Validations in the Composition Age

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news.vuejs.org

#140 ## Tuesday, May 7, 2019

Vuex v3.1.1 released. Vue-CLI v4.0-alpha is here; Managing state with Apollo and more!

Hello!

Whoa, there is so much content this week we had a really hard time picking up the articles (some of them might show up next week).

First of all, Vuex got a new release which will definitely make the NativeScript devs happy, since now it supports debugging with the remote Vue Devtools. 🎉

The Vue-CLI v4.0.0-alpha has also been released with several meaningful changes like bumping the versions on webpack-chain, core-js, ESLint, and workbox in the PWA plugin. Take it for a spin and let us know of any issues.

Also, Natalia has written an amazing article on managing state when using Apollo and is probably a must read those of you considering using Apollo in your project.

Cheers,

— Damian Dulisz

PLAY THE PODCAST

Open Source Work

Vue-Multiselect

Universal select/multiselect/tagging component for Vue.js

Vuelidate

Simple, lightweight model-based validation for Vue.js

Vue-Global-Events

Register global events as a component

with Eduardo San Martin Morote @posva

FormVueLatte

Forms, Vue and Coffee ☕

with Marina Mosti @MarinaMosti

Technical Lead

@Coursedoginc

Thanks to all my supporters!

https://github.com/users/shentao/sponsorship

Vueconf.US

Vue School

storyblok

Vue Mastery

VueJobs

And all the amazing **individuals** 💚

Validations in the Composition Age

Validation libraries in Vue.js 2.x

Vee-Validate

Template Driven Validation Framework
created by Abdelrahman Awad

```
<ValidationProvider rules="min:3" v-slot="{ errors }">
  <input v-model="value" type="text">
  <span>{{ errors[0] }}</span>
</ValidationProvider>
```

Validation libraries in Vue.js 2.x

Vuelidate

Model-based Validations
created by Damian Dulisz
and Paweł Grabarz

```
export default {
  data () {
    return {
      password: '',
      repeatPassword: ''
    }
  },
  validations () {
    return {
      password: {
        required,
        minLength: minLength(7),
      },
      repeatPassword: {
        sameAs: sameAs(‘password'),
      }
    }
  }
}
```

Validation libraries in Vue.js 2.x

Current problems with Vuelidate:

- No lazy validation support.
- No built-in support for error messages.
- Mediocre support for async-validators.
- Requires validation rules for the whole data model at once.
- Hard to share the validation results between components.
  Especially from a child to the parent.
- Complicated source code including several hacks to make it work with Vue 2.x, that makes it hard to maintain and contribute to.

Vue.js 3.0

Vuelidate v2.0 alpha

vuelidate/vuelidate/tree/next

```
yarn add @vuelidate/core @vuelidate/validators
```

Vuelidate v2.0

- Complete rewrite
- Built for Vue 3.0
- Half the code, quarter the complexity
- Mostly backwards compatible
- Lightweight (currently 1.6 kB min+gzip)

Vuelidate v2.0

Basic component with `password` and `repeatPassword` in the state.

```
export default {
  setup () {
    const password = ref('')
    const repeatPassword = ref('')


    return {
      password,
      repeatPassword,
    }
  }
}
```

Vuelidate v2.0

Let’s import our new Vuelidate composition function `useVuelidate`.

It accepts and object containing the rules and an object containing the state that the rules will validate.

```
import useVuelidate from ‘@vuelidate/core'

export default {
  setup () {
    const password = ref('')
    const repeatPassword = ref('')
    const v$ = useVuelidate(
      rules,
      { password, repeatPassword }
    )

    return {
      password,
      repeatPassword,
      v$
    }
  }
}
```

Vuelidate v2.0

The rules, similar to Vuelidate 0.x should map 1:1 to the state that will be passed.

```
import useVuelidate from ‘@vuelidate/core'

export default {
  setup () {
    const password = ref('')
    const repeatPassword = ref('')
    const rules = {
      password: {
        required,
        minLength: minLength(7),
      },
      repeatPassword: {
        sameAs: sameAs(password),
      }
    }

    const v$ = useVuelidate(
      rules,
      { password, repeatPassword }
    )

    return {
      password,
      repeatPassword,
      v$
    }
  }
```

Vuelidate v2.0

Demo Time!

Vuelidate v2.0

Built-in Error Messages support

Vuelidate v2.0

All 21 built-in validators come with messages and params already set up.

Vuelidate v2.0

All 21 built-in validators come with messages and params already set up.

```
alpha
alphaNum
and
between
decimal
email
integer
ipAddress
macAddress
maxLength
maxValue
minLength
minValue
not
numeric
or
required
requiredIf
requiredUnless
sameAs
url
```

Vuelidate v2.0

```
alpha
alphaNum
and
between
decimal
email
integer
ipAddress
macAddress
maxLength
maxValue
minLength
minValue
not
numeric
or
required
requiredIf
requiredUnless
sameAs
url
```

You choose which one to import from `@vuelidate/validators`

Vuelidate v2.0

`@vuelidate/validators`

- Fully tree-shakeable.
- Separate package.
- Separate release cycle.
- Easy to contribute.

Vuelidate v2.0

Build your own validators!

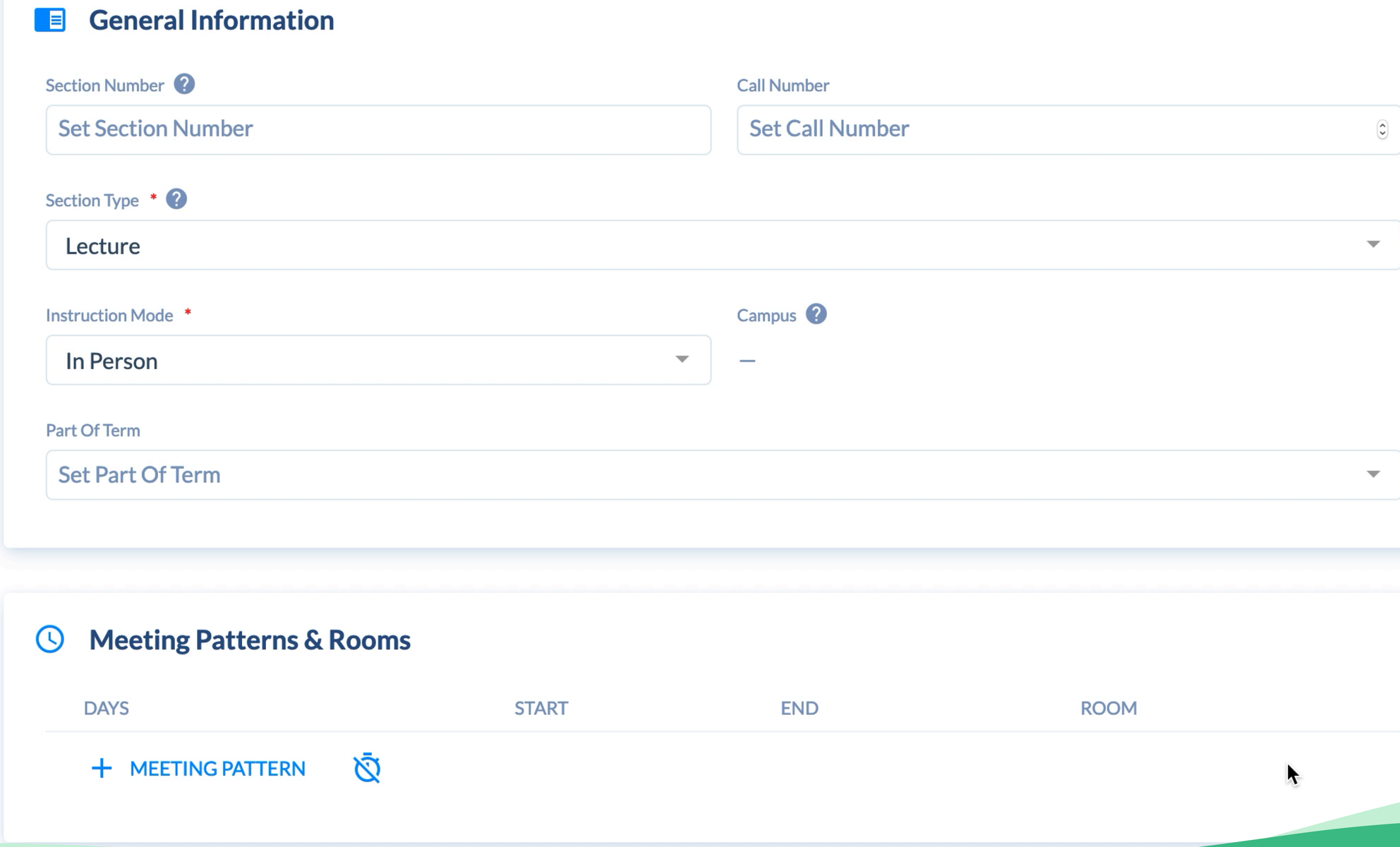
```
import minLength from '../raw/minLength'

export default length => ({
  $validator: minLength(length),
  $message: ({ $params }) => `This field should be at
    least ${$params.length} long.`,
  $params: { length }
})
```

Submit a **Pull Request** to share it with others!

Forms

Forms


General Information
Section Number
Set Section Number
Call Number
Set Call Number
Section Type *
Lecture
Instruction Mode *
In Person
Campus
—
Part Of Term
Set Part Of Term
Meeting Patterns & Rooms
DAYS
START
END
ROOM
MEETING PATTERN

Forms

Editing Section Template

EDIT PREVIEW

General Information

Section Number

Set Section Number

Call Number

Set Call Number

Section Type *

Lecture

Instruction Mode *

In Person

Campus

—

Part Of Term

Set Part Of Term

Meeting Patterns & Rooms

DAYS	START	END	ROOM

+ MEETING PATTERN

Solution:

Schema Based Forms

Common issues with schema form libraries

- Only supports predefined input components.
  - Can’t be used with existing UI component libraries like Vuetify, Quasar of Buefy.
  - Limited possibilities when it comes to more complex data structures.
- Not compatible with external validation libraries like vee-validate or vuelidate that you might already use in your app.

FormVueLatte

Lightweight Schema Generated Forms

vuelidate/formvuelatte

FormVueLatte 

Lightweight Schema Generated Forms

- “Bring Your Own Components” Idea
  - No built-in UI input components
  - Works with all v-model compatible components
- Super lightweight (less than 100 LoC)

Created by **Marina Mosti** and **Damian Dulisz**

FormVueLatte 

Lightweight Schema Generated Forms

Demo Time!

What about validations? 🤔

Introducing...

FormVueLatteVuelidatte

Just kidding 😅

FormVueLatte 

Lightweight Schema Generated Forms

Demo Time!

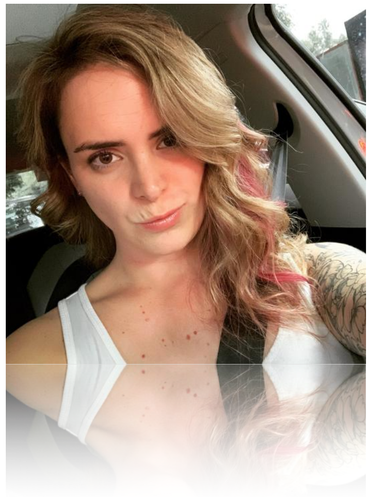
FormVueLatte 

Lightweight Schema Generated Forms

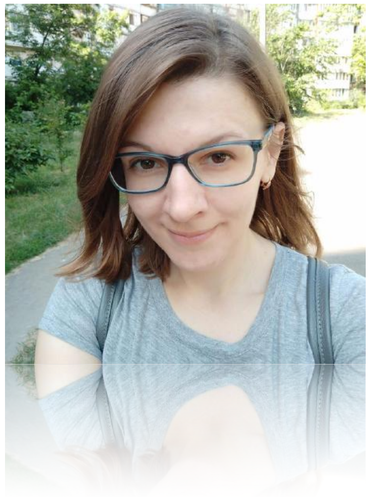
Roadmap:

- Plugin system enabling new integrations
  - Adapters for popular UI libraries like Vuetify
  - Parsers for popular schema formats like JSON Schema
  - Community plugins (your own)!

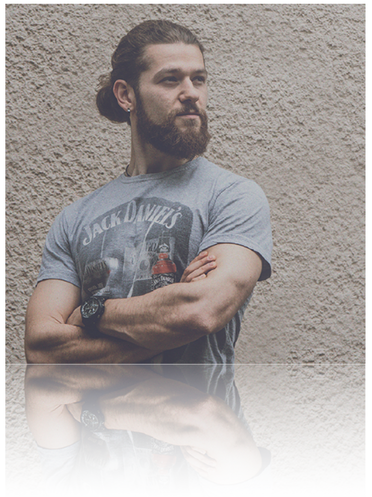
Meet the Vuelidate team!



Marina Mosti
@marinamosti



Natalia Tepluhina
@n_tepluhina



Dobromir Hristov
@d_m_hristov

That guy on the stage

Thank You!

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Vue.js Core Team

Demo Code + Library Prototypes

https://github.com/shentao/fvlidate

https://github.com/users/shentao/sponsorship

Vuelidate v2.0

Nested validations

Child components with validations will report back to the ancestor component.

Meaning, the root form component will know the validation results of all child components.