



Enhance SFMC CloudPages with JavaScript Using VueJS



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Avagate / Stashr

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THE SPOT
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CloudPages

In-Platform Applications and Landing Pages



Simple

A single page to create public facing user experiences.

Flexible

Can use HTML and Client-Side JavaScript to enhance your pages.

Powerful

Combined with Server-Side JavaScript and AMPscript, leverage data in SFMC.



VueJS

The Progressive JavaScript Framework



Approachable

Builds on top of standard HTML, CSS and JavaScript with intuitive API and world-class documentation.

Performant

Reactive, designed to be used with or without a build step.

Versatile

Incrementally adoptable ecosystem that scales between a library and a full-featured framework.



Benefits of VueJS



Template Syntax

Extends HTML, Familiar

Reactive

Tracks Changes, Updates the Document Object Model

Components

Reusable, Isolated

No Build Step

Designed to work with and without a build step

```
template: `
  <div>
    <p>{{heroHeadline}}</p>
    <p>{{heroSubheader}}</p>
    <!--
      Using VueJS v-if directive to easily hide/show the below paragraph
      based on the subscriberInfo Props
    -->
    <p v-if="subscriberInfo.name && subscriberInfo.email">
      Hey, {{subscriberInfo.name}} at {{subscriberInfo.email}}
    </p>
  </div>
`
```

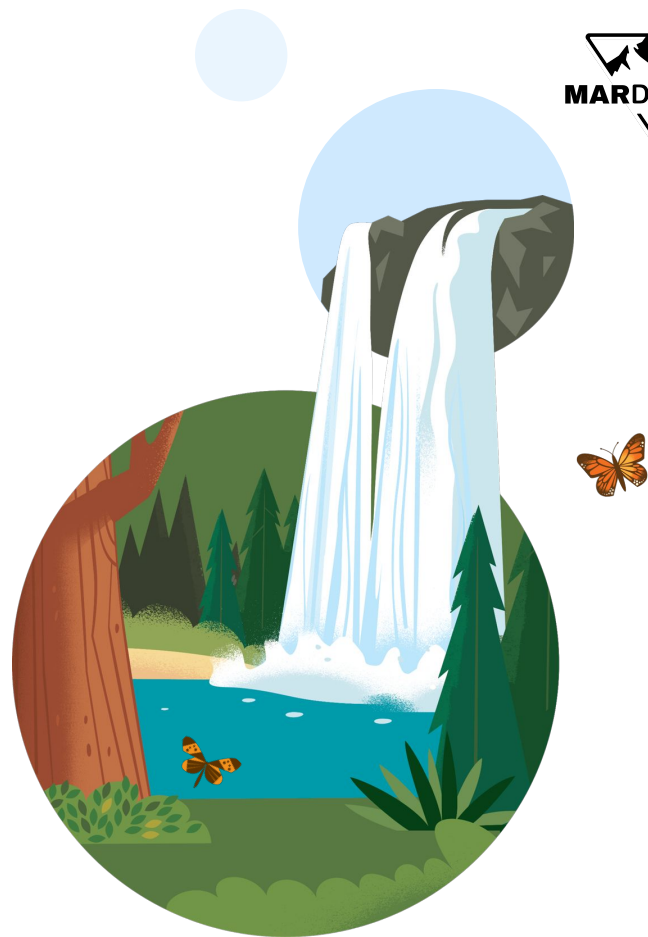


Thinking modular makes complexity approachable

Each component has its purpose

Components can be reusable

Easily Add/Remove Components/Features



Let's Look at Some Code

Familiar Structure

Standard HTML Tags

VueJS via CDN

CDN import allows for no build step

Container div

Div Container that renders application

Core AppJS object

Sets up and mounts the main app to Container div

```
<!DOCTYPE html>
<html>

<head>
  <!--
    Import VueJS Framework via CDN
    https://vuejs.org/
  -->
  <script src="https://unpkg.com/vue@3/dist/vue.global.js"></script>
</head>

<body>
  <!-- div container to mount VueApp -->
  <div id="app">
    Hey, {{subscriberData.name}} at {{subscriberData.email}}
  </div>

  <!-- CodeSnippet Blocks Remove ClientSide Script Tags -->
  <script>
    /**
     * Main VueJS App Component
     **/
    const AppJS = {
      // Data function returns $data object
      data() {
        return {
          subscriberData: {
            name: 'Astro',
            email: 'Astro@gastroworld.io'
          }
        };
      },
    };

    // Initiate/configuration of main Vue Application
    const app = Vue.createApp(AppJS).mount('#app');
  </script>
</body>

</html>
```



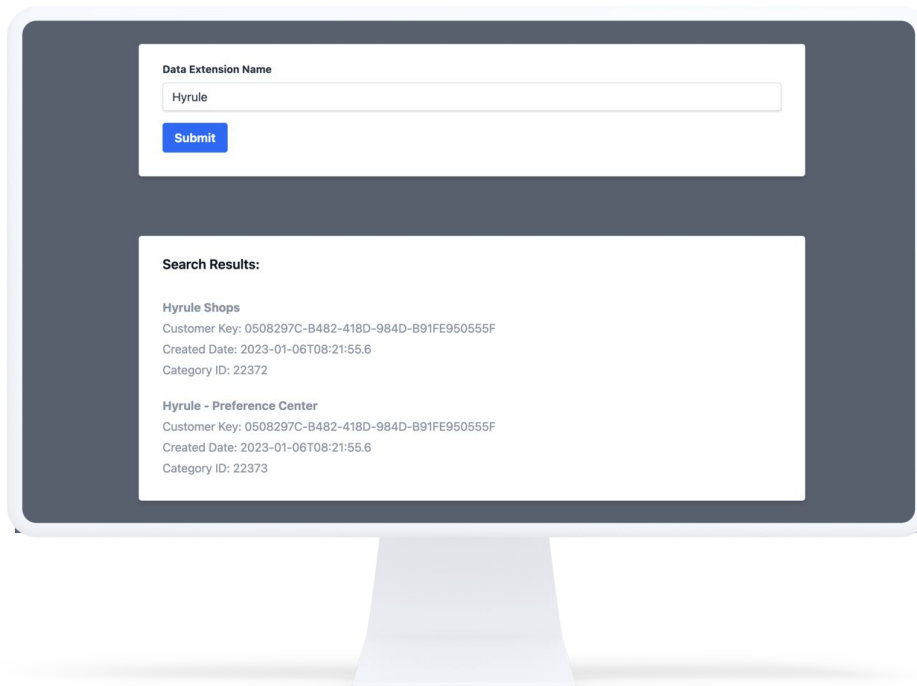
Let's build something

Simple Search with Results

Working in Modularized Components

Using Code Snippet Content Blocks

Asynchronous Submit Method



CloudPage Template

Minimal Code

Core Structural HTML

CDN Imports

AMPscript Imports

```
<!DOCTYPE html>
<html>
<head>
  <!-- VueJS via CDN: https://vuejs.org/ -->
  <script src="https://unpkg.com/vue@3/dist/vue.global.js"></script>
  <!-- TailwindCSS: https://tailwindcss.com/ -->
  <script src="https://cdn.tailwindcss.com"></script>
</head>
<body>
  <div id="app">
    <section>
      <div>
        <form>
          <div>
            <label>
              Data Extension Name
            </label>
            <input
              id="dataExtensionName"
              type="text"
              v-model="formData.dataExtensionName"
            >
          </div>
        </form>
      </div>
    </section>
  </div>
</body>
</html>
```

```
<!DOCTYPE html>
<html>
<head>
  <!-- VueJS via CDN: https://vuejs.org/ -->
  <script src="https://unpkg.com/vue@3/dist/vue.global.js"></script>
  <!-- TailwindCSS: https://tailwindcss.com/ -->
  <script src="https://cdn.tailwindcss.com"></script>
</head>
<!--
  CloudPage HTML ContentBlock:
  Content Builder/DataExtension_Search/appHTML
-->
<body class="bg-gray-500">
  %%=ContentBlockByID('9202')=%%
</body>
<!--
  CloudPage JavaScript Imports ContentBlock:
  Content Builder/DataExtension_Search/appJS
-->
%%=ContentBlockByID('9204')=%%
```

```
    },
    {
      CustomerKey: '0508297C-B482-418D-984D-B91FE950555F',
      Name: 'Hyrule - Preference Center',
      CreatedDate: '2023-01-06T08:21:55.6',
      ModifiedDate: '2023-01-06T08:21:55.6',
      CategoryID: 22373
    },
  ],
};
}
}
// Initialize configuration of main Vue Application
const app = Vue.createApp(AppJS).mount('#app');
</script>
```



Data Extension Name

Submit



Search Results:

Hyrule Shops
Customer Key: 0508297C-B482-418D-984D-B91FE950555F
Created Date: 2023-01-06T08:21:55.6
Category ID: 22372

Hyrule - Preference Center
Customer Key: 0508297C-B482-418D-984D-B91FE950555F
Created Date: 2023-01-06T08:21:55.6
Category ID: 22373



Core Components

App_JS

```
const AppJS = {
  // Register Components
  components: {
    DataExtensionSearch,
    DataExtensionResults,
  },
  // Data function returns $data object
  data() {
    return {
      config: {
        apiBaseUrl:
          "https://{{tssd}}.pub.sfmcc-content.com/{{id}}",
      },
      dataExtensionReturn: [],
    };
  },
  methods: {
    submitSearch: async function (searchTerm) {
      // Submit Request
    },
  },
};

// Initiate/configuration of main Vue Application
const app = Vue.createApp(AppJS).mount("#app");
```

App_HTML

```
<div id="app">
  <!-- Search Component -->
  <data-extension-search-container
    @submit-search="submitSearch"
  >
  </data-extension-search-container>

  <!-- Results Component -->
  <data-extension-search-results
    :search-results="dataExtensinReturn"
  >
  </data-extension-search-results>
</div>
```

Child Components

JavaScript Object

HTML as Template String

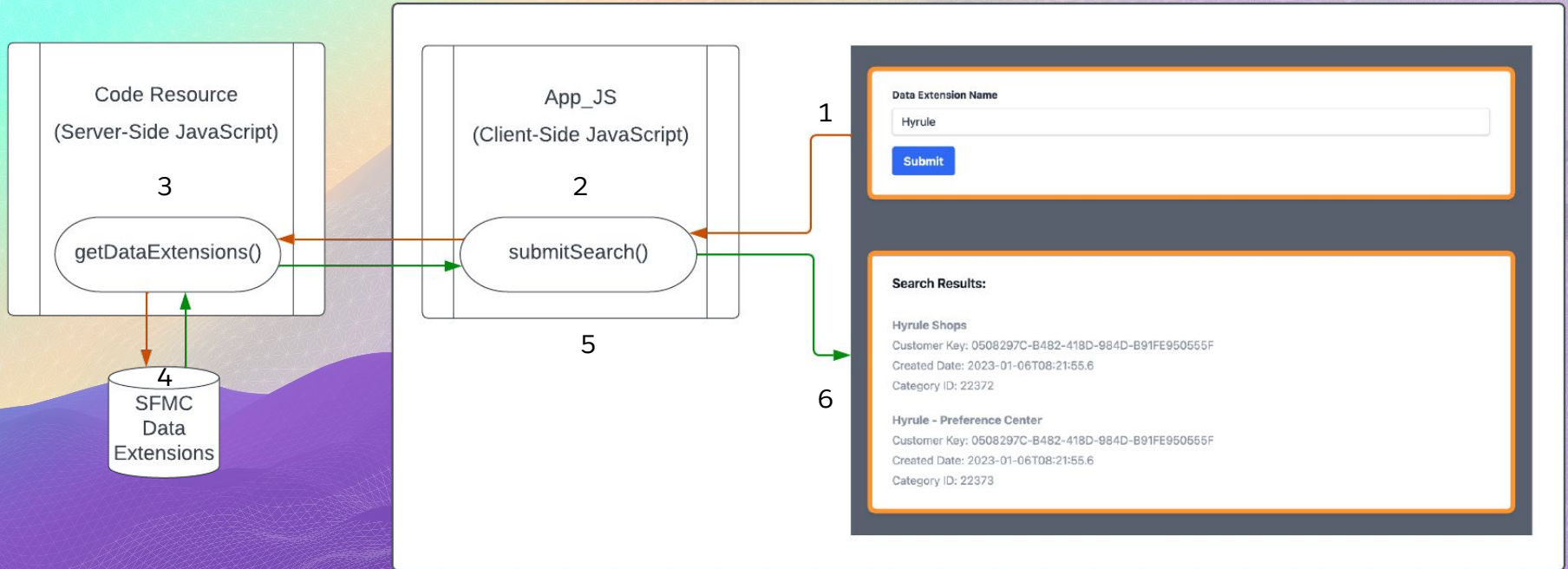
Can take data from parent component

Can pass data to parent component



```
const DataExtensionSearchContainer = {
  data() {
    return {
      formData: {
        dataExtensionName: ''
      }
    };
  },
  methods: {
    submitSearch: function () {
      if(this.formData.dataExtensionName.length === 0){
        return;
      }

      this.$emit(this.formData.dataExtensionName)
    }
  },
  template: `
    <section>
      <form>
        <div>
          <label for="dataExtensionName">
            Data Extension Name
          </label>
          <input
            id="dataExtensionName"
            type="text"
            v-model="formData.dataExtensionName"
          >
        </div>
        <div>
          <button
            @click="submitSearch"
            type="button"
          >
            Submit
          </button>
        </div>
      </form>
    </section>
  `
};
```



Code Resource
(Server-Side JavaScript)

3

`getDataExtensions()`

4

SFMC
Data
Extensions

App_JS
(Client-Side JavaScript)

2

`submitSearch()`

5

Data Extension Name

Hyrule

Submit

Search Results:

Hyrule Shops

Customer Key: 0508297C-B482-418D-984D-B91FE950555F
Created Date: 2023-01-06T08:21:55.6
Category ID: 22372

Hyrule - Preference Center

Customer Key: 0508297C-B482-418D-984D-B91FE950555F
Created Date: 2023-01-06T08:21:55.6
Category ID: 22373

DevTools

Visualize your data

Track down problem components

See events and their resulting actions

Test variables/state directly in the browser



Find components...

<Root> fragment

<DataExtensionSearch>

<DataExtensionResults>

<DataExtensionSearch> Filter state...

data

formData: Reactive

dataExtensionName: "Hyrule"

Data Extension Name

Hyrule

Submit

Search Results:

Hyrule Shops

Customer Key: 0508297C-B482-418D-984D-B91FE950555F

Created Date: 2023-01-06T08:21:55.6

Category ID: 22372

Hyrule - Preference Center

Customer Key: 0508297C-B482-418D-984D-B91FE950555F

Created Date: 2023-01-06T08:21:55.6

Category ID: 22373

When Should VueJS be used?

Small to Medium sized pages/apps

Handling and keeping track of a lot of data





Thank you!



Socials & Full Project
Code

