: 1rem;
  line-height: 1.75;
}

.uk-navbar-container {
  background: #fff !important;
  font-family: Staatliches;
}
```

```
img:hover {
  opacity: 1;
  transition: opacity 0.25s cubic-
bezier(0.39, 0.575, 0.565, 1);
}
</style>
```

- Remove the `components/HelloWorld.vue` component

Perfect! You should have a blank page now! I know it's sound weird but it means that you did everything well!

Create the routing of the application

First of all we are going to create the routing of our application using vue-router

- Install `vue-router` by running the following command in your terminal:

```
yarn add vue-router
```

Head to your `main.js` file and replace the code by the following one:

```
import { createApp, h } from "vue";
import { createRouter, createWebHashHistory
} from "vue-router";
```

```
import { createApolloProvider } from "@vue/
apollo-option";
import apolloClient from "./vue-apollo";
import App from "./App.vue";

const apolloProvider =
createApolloProvider({
  defaultClient: apolloClient,
});

const routes = [{ path: "/" }];

// 3. Create the router instance and pass
the `routes` option
// You can pass in additional options here,
but let's
// keep it simple for now.
const router = createRouter({
  // 4. Provide the history implementation
to use. We are using the hash history for
simplicity here.
  history: createWebHashHistory(),
  routes, // short for `routes: routes`
});

const app = createApp({
  render: () => h(App),
});

app.use(router);
app.use(apolloProvider);
app.mount("#app");
```

As you can see, we are simply importing vue-router and telling Vue to use it. We then create our routes. The first one is the main page / and is not using any components yet, we'll do it later.

Create the Nav component

We will create a Nav that will be present on every page of your application. To do this, we will simply call it in our `App.vue`

- Create a `components/Nav.vue` file containing the following code:

```
<template>
  <div>
    <nav class="uk-navbar-container" uk-
navbar>
      <div class="uk-navbar-left">
        <ul class="uk-navbar-nav">
          <li>
            <a href="/">Strapi Blog </a>
          </li>
        </ul>
      </div>

      <div class="uk-navbar-right">
```

```
        <ul class="uk-navbar-nav">
          <li v-for="category in
categories.data" v-bind:key="category.id">
            <router-link
              :to="{ path: '/category/' +
category.attributes.slug }"
              :key="category.attributes.slu
g"
            >

{{ category.attributes.name }}
            </router-link>
          </li>
        </ul>
      </div>
    </nav>
  </div>
</template>

<script>
import gql from "graphql-tag";
export default {
  name: "Nav",
  data() {
    return {
      categories: [],
    };
  },
  apollo: {
    categories: gql`
```

```
      query Categories {
        categories {
          data {
            id
            attributes {
              slug
              name
            }
          }
        }
      }
    `,
  },
};
</script>
```

Here, we are defining a `categories` array that will be filled with the response of this GraphQL query:

```
apollo: {
  categories: gql`
    query Categories {
        categories {
          data {
            attributes {
              slug
              name
            }
          }
        }
```

```
      }
  `
}
```

Let's use this new component inside our `App.vue` component

- Import your Nav component and use it inside your `App.vue` component

```
<template>
  <div id="app">
    <Nav />
  </div>
</template>

<script>
import Nav from "./components/Nav.vue";

export default {
  name: "App",
  components: { Nav }
};
</script>
<style lang="css">
...
```

Awesome! You should see your brand new Nav!

Note The current code is not suited to display a lot of categories as you may encounter a UI issue. Since this blog post is supposed to be short, I will let you improve the code to maybe add a lazy load or something.

For now, the links are not working, you'll work on it later on the tutorial ;)

Create the Articles page

let's display your articles from Strapi now!

- Create a `src/containers` folder and create a `src/containers/Articles.vue` file containing the following code:

```
<template>
  <div>
    <div class="uk-section">
      <div class="uk-container uk-
container-large">
        <h1>Strapi blog</h1>


<ArticlesList :articles="articles"></
ArticlesList>
      </div>
    </div>
  </div>
```

```
</template>

<script>
import ArticlesList from "../components/
ArticlesList.vue";
import gql from "graphql-tag";

export default {
  components: {
    ArticlesList,
  },
  data() {
    return {
      articles: [],
    };
  },
  apollo: {
    articles: gql`
      query Articles {
        articles {
          data {
            attributes {
              slug
              title
              category {
                data {
                  attributes {
                    slug
                    name
                  }
                }
              }
              image {
                data {
                  attributes {
                    url
                  }
                }
              }
            }
          }
        }
      }
    `,
  },
};
</script>
```

Here we are just creating the page that will use a `ArticlesList` component that will display our articles. We will give these articles as a props from the response of this GraphQL query:

```
apollo: {
    articles: gql`
      query Articles {
        articles {
          data {
            attributes {
              slug
              title
              category {
                data {
                  attributes {
                    slug
                    name
                  }
                }
              }
              image {
                data {
                  attributes {
                    url
                  }
                }
              }
            }
          }
        }
      }
    `,
  },
```

- Create a `components/ArticlesList.vue` file containing the following code:

```
<template>
  <div>
    <div class="uk-child-width-1-2" uk-
grid>
      <div>
        <router-link
```

```
          v-for="article in leftArticles"
          :to="{ path: '/article/' +
article.attributes.slug }"
          class="uk-link-reset"
          :key="article.attributes.slug"
        >
          <div class="uk-card uk-card-
muted">
            <div class="uk-card-media-top">
              <img
                :src="api_url +
article.attributes.image.data.attributes.ur
l"
                alt=""
                height="100"
              />
            </div>
            <div class="uk-card-body">
              <p
                id="category"
                v-
if="article.attributes.category"
                class="uk-text-uppercase"
              >

{{ article.attributes.category.data.attribu
tes.name }}
              </p>
              <p id="title" class="uk-text-
large">
```

```
                {{ article.attributes.title
}}
              </p>
            </div>
          </div>
        </router-link>
      </div>
      <div>
        <div class="uk-child-width-1-2@m
uk-grid-match" uk-grid>
          <router-link
            v-for="article in
rightArticles"
            :to="{ path: '/article/' +
article.attributes.slug }"
            class="uk-link-reset"
            :key="article.attributes.slug"
          >
            <div class="uk-card uk-card-
muted">
              <div class="uk-card-media-
top">
                <img
                  :src="api_url +
article.attributes.image.data.attributes.ur
l"
                  alt=""
                  height="100"
                />
              </div>
              <div class="uk-card-body">
                <p
                  id="category"
                  v-
if="article.attributes.category"
                  class="uk-text-uppercase"
                >

{{ article.attributes.category.data.attribu
tes.name }}
                </p>
                <p id="title" class="uk-
text-large">

{{ article.attributes.title }}
                </p>
              </div>
            </div>
          </router-link>
        </div>
      </div>
    </div>
  </div>
</template>

<script>
export default {
  data: function () {
    return {
      api_url:
process.env.VUE_APP_STRAPI_API_URL,
    };
  },
  props: {
    articles: Object,
  },
  computed: {
    leftArticlesCount() {
      return
Math.ceil(this.articles.data.length / 5);
    },
    leftArticles() {
      return this.articles.data.slice(0,
this.leftArticlesCount);
    },
    rightArticles() {
      return this.articles.data.slice(
        this.leftArticlesCount,
        this.articles.data.length
      );
    },
  },
};
</script>
```

Here we are simply displaying our articles by separating them on left and right side for design purpose:

```
computed: {
    leftArticlesCount() {
      return
Math.ceil(this.articles.data.length / 5);
    },
    leftArticles() {
      return this.articles.data.slice(0,
this.leftArticlesCount);
    },
    rightArticles() {
      return
this.articles.data.slice(this.leftArticlesC
ount, this.articles.data.length);
    },
  },
```

We are using the `api_url: process.env.VUE_APP_STRAPI_API_URL` in order to display images from Strapi

Now it's time to display this page, remember the route you defined without a component? Let's tell your Vue app to use this `containers/Articles` component when you are visiting /

- Modify your VueRouter instance by adding the following code inside your `main.js` file:

```
...
import Articles from "./containers/
Articles";
```

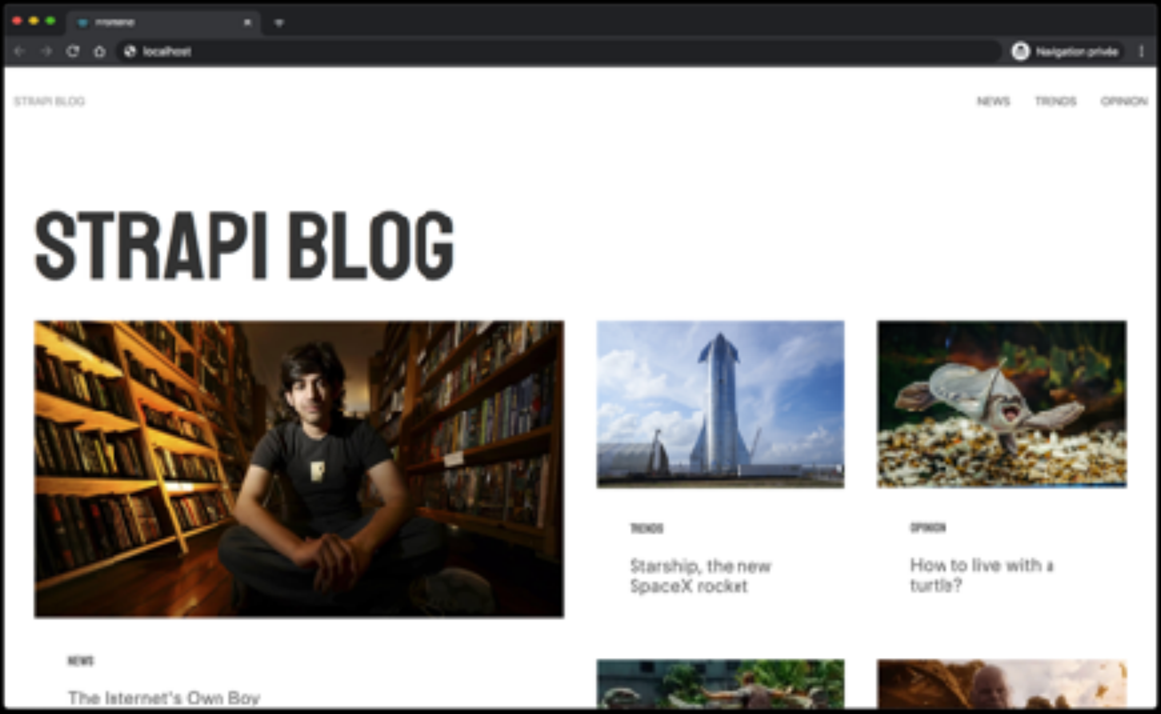
```
...

const routes = [{ path: "/", component:
Articles }];
...
```

One last thing, we need to tell Vue where to place this component.

- Add a `router-view` component just under your `Nav` component inside your `App.vue` component:

```
<template>
  <div id="app">
    <Nav />
    <router-view :key="$route.fullPath"></
router-view>
  </div>
</template>
...
```



Article page

First of all you'll need to install some dependencies:

- Install `moment` and `vue-markdown-it` by running the following command:

```
yarn add moment vue-markdown-it
```

You can see that if you click on the article, there is nothing. Let's create the article page together!

- Create a `containers/Article.vue` file containing the following:

```
<template>
  <div v-if="articles.data">
    <div
      v-
if="articles.data[0].attributes.image"
      id="banner"
      class="uk-height-small uk-flex uk-
flex-center uk-flex-middle uk-background-
cover uk-light uk-padding"
      :data-src="
        api_url +
articles.data[0].attributes.image.data.attr
ibutes.url
      "
      uk-img
    >

<h1>{{ articles.data[0].attributes.title }}
</h1>
    </div>

    <div class="uk-section">
      <div class="uk-container uk-
container-small">
        <vue-markdown-it
          v-
if="articles.data[0].attributes.content"
```

```
          :source="articles.data[0].attribu
tes.content"
          id="editor"
        />
        <p v-
if="articles.data[0].attributes.publishedAt
">
          {{

moment(articles.data[0].attributes.publishe
dAt).format("MMM Do YY")
          }}
        </p>
      </div>
    </div>
  </div>
</template>

<script>
var moment = require("moment");
import VueMarkdownIt from "vue-markdown-
it";
import gql from "graphql-tag";

export default {
  data() {
    return {
      articles: {},
      moment: moment,
      api_url:
process.env.VUE_APP_STRAPI_API_URL,
      routeParam: this.$route.params.slug,
    };
  },
  components: {
    VueMarkdownIt,
  },
  apollo: {
    articles: {
      query: gql`
        query Article($slug: String!) {
          articles(filters: { slug: { eq:
$slug } }) {
            data {
              attributes {
                slug
                title
                content
                category {
                  data {
                    attributes {
                      slug
                      name
                    }
                  }
                }
                image {
                  data {
                    attributes {
                      url
                    }
                  }
                }
              }
            }
          }
        }
      `,
      variables() {
        return {
          slug: this.routeParam,
        };
      },
    },
  },
};
</script>
```

Here we are fetching the url id with `routeParam: this.$route.params.id` and setting it in our GraphQL variables:

```
variables() {
  return {
    slug: this.routeParam
  };
}
```

Now we simply need to configure the router in our `main.js` file

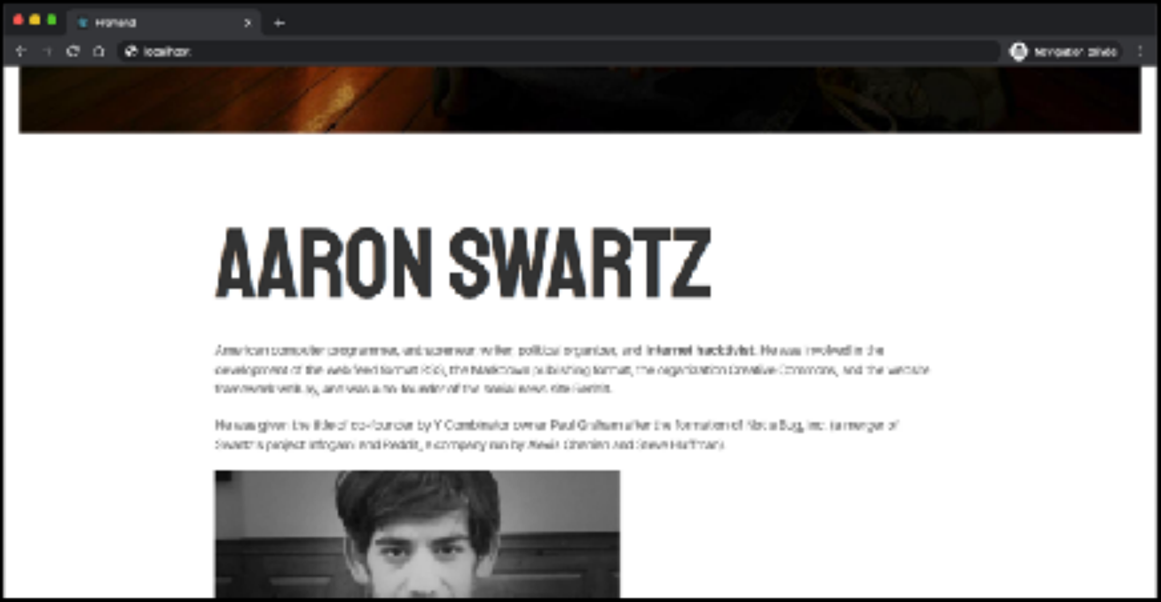
- Configure a new route in your `main.js` file

```
...
import Articles from "./containers/
Articles";
import Article from "./containers/Article";

...

const routes = [
  { path: "/", component: Articles },
  {
    path: "/article/:slug",
    component: Article,
  },
];
...
```

Click on any article!


AARON SWARTZ

American computer programmer, entrepreneur, writer, political organizer, and Internet hacktivist. He was involved in the development of the web feed format RSS, the Markdown publishing format, the organization Creative Commons, and the website framework web.py, and was a co-founder of the social news site Reddit.

He was given the title of co-founder by Y Combinator owner Paul Graham after the formation of Not a Bug, Inc. (a merger of Swartz's project Infogami and Reddit), a company run by Alexis Ohanian and Steve Huffman.

Categories

Let's create a page for each category now!

- Create a `containers/Category.vue` file containing the following code:

```
<template>
  <div>
    <div class="uk-section">
      <div class="uk-container uk-
container-large">

<h1>{{ category.data[0].attributes.name }}
</h1>
```

```
        <ArticlesList
          :articles="category.data[0].attri
butes.articles.data || []"
        ></ArticlesList>
      </div>
    </div>
  </div>
</template>

<script>
import ArticlesList from "../components/
ArticlesList";
import gql from "graphql-tag";

export default {
  data() {
    return {
      category: [],
      routeParam: this.$route.params.slug,
    };
  },
  components: {
    ArticlesList,
  },
  apollo: {
    category: {
      query: gql`
        query Category($slug: String!) {
          categories(filters: { slug: { eq:
$slug } }) {
            data {
              attributes {
                slug
                name
                articles {
                  data {
                    attributes {
                      slug
                      title
                      content
                      category {
                        data {
                          attributes {
                            name
                          }
                        }
                      }
                      image {
                        data {
                          attributes {
                            url
                          }
                        }
                      }
                    }
                  }
                }
              }
            }
          }
        }
      `,
      variables() {
        return { slug: this.routeParam };
      },
    },
  },
};
</script>
```

The code is pretty similar to the previous `containers/Article.vue` file. We are fetching articles depending on the category we are in the url:

```
apollo: {
    category: {
      query: gql`
        query Category($slug: String!) {
          categories(filters: { slug: { eq:
$slug } }) {
            data {
              attributes {
                slug
                name
                articles {
                  data {
                    attributes {
                      slug
                    title
                    content
                    category {
                      data {
                        attributes {
                          name
                        }
                      }
                    }
                    image {
                      data {
                        attributes {
                          url
                        }
                      }
                    }
                  }
                }
              }
            }
          }
        }
      }
    `,
    variables() {
      return { slug: this.routeParam };
    },
  },
},
```

Again we simply need to configure the router in our `main.js` file

- Configure a new route in your `main.js` file

```
import Article from "./containers/Article";
import Articles from "./containers/
Articles";
import Category from "./containers/
Category";

...

const routes = [
  { path: "/", component: Articles },
  {
    path: "/article/:slug",
    component: Article,
  },
  {
    path: "/category/:slug",
    component: Category,
  },
];
```

Click on any Category on your Nav!

Awesome! You can now navigate through categories :)

Conclusion

Huge congrats, you successfully achieved this tutorial. I hope you enjoyed it!

Still hungry?

Feel free to add additional features, adapt this project to your own needs, and give your feedback in the comments section.

If you want to deploy your application, check our documentation: https://strapi.io/documentation/3.0.0-beta.x/guides/deployment.html

Write for the community

Contribute and collaborate on educational content for the Strapi Community https://strapi.io/write-for-the-community

Can't wait to see your contribution!

Please note: Since we initially published this blog, we released new versions of Strapi and tutorials may be outdated. Sorry for the inconvenience if it's the case, and please help us by reporting it here.

Get started with Strapi by creating a project using a starter or trying our live demo. Also, consult our forum if you have any questions. We will be there to help you.

See you soon!