VueDC

Announcements

- **Vue.js London**
  - September 20-21, 2018
  - Follow @bencodezen on Twitter for updates and his updates on the conference

- **VueDC CodeLabs #5**
  - September 27th, 2018
  - Politico, Rosslyn, VA

- **Connect.Tech - Atlanta, Georgia**
  - October 17-19, 2018
  - Dedicated Vue.js track
  - Three Vue.js workshops

- **VueToronto - Toronto, Canada**
  - November 14-16, 2018

We're always looking for speakers!

If you don't have a topic, that's okay! We can work with you to come up with one or collaborate together on a talk.

And if you're interested in being a part of our show & tell, let us know so we can slot you in a future meetup!

Reach out to us at vuejsdc@gmail.com!

Many thanks to our **gold** sponsor **Bloomberg BNA**!

Storybook and Storyshot Testing w/ Vue.js

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What is Storybook?

Storybook (https://storybook.js.org/) is an community driven open source project that allows you to develop UI components in isolation.

Storybook by itself is great but addons like make it even better.

You can use it to provide documentation for app components, a pattern library or a design system (https://storybook.js.org/examples/).

Storybook Setup

Install with Vue CLI 3:

Storybook plugin:
https://github.com/storybooks/vue-cli-plugin-storybook

Install storybook-vue-router dependency:
https://github.com/gvaldambrini/storybook-router

Storybook Setup

Storybook file structure:

```
config/storybook/
  –addons.js
  –config.js

src/stories/
```

Storybook Setup

config/storybook/config.js:

```
import { configure, addDecorator } from '@storybook/vue'
import StoryRouter from 'storybook-vue-router'
addDecorator(StoryRouter())
function loadStories() {
 require('../../src/stories/ComponentName.stories')
}
configure(loadStories, module)
```

Storybook Stories

src/stories/Component.stories.js:

```
import { storiesOf } from '@storybook/vue'
import Component from '../components/Component.vue'

storiesOf('Component', module).add('default', () => ({
 components: { Component },
 template: '<Component/>'
}))
```

Global Decorator

You can add a global template decorator to your storybook config which allows you to add global styling like fonts and backgrounds.

Global Decorator

```
import { configure, addDecorator } from '@storybook/vue'
import Vue from 'vue'
import StoryRouter from 'storybook-vue-router'
import AppStorybook from '../../src/stories/AppStorybook.vue'

Vue.component('AppStorybook', AppStorybook)

addDecorator(StoryRouter())

addDecorator(() => {
 return {
   template: '<AppStorybook><story/></AppStorybook>'
 }
})

function loadStories() {
 require('../../src/stories/ComponentName.stories')
}
configure(loadStories, module)
```

Storybook Addons

With Vue CLI 3 install dependency you want. Not all addons will work with Vue.

(https://github.com/storybooks/storybook/blob/master/ADDONS_SUPPORT.md)

Storybook Addons

config/storybook/addons.js:

```
import '@storybook/addon-actions/register'
import '@storybook/addon-links/register'
import '@storybook/addon-viewport/register'
import '@storybook/addon-notes/register'
```

config/storybook/config.js:

```
import { withNotes } from '@storybook/addon-notes'

addDecorator(withNotes())
```

Testing with Storyshot

Unit testing test code logic like if statements (Jest).

E2E test user functionally like clicking on a button produces the desired response (Nightwatch).

Visual regression testing automates the testing of how an app looks (Storyshot).

Visual Regression Testing

Visual regression testing test your html and CSS through images. Here’s how it works:

An initial image is taken
You make changes
Another image is taken
The 2 images are compared for differences

Storyshot Setup

With Vue CLI 3 install

```
@storybook/addon-storyshots
@storybook/addon-storyshots-puppeteer
```

(https://github.com/storybooks/storybook/tree/master/addons/storyshots/storyshots-core)

(https://github.com/storybooks/storybook/tree/master/addons/storyshots/storyshots-puppeteer)

Storyshot Setup

jest.config.js:

```
module.exports = {
 moduleFileExtensions: ['js', 'json', 'vue'],
 transform: {
   '^.+\\.vue$': 'vue-jest',
   '.+\\.(css|styl|less|sass|scss|png|jpg|ttf|woff|woff2)$': 'jest-transform-stub',
   '^.+\\.jsx?$': 'babel-jest'
 },
 transformIgnorePatterns: ['<rootDir>/node_modules/(?!(@storybook/.*\\.vue$))'],
 testPathIgnorePatterns: ['<rootDir>/test/e2e/.*'],
 moduleNameMapper: { '^@/(.*)$': '<rootDir>/src/$1' },
 snapshotSerializers: ['jest-serializer-vue'],
 testMatch: ['**/tests/unit/**/*.spec.js', '**/src/stories/**/*.test.js'],
 testURL: 'http://localhost:8080',
 verbose: true
}
```

Storyshot Setup

src/stories/storyshots.test.js:

```
import initStoryshots from '@storybook/addon-storyshots'
import { imageSnapshot } from '@storybook/addon-storyshots-puppeteer'
import expect from 'expect'

const { configureToMatchImageSnapshot } = require('jest-image-snapshot')

initStoryshots({
 configPath: 'config/storybook',
 suite: 'storyshots',
 test: imageSnapshot({
   beforeScreenshot(page) {
     page.setViewport({ width: 750, height: 100 })
   },
   storybookUrl: 'http://localhost:6006'
 })
})

const toMatchImageSnapshot = configureToMatchImageSnapshot({
 customDiffConfig: { threshold: 0 }
})

expect.extend({ toMatchImageSnapshot })
```

Customize Storyshot

Storyshot uses Puppeteer

The default viewport is 800x600 but you can change that by add the below to src/stories.storyshots.test.js:

```
test: imageSnapshot({
 beforeScreenshot(page) {
   page.setViewport({ width: 750, height: 100 })
 }
})
```

The height must be set but the screenshot will auto adjust the height.
(https://github.com/GoogleChrome/puppeteer/blob/v1.8.0/docs/api.md#pagesetviewportviewport)

Use Storyshot

Storyshot runs with unit tests The first time an image will be generated.

Each time after that a diff image will be generated if there is a discrepancy.

Questions?

Thanks everyone for coming and hope to see you at the next meetup!

If you need support on a day to day, we got you.

Make sure to:

- Check out our Discord channel (https://discordapp.com/invite/6MZWP8z)
- Bookmark our site (https://www.vuedc.io)
- Find talk resources on GitHub (https://github.com/VueDC)