



GitLab

No time to refactor, how we made the Frontend
awesome at GitLab with Vue.js



What is GitLab?



Results, Efficiency, Iteration



Commit 0f43e98e authored 5 years ago by Dmitriy Zaporozhets

[Browse files](#)

[Options ▾](#)

gitignore

-o- 0 parents master ...

Showing 1 changed file with 9 additions and 0 deletions

[Hide whitespace changes](#)

[Inline](#)

[Side-by-side](#)

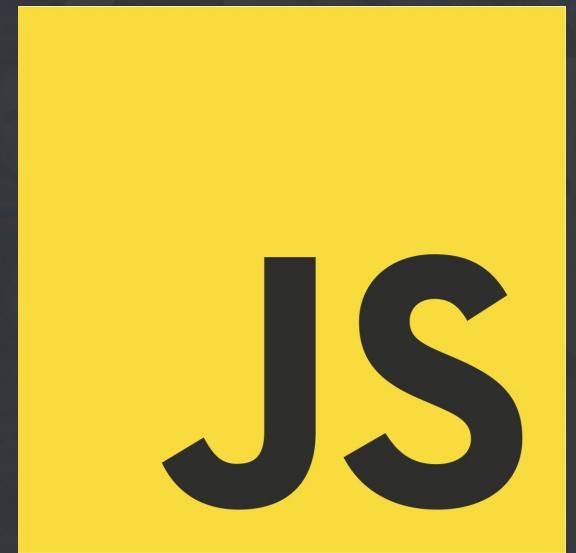
▼ .gitignore 0 → 100644



[View file @0f43e98](#)

```
1 + .bundle
2 + .rbx/
3 + db/*.sqlite3
4 + log/*.log
5 + tmp/
6 + .sass-cache/
7 + coverage/*
8 + *.swp
9 + public/uploads/
```







Merged

Merge Request !5464 opened 10 months ago by  Fatih Acet

ES6ify all the things!

Request to merge [es6ify](#)  into [master](#)

 Pipeline #3776387 passed with stages   for aaa9509d.

[Approve](#)

Requires 1 more approval

Merged by  [Jacob Schatz](#) 10 months ago

The changes were merged into [master](#)

The source branch has been removed.

[Revert](#)

[Cherry-pick](#)



0



0



https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/5464



BABEL



Merged

Merge Request [!7288](#) opened 7 months ago by  Mike Greiling 6 of 7 tasks completed

Edit

Integrate webpack for frontend asset compilation



What does this MR do?

Replaces rails asset pipeline (aka Sprockets) with [webpack](#) for javascript compilation, and replaces the Teaspoon rails gem with the [Karma test runner](#).

This MR is a first pass and aims to be as simple as possible. No new features are added, no behavior should change. The messy global scope ([#20983](#)) is maintained to emulate the sprockets environment in case there are any kludgy scripts which still rely on the old behavior. These things will all be addressed in future issues (see [#27486](#)).

https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/7288



Merged

Merge Request !5445 opened 10 months ago by  Winnie 🎉

Edit

Add ESLint

What does this MR do?

- create `package.json`
- add ESLint dependencies to `package.json`
- add JavaScript linting to CI
- add Rake task `lint:javascript` as alias for `eslint` (which itself is an alias for `npm run eslint`)

Are there points in the code the reviewer needs to double check?

Probably not.

Why was this MR needed?

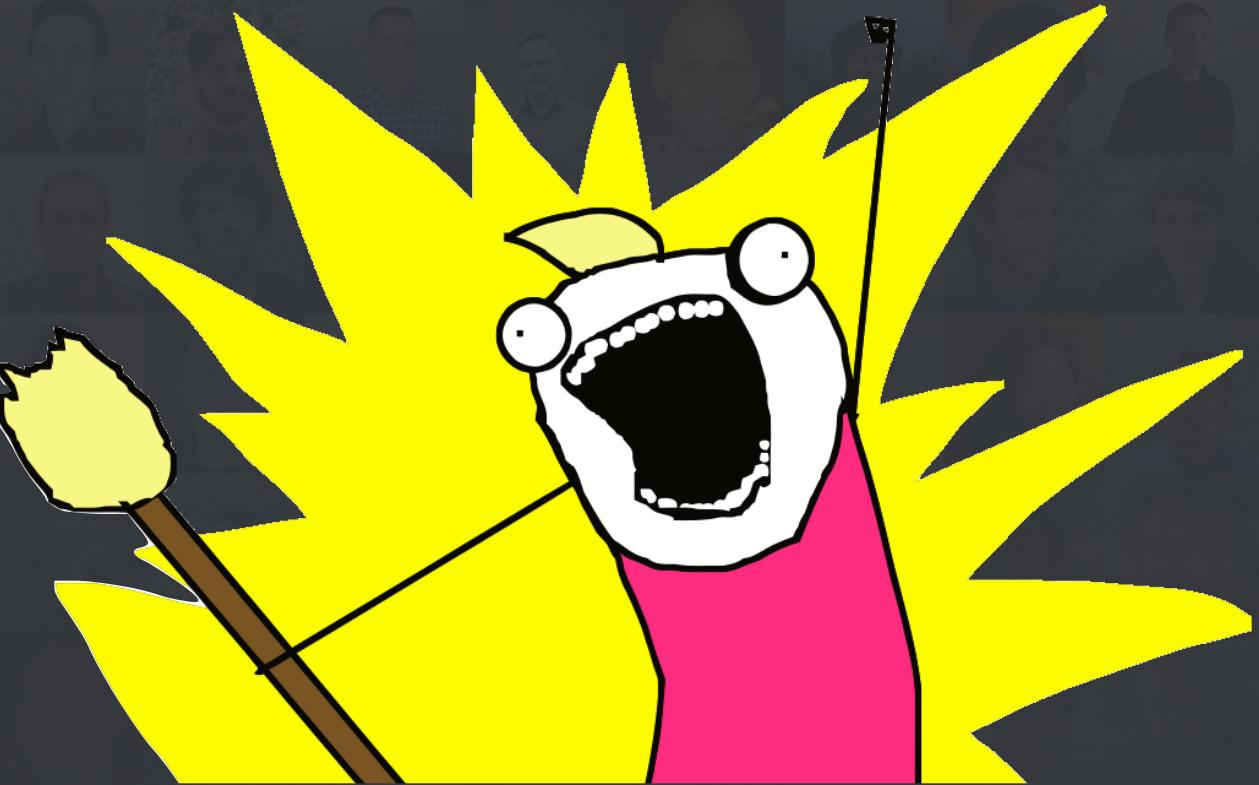
My hovercraft was full of eels.

https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/5445



yarn

https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/9055



All the tools!

```
class @Flash
  hideFlash = -> $(@).fadeOut()
  constructor: (message, type = 'alert', parent = null) ->
    if parent
      @flashContainer = parent.find('.flash-container')
    else
      @flashContainer = $('.flash-container-page')

    @flashContainer.html('')
    flash = $('',
      class: "flash-#{type}"
    )
    flash.on 'click', hideFlash

    textDiv = $('',
      class: 'flash-text',
      text: message
    )
    textDiv.appendTo(flash)
    if @flashContainer.parent().hasClass('content-wrapper')
      textDiv.addClass('container-fluid container-limited')

    flash.appendTo(@flashContainer)
    @flashContainer.show()
```

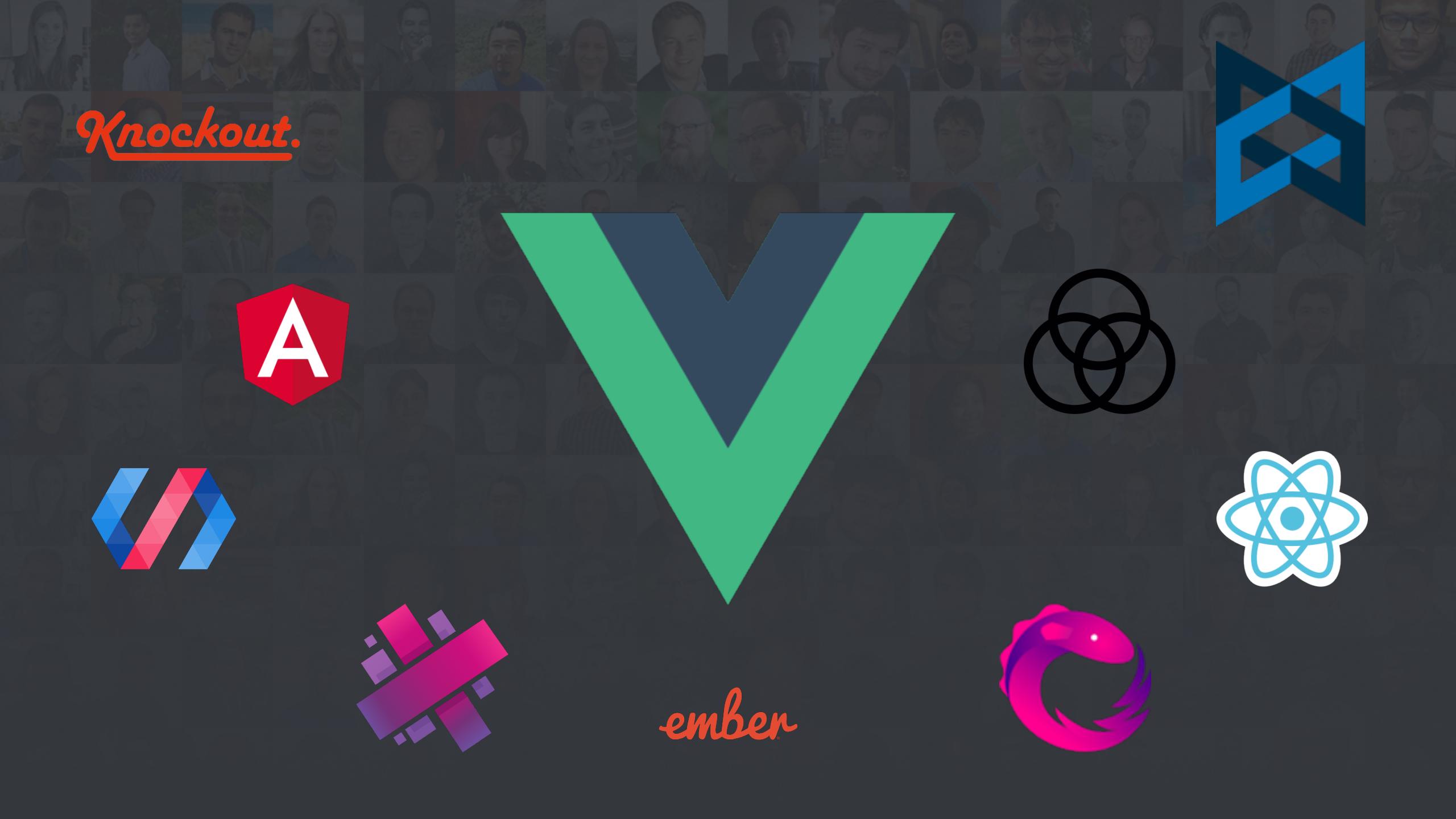
```
(function() {
  this.Flash = (function() {
    var hideFlash;
    hideFlash = function() {
      return $(this).fadeOut();
    };
  });

  function Flash(message, type, parent) {
    var flash, textDiv;
    if (type == null) {
      type = 'alert';
    }
    if (parent == null) {
      parent = null;
    }
    if (parent) {
      this.flashContainer = parent.find('.flash-container');
    } else {
      this.flashContainer = $('.flash-container-page');
    }
    this.flashContainer.html('');
    flash = $('', {
      "class": "flash-" + type
    });
    flash.on('click', hideFlash);
    textDiv = $('', {
      "class": 'flash-text',
      text: message
    });
    ...
  }
})();
```

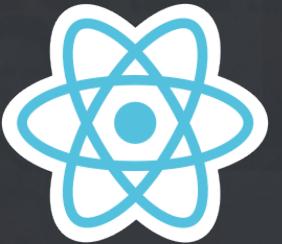
```
/* eslint-disable func-names, space-before-function-paren, wrap-iife, no-var, one-var,
one-var-declaration-per-line, no-param-reassign, quotes, quote-props, prefer-template,
comma-dangle, max-len */
```

```
window.Flash = (function() {
  var hideFlash;
  hideFlash = function() {
    return $(this).fadeOut();
  };
  function Flash(message, type, parent, actionConfig) {
    var flash, textDiv, actionLink;
    if (type == null) {
      type = 'alert';
    }
    if (parent == null) {
      parent = null;
    }
    if (parent) {
      this.flashContainer = parent.find('.flash-container');
    } else {
      this.flashContainer = $('.flash-container-page');
    }
    this.flashContainer.html('');
    flash = $('', {
      "class": "flash-" + type
    });
    flash.on('click', hideFlash);
    textDiv = $('', {
      "class": 'flash-text',
      text: message
    });
    if (parent) {
      parent.append(flash);
      flash.append(textDiv);
    } else {
      this.flashContainer.append(flash);
      flash.append(textDiv);
    }
  }
});
```





Knockout.

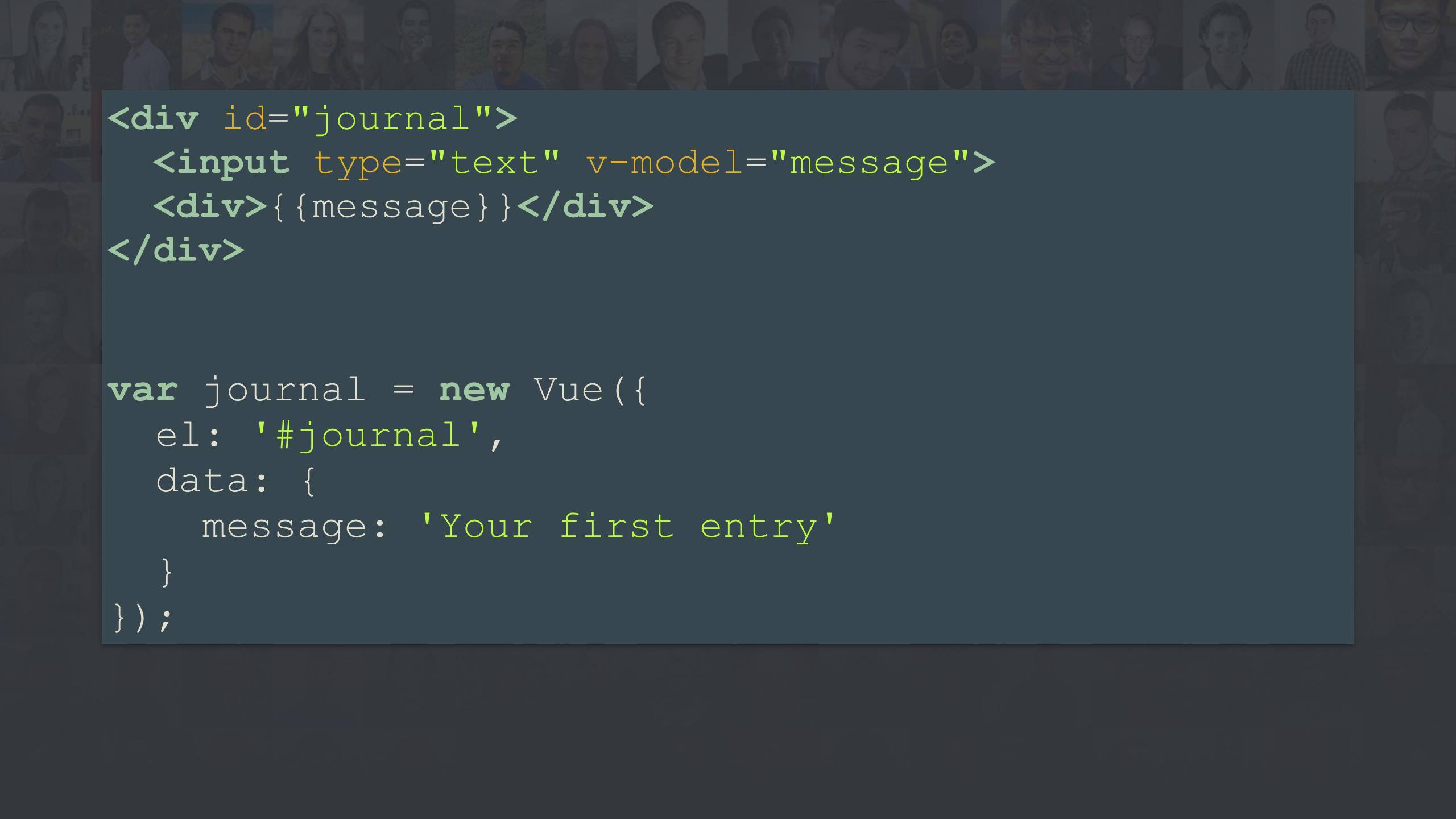


ember





1. Easy to Use



```
<div id="journal">
  <input type="text" v-model="message">
  <div>{ message }</div>
</div>
```

```
var journal = new Vue( {
  el: '#journal',
  data: {
    message: 'Your first entry'
  }
});
```



1. Easy to Use
2. Docs are great!



1. Easy to Use
2. Docs are great!
3. Vue.js + GitLab === Less code

Development

Search or filter results...

Add list

Add issues



To Do

1 +

Add README #2

Doing

0 +

Closed

0

https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/5554

Merged

Merge Request [!10878](#) opened a month ago by  Filipa Lacerda 12 of 14 tasks completed

Edit

Rewrite Pipeline Graph in Vue.js to allow realtime

What does this MR do?

Frontend part of making pipelines graph realtime.

Transform existing haml into vue:

- Create vue bundle
 - Create graph component
 - Create stage component
 - Create badge component reusable between the big graph and the dropdown with jobs
 - Create dropdown component
 - Create tests for all new components
 - Fixes HTML structure of job dropdown
- ~~[] Remove USJ for actions calls~~ Let's go with baby steps and remove this in a second iteration

https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/10878

Vue

For more complex frontend features, we recommend using Vue.js. It shares some ideas with React.js as well as Angular.

To get started with Vue, read through [their documentation](#) (external link).

When to use Vue.js ↗

We recommend using Vue for more complex features. Here are some guidelines for when to use Vue.js:

- If you are starting a new feature or refactoring an old one that highly interacts with the DOM;
- For real time data updates;
- If you are creating a component that will be reused elsewhere;

When not to use Vue.js

We don't want to refactor all GitLab frontend code into Vue.js, here are some guidelines for when not to use Vue.js:

- Adding or changing static information;
- Features that highly depend on jQuery will be hard to work with Vue.js;
- Features without reactive data;

As always, the Frontend Architectural Experts are available to help with any Vue or JavaScript questions.

Vue

- › [When to use Vue.js](#)
- › [When not to use Vue.js](#)
- › [Vue architecture](#)
 - › [Components, Stores and Services](#)
 - › [A *_bundle.js file](#)
 - › [A folder for Components](#)
 - › [A folder for the Store](#)
 - › [A folder for the Service](#)
 - › [CSRF token](#)
 - › [End Result](#)
- › [Style guide](#)
- › [Testing Vue Components](#)
 - › [Test the component's output](#)
 - › [Stubbing API responses](#)

https://docs.gitlab.com/ce/development/fe_guide/vue.html

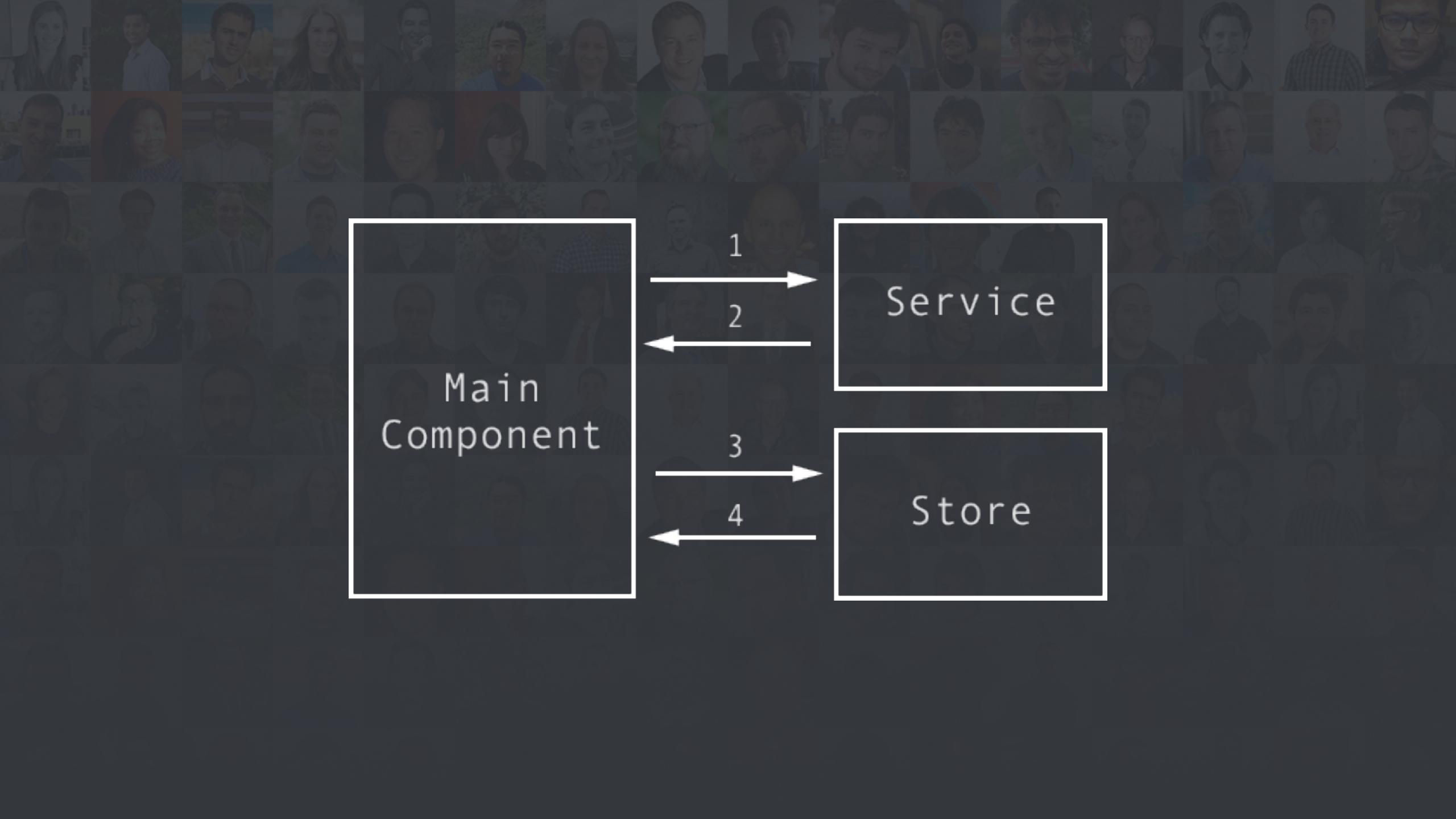
https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/8866



Announcing Vue.js 2.0

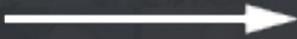


Vue.js at GitLab



Main
Component

1



2

Service

3



4

Store

pipelines/index.html.haml

```
#pipelines-list-vue{ data: {  
  endpoint: namespace_project_pipelines_path(),  
  "help-page-path" => help_page_path(),  
  "all-path" => project_pipelines_path(@project),  
  "pending-path" => project_pipelines_path(@project,  
  "ci-lint-path" => ci_lint_path } }  
  
= webpack_bundle_tag('common_vue')  
= webpack_bundle_tag('pipelines')
```

pipelines/pipelines_bundle.js

```
import Vue from 'vue';
import pipelinesComponent from './pipelines.vue';

document.addEventListener('DOMContentLoaded', () => {
  return new Vue({
    el: '#pipelines-list-vue',
    components: {
      pipelinesComponent,
    },
    render(createElement) : {
      return createElement('pipelines-component'),
    },
  });
});
```

pipelines/store.js

```
export default class PipelinesStore {  
  
  constructor() {  
    this.state.pipelines = [];  
  }  
  
  storePipelines(pipelines = []) {  
    this.state.pipelines = pipelines;  
  }  
}
```

pipelines/service.js

```
import Vue from 'vue';
import VueResource from 'vue-resource';

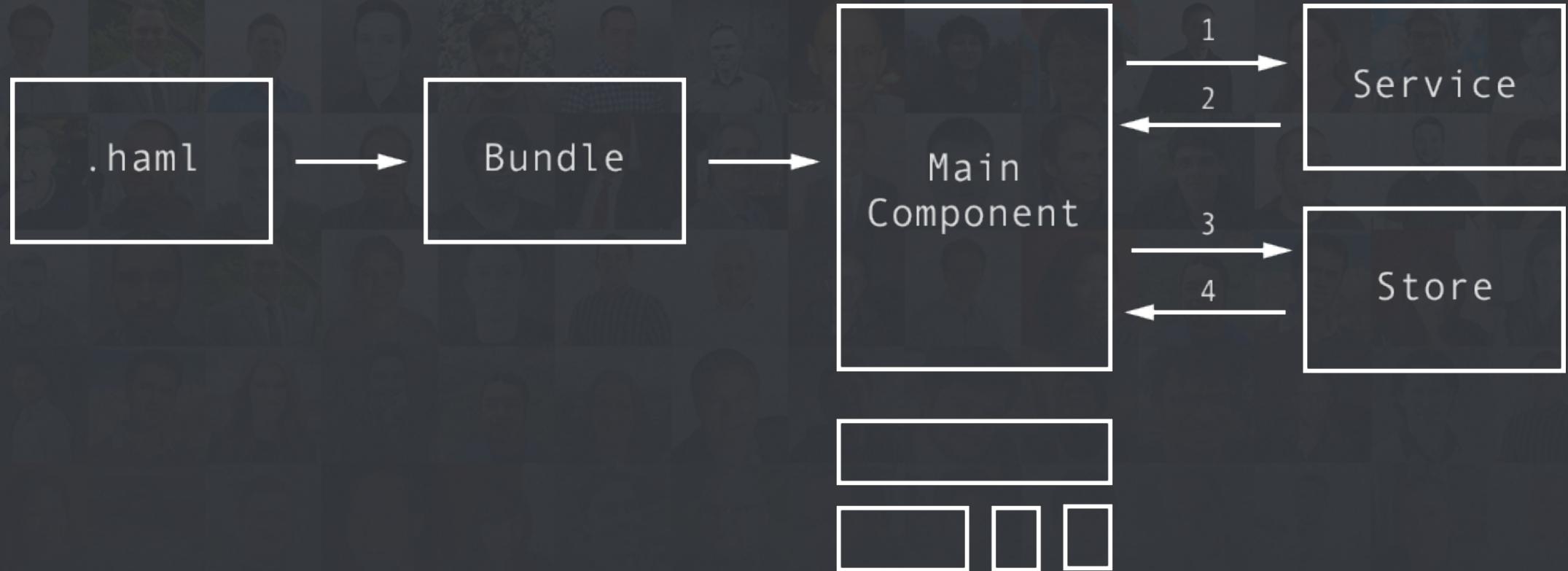
Vue.use(VueResource);

export default class PipelinesService {
  constructor(endpoint) {
    this.pipelines = Vue.resource(endpoint);
  }
  getPipelines(data = {}) {
    return this.pipelines.get(data);
  }
  postAction(endpoint) {
    return Vue.http.post(`.${endpoint}.json`);
  }
}
```

```
<script>
  import Service from 'service';
  import Store from 'store';

  export default {
    data() {
      const dataset = document.querySelector('#pipelines-list-vue').dataset;
      const store = new Store();
      const service = new Service(endpoint);
      return {
        store,
        service,
      };
    },
    created() {
      this.service.getPipelines()
        .then((response) => response.json())
        .then((pipelines) => this.store.storePipelines(pipelines))
        .catch((error) => this.handleError(error));
    },
  };
</script>
```

```
<template>
  <table> </table>
</template>
```



 passed

Pipeline #7538982 triggered 2 months ago by  Mike Greiling

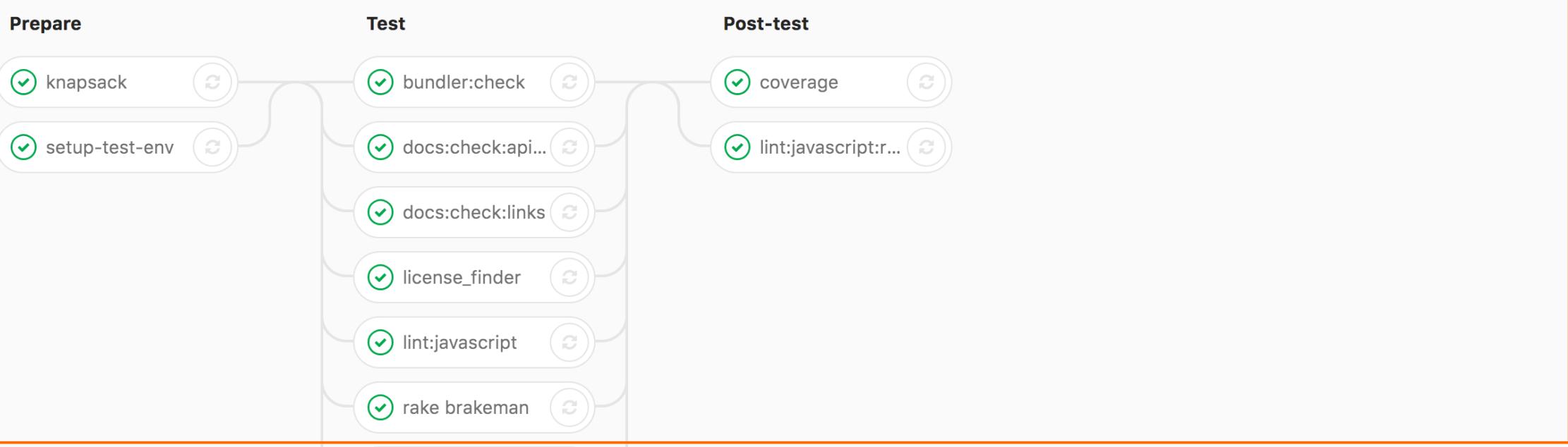
Retry

add license approvals for vue-loader

⌚ 52 jobs from [add-vue-loader](#) in 92 minutes 40 seconds (queued for 32 seconds)

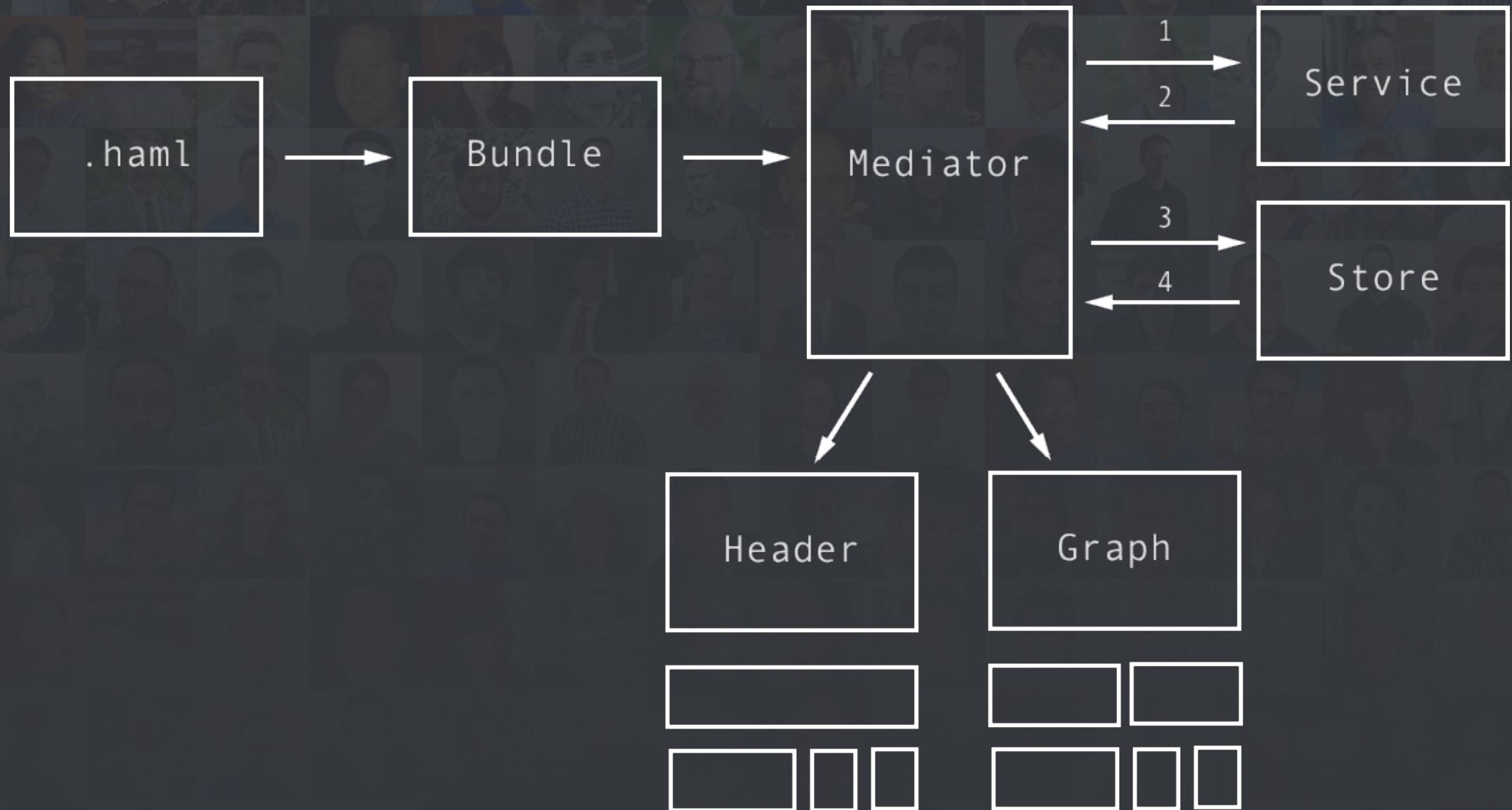
-o [02f1599d](#) ... 

Pipeline Jobs 52 Failed Jobs 1



```
const mediator = new PipelinesMediator({ endpoint: endpoint });
mediator.fetchPipeline();
new Vue({
  el: '#js-pipeline-graph-vue',
  data() { return {mediator} },
  components: { pipelineGraph },
  render(createElement) {
    return createElement('pipeline-graph', {
      props: { pipeline: this.mediator.store.state.pipeline },
    });
  },
}) ;

new Vue({
  el: '#js-pipeline-header-vue',
  data() { return {mediator} },
  components: {
    pipelineHeader,
  },
  render(createElement) {
    return createElement('pipeline-header', {
      props: { pipeline: this.mediator.store.state.pipeline},
    });
  },
}) ;
```





I SPENT THE WEEK
WRITING A TEST
SCRIPT FOR OUR
PRODUCT.



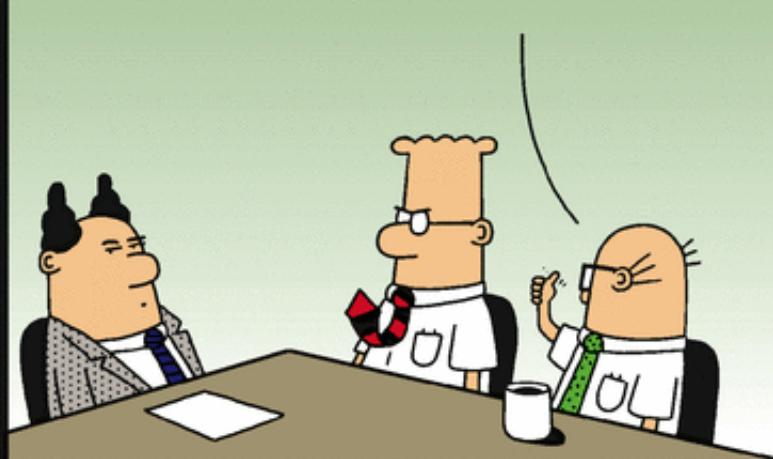
Dilbert.com DilbertCartoonist@gmail.com

AND I WROTE A
TEST SCRIPT TO
TEST DILBERT'S
TEST SCRIPT.



3-24-11 ©2011 Scott Adams, Inc./Dist. by UFS, Inc.

YOUR SCRIPT WAS
ALMOST PERFECT.
KEEP UP THE GOOD
WORK, BUDDY.



```
import Vue from 'vue';
import component from '~/pipelines/component.vue';

describe('Test component', () => {
  let vm;

  beforeEach(() => {
    const Component = Vue.extend(component);
    vm = new Component({ propsData: { .. } }).$mount();
  });

  afterEach(() => { vm.$destroy(); });

  it('should render the provided data', () => {
    expect(
      vm.$el.querySelector('.element').textContent.trim(),
    ).toEqual('foo');
  });
});
```

```
describe('with successful data', () => {

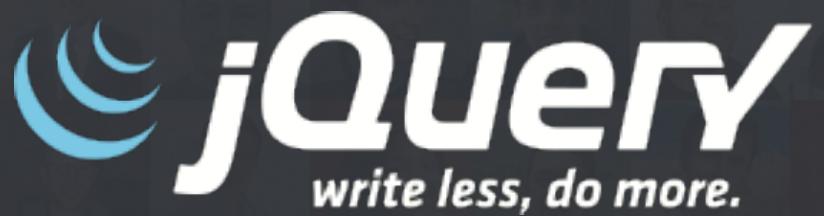
  const interceptor = (request, next) => {
    next(request.respondWith(JSON.stringify({ foo: 'bar' })), {
      status: 200,
    }) ;
  } ;

  beforeEach(() => {
    Vue.http.interceptors.push(interceptor);
  });

  afterEach(() => {
    Vue.http.interceptors = _.without(Vue.http.interceptor, interceptor);
  });

  it('should render the received data', (done) => {
    const vm = new Component({}).$mount()

    setTimeout(() => {
      expect(vm.$el.textContent).toEqual('bar');
      done();
    }) ;
  }) ;
}) ;
```



Challenges





Future plans for Frontend

1. Make it fast!
2. Code splitting - https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/12032
3. Realtime
4. Responsive tables - https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/12171
5. Load CSS through Webpack
6. Accessibility
7. Vue State Management - https://gitlab.com/gitlab-org/gitlab-ce/merge_requests/12069
8. Use headless chrome - <https://gitlab.com/gitlab-org/gitlab-ce/issues/30876>



Contributing to GitLab
<https://about.gitlab.com/contributing/>



Questions?



Thank you!