

# Optimizing for Developer Delight

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★★★★★ 4.2 | 144 Reviews

144  
Reviews

88  
Questions

50  
Answers

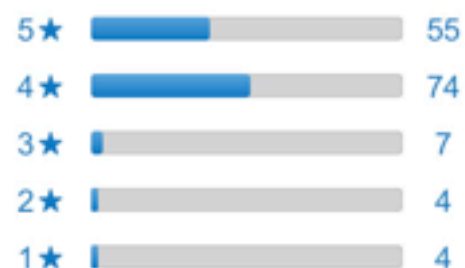
Search topics and reviews

Search

## Reviews

Write a review

### Rating Snapshot



### Average Customer Ratings

Overall ★★★★★ 4.2  
Quality ★★★★★ 3.9  
Value ★★★★★ 3.9

### Most Helpful Favorable Review

★★★★★

waaaaatahmalon · 5 months ago

#### LOVED IT, WILL BUY AGAIN

FIVE STARS! this product was splendid!  
fabulous! incredible! fantastic! wowza! yowza! ...

[Show Full Review](#)

9 of 10 people found this helpful

### Most Helpful Critical Review

★★★★★

NOTAJETSKIER27 · 5 months ago

#### I don't know how to steer a jet ski!

I bought a jet ski about a month ago and I have  
no idea how to steer it. I occasionally just sit on ...

[Show Full Review](#)

5 of 6 people found this helpful

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# the problem

- large and growing codebase
- mission-critical application
- constantly expanding team
- mix of junior and senior devs
- mandate for rapid feature development





# “developer delight”

- a clear path for getting up to speed
- points of entry for junior & senior devs
- as few surprises as possible: it just works
- isolated complexity
- easy development and debugging
- nothing more difficult than it “should” be



THE TRUTH IS OUT THERE

**assert all the things**



TypeError: Cannot read property '0' of undefined

```
BVReporter.assert(  
    _(config).isObject(),  
    'config is object'  
);
```

```
BVReporter.assert(  
    !_ (config.subjectId).isUndefined(),  
    'config.subjectId is defined'  
);
```

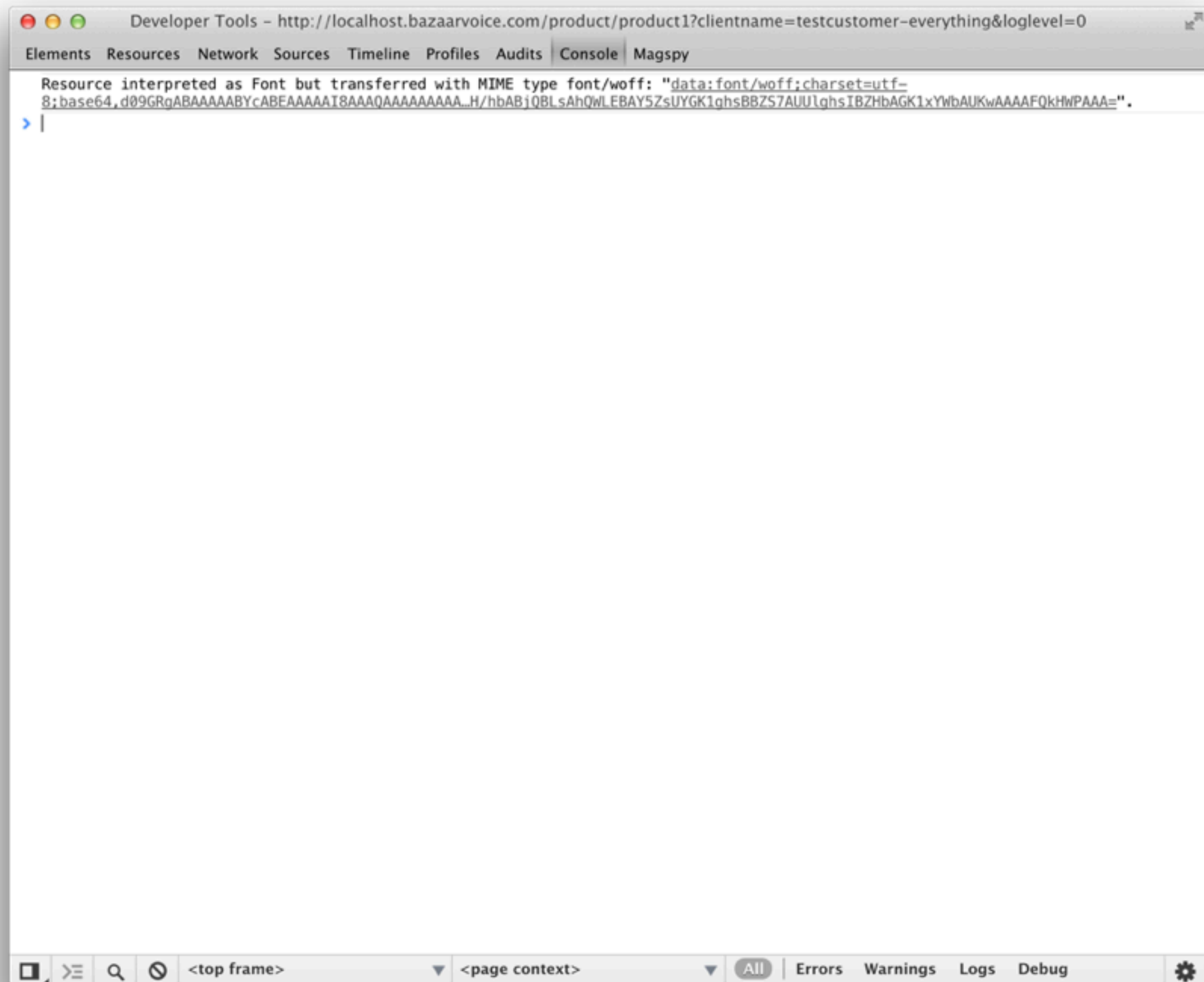
```
assert : function (assertion, message) {  
  if (!assertion) {  
    throw new Error('Assertion failed: ' + message);  
  }  
}
```





**log the lifecycle**



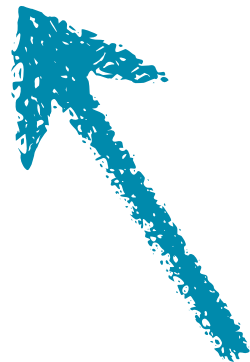




```
BVReporter.group(BVReporter.INFO, 'Component Initialization');
```

```
_(componentData).each(function (cd, componentName) {  
  var c = new BComponent(cd);  
  this.components[componentName] = c;  
}, this);
```

```
BVReporter.groupEnd(BVReporter.INFO, 'Component Initialization');
```



- ▼ **Rendering top view BVRRContainer[reviewContentList1<Reviews>]**
  - ▼ **View contentList attaching**
    - View contentList is acting as its own event manager.
  - ▼ **View contentFilterButton attaching**
    - View contentFilterButton found an event manager: BVRRContainer[reviewContentList1<Reviews>]
  - 🔍 **View: 4.017ms**
  - ▼ **View dropdownable attaching**
    - View dropdownable found an event manager: BVRRContainer[reviewContentList1<Reviews>]
  - 🔍 **View: 1.979ms**
  - ▼ **View headToHead attaching**
    - View headToHead found an event manager: BVRRContainer[reviewContentList1<Reviews>]
  - ▼ **View contentItem attaching**
    - View contentItem found an event manager: BVRRContainer[reviewContentList1<Reviews>]
  - ▼ **View avatar attaching**
    - View avatar found an event manager: BVRRContainer[reviewContentList1<Reviews>]
  - 🔍 **View: 5.587ms**
  - ▼ **View feedback attaching**
    - View feedback found an event manager: BVRRContainer[reviewContentList1<Reviews>]
  - 🔍 **View: 1.224ms**
  - ▼ **View secondaryContentList attaching**
    - View secondaryContentList found an event manager: BVRRContainer[reviewContentList1<Reviews>]
  - ▼ **View secondaryContentItemCollection attaching**
    - View secondaryContentItemCollection found an event manager: BVRRContainer[reviewContentList1<Reviews>]
  - 🔍 **View: 2.738ms**
  - ▼ **View secondaryContentItemCollection attaching**
    - View secondaryContentItemCollection found an event manager: BVRRContainer[reviewContentList1<Reviews>]



**eliminate temptation**



```
define([  
  'ENV', ,  
  'underscore',  
  'bv/api/fetch'  
], function (ENV, _, api) {
```

```
ENV.trigger( 'showLoading' );
```

```
ENV.trigger(  
    'track:error',  
    new Error('Missing parent in Collection : ' + this.name)  
);
```

```
ENV.trigger('track:conversion', data, conversion);
```

```
if (
  !ENV.get( 'userTokenDfd' ) ||
  ENV.get( 'userTokenDfd' ).state() === 'resolved'
) {
  ENV.set( { userTokenDfd : $.Deferred() } );
}
```



```
this.on('pageto', this.fetchPage, ENV);
```

```
ENV.trigger('showLoading');
```

```
LoadingOverlay.show();
```

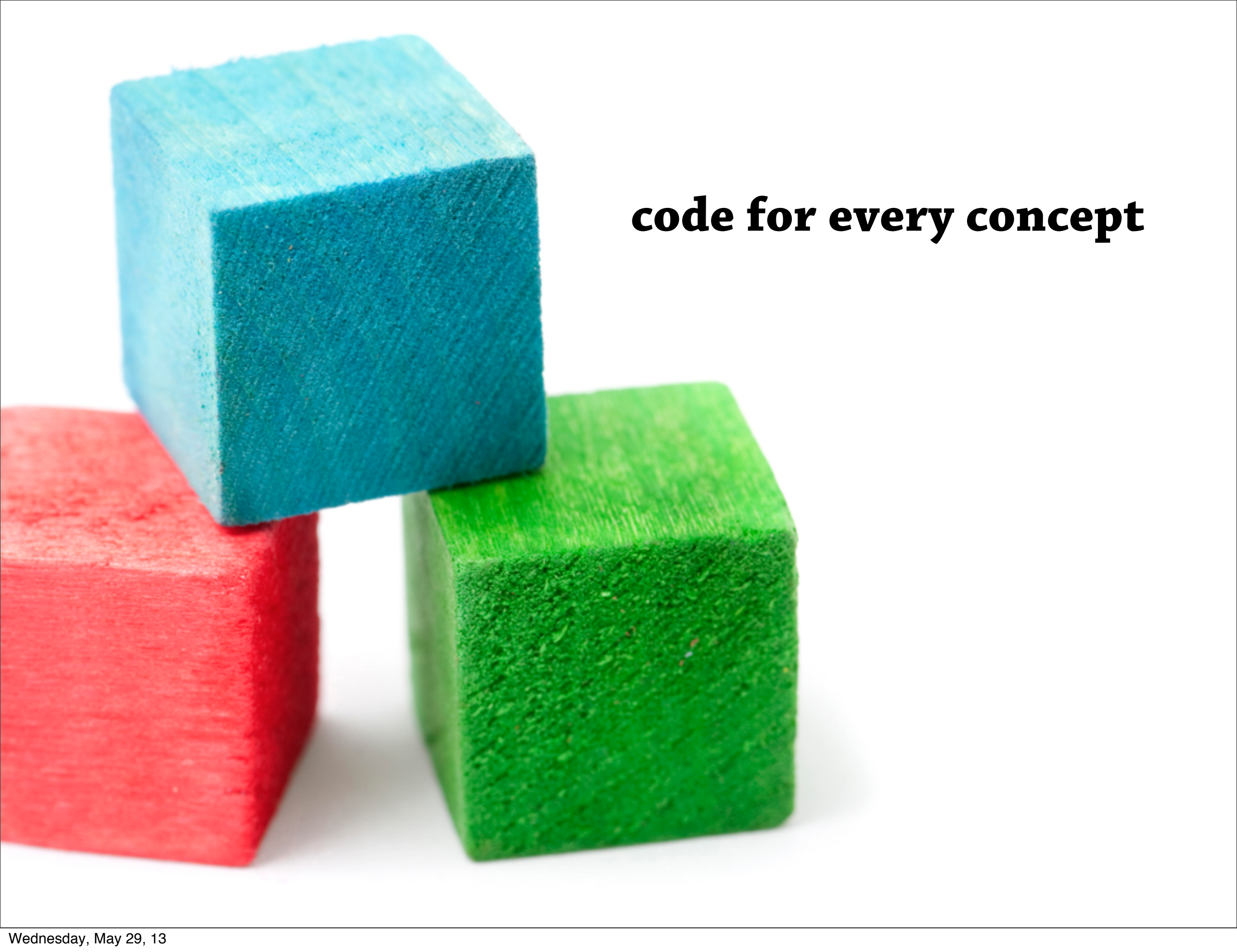
```
ENV.trigger(  
  'track:error',  
  new Error('Missing parent in Collection : ' + this.name)  
);
```

```
BVTracker.error( new Error(  
  'Missing parent in Collection : ' + this.name  
) );
```

```
ENV.trigger('track:conversion', data, conversion);
```

```
BVTracker.conversion(data, conversion);
```

```
this.on('pageto', this.fetchPage, ENV);  
this.subscribe('pageto', this.fetchPage);
```



**code for every concept**

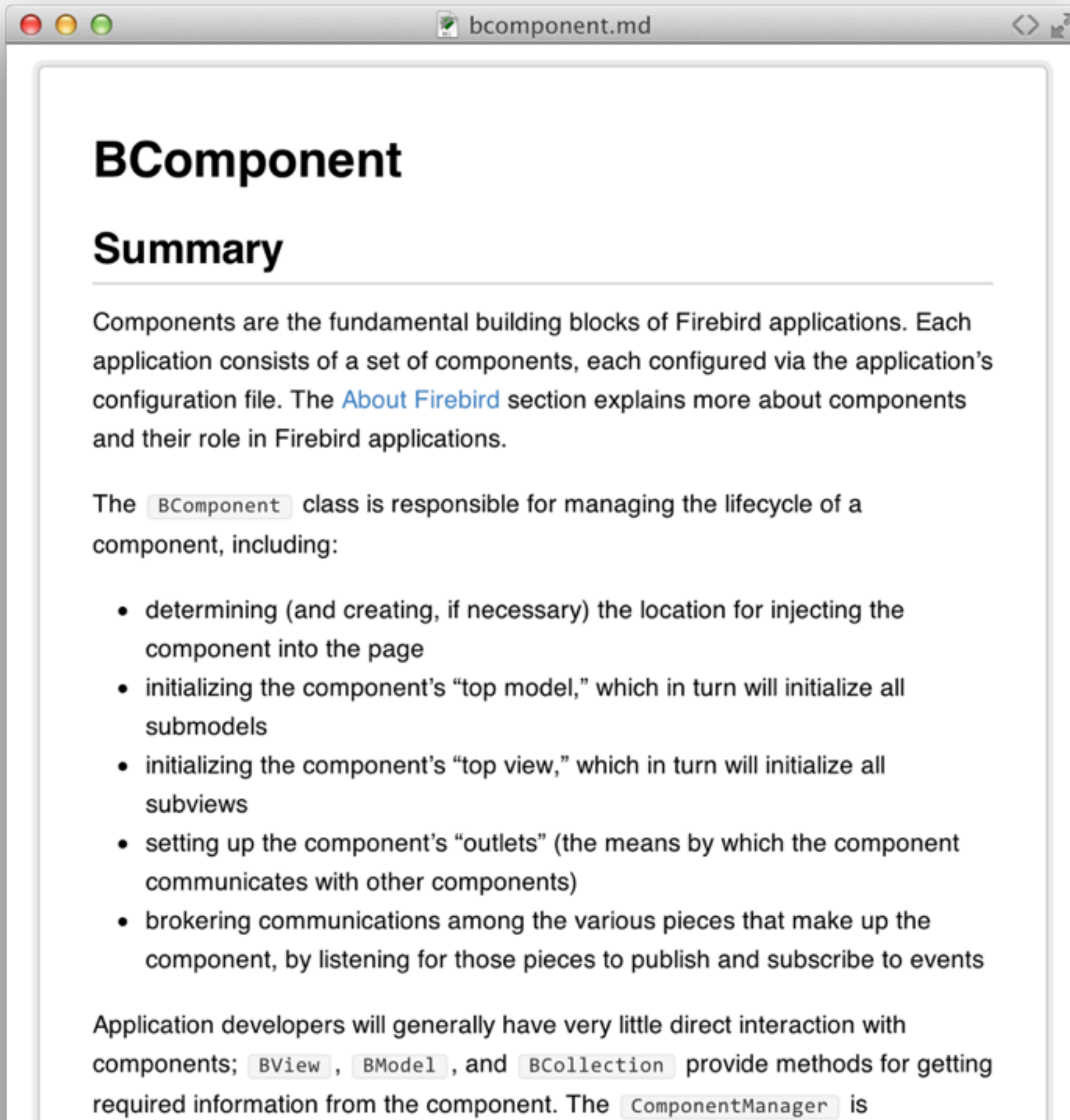



```
ENV.trigger(  
  — 'track:error',  
  — new Error('Missing parent in Collection : ' + this.name)  
);
```

```
BVTracker.error( new Error(  
  'Missing parent in Collection : ' + this.name  
) );
```

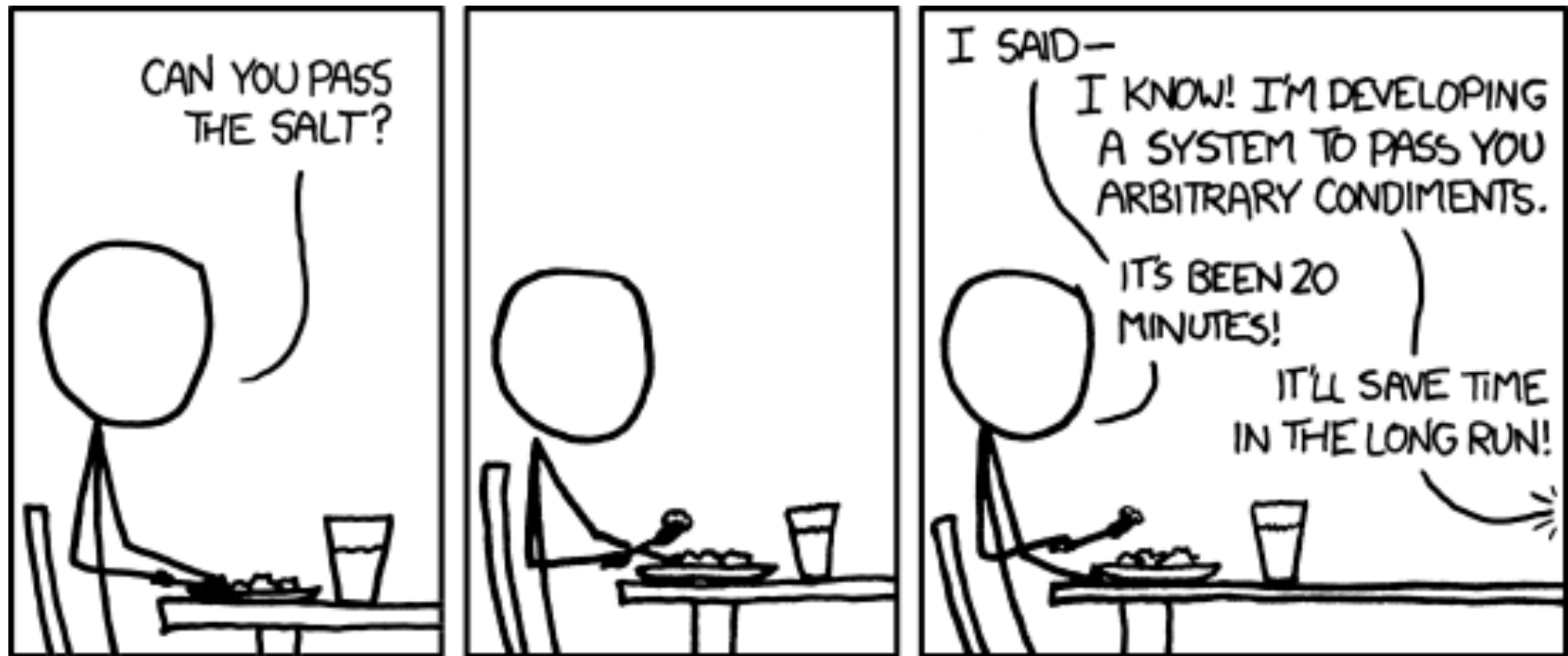
```
"reviewContentList" : {  
  "features" : {  
    "self" : ["headToHead", "contentFilter", "contentItemC  
    "contentItem" : ["has:stars", "has:secondaryRatings",  
    "pagination" : ["ugcCount"],  
    "secondaryContentList" : ["secondaryContentItemCollect  
    "secondaryContentItem" : ["avatar", "feedback"],  
    "contentFilter" : ["has:filterButton"]  
  },  
  // ...  
},
```

```
var components = ENV.get('components');  
components.each(function (component, index) {  
    var view = init.initView(component, index);  
    // ...  
});
```

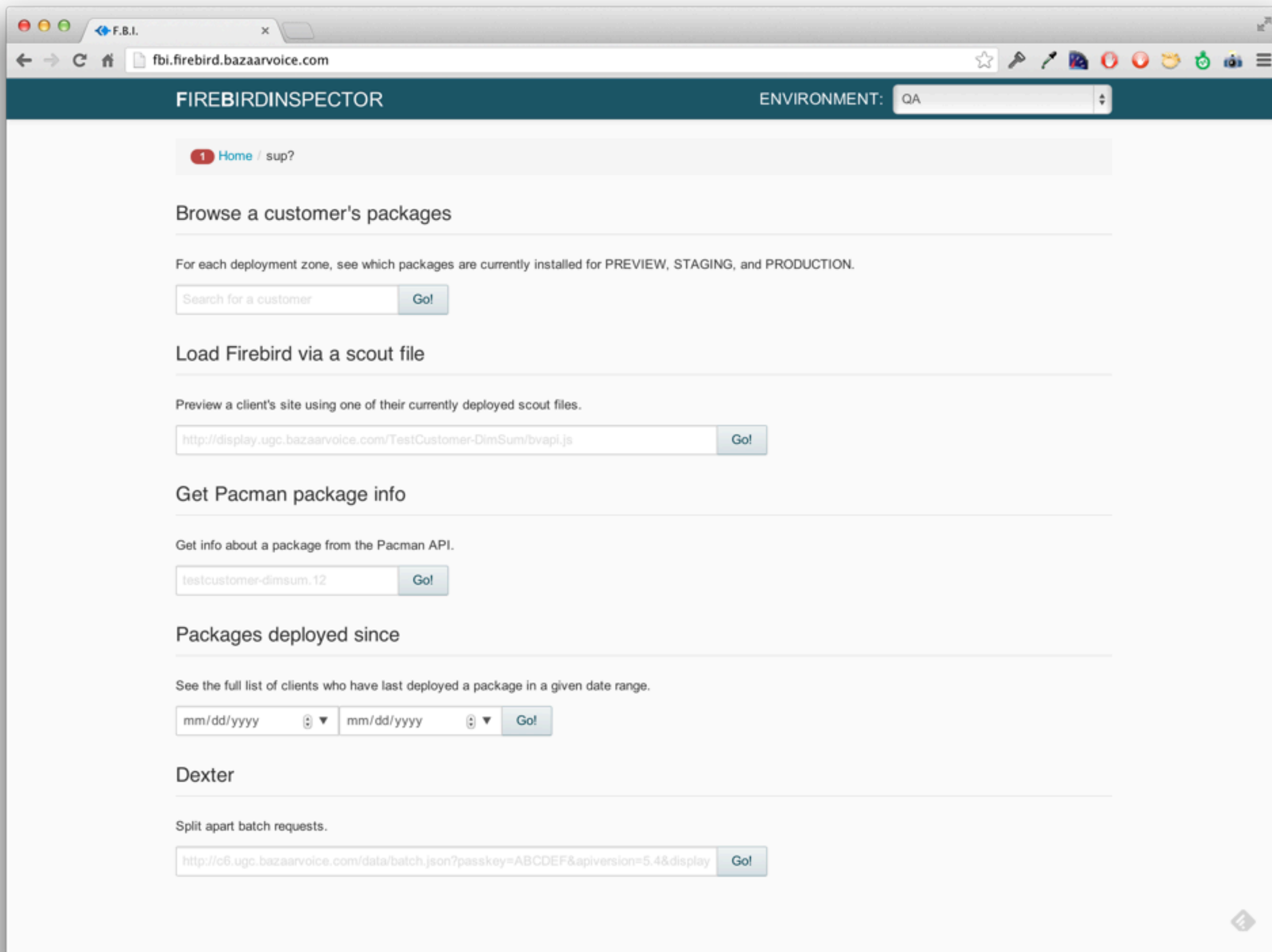




```
_(componentData).each(function (config, componentName) {  
    var c = new Component(config);  
    this.components[componentName] = c;  
    var view = c.initView(index);  
    // ...  
}, this);
```



**automate everything**



```
2. rebecca.murphey@rmurphey-mbpro: ~/code/firebird (zsh)
→ firebird git:(master) grunt urls:qa:TestCustomer-Oliver-C7
Running "urls:qa:TestCustomer-Oliver-C7" (urls) task
Customer: TestCustomer-Oliver-C7
Bucket: qa

Main Site STAGING
  BUILD: ./buildAndServeLocal.sh TestCustomer-Oliver-C7 0fd720c4-1dea-4d8e-
a299-0b6ce4d4c58e c7a254fce6e18fca8f6cfa2d568e098d636c69656e744e616d653d546573744
37573746f6d65722d4f6c697665722d433726757365726e616d653d26696e7465726e616c3d266461
74653d32303939303130312666756c6c4e616d653d267762486f73743d
  QA: https://qa-preview.bazaarvoice.com/product/0fd720c4-1dea-4d8e-a299-0b6ce4d4c58e/c7a254fce6e18fca8f6cfa2d568e098d636c69656e744e616d653d54657374437573746f6d65722d4f6c697665722d433726757365726e616d653d26696e7465726e616c3d26646174653d32303939303130312666756c6c4e616d653d267762486f73743d&ve=dimsum-0fd720c4-1dea-4d8e-a299-0b6ce4d4c58e&locale=en_US
  LOCAL: http://localhost.bazaarvoice.com/product/0fd720c4-1dea-4d8e-a299-0b6ce4d4c58e/c7a254fce6e18fca8f6cfa2d568e098d636c69656e744e616d653d54657374437573746f6d65722d4f6c697665722d433726757365726e616d653d26696e7465726e616c3d26646174653d32303939303130312666756c6c4e616d653d267762486f73743d&ve=dimsum-0fd720c4-1dea-4d8e-a299-0b6ce4d4c58e&locale=en_US

>> Fetched URLs for TestCustomer-Oliver-C7 in bucket qa
```



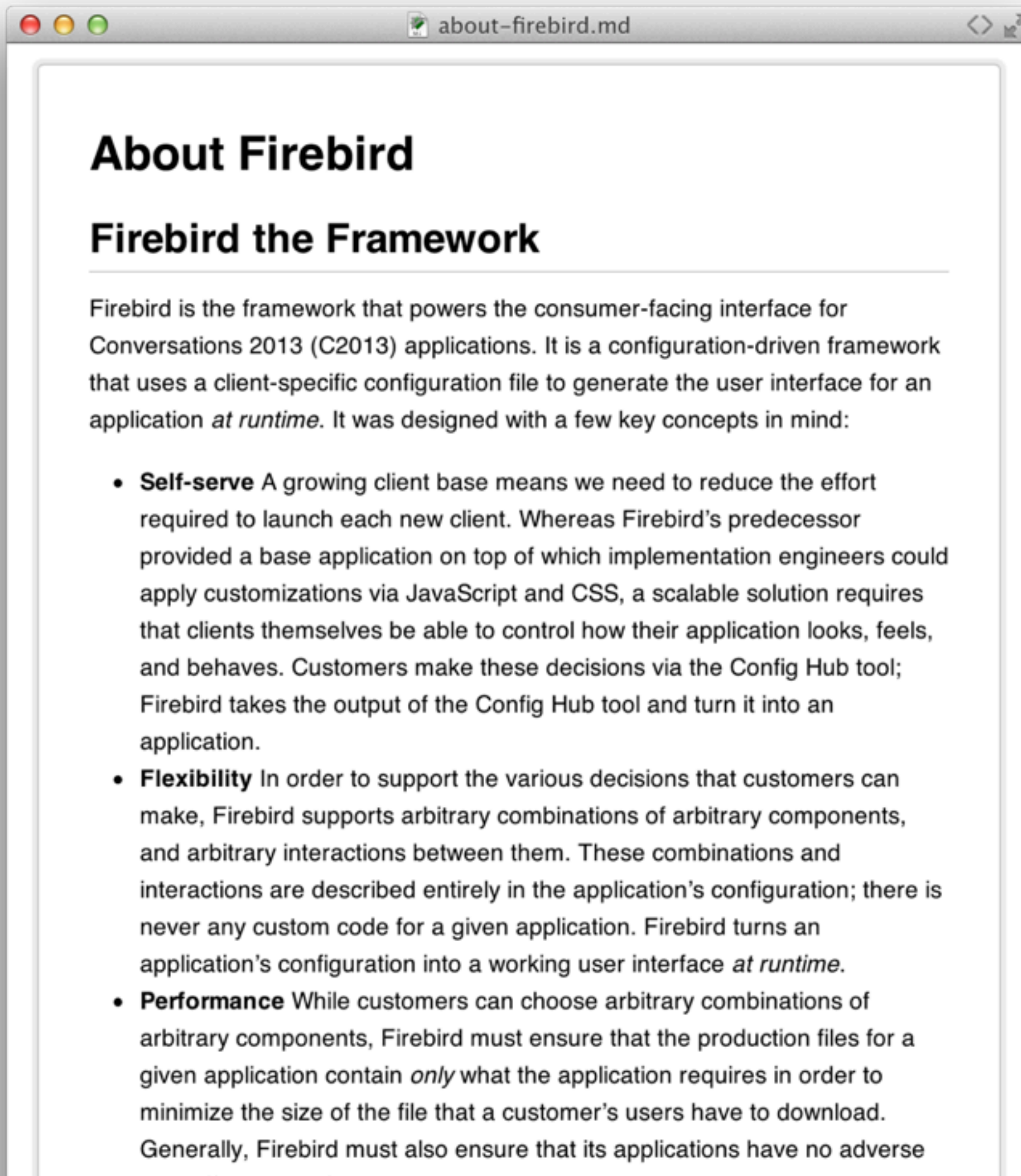


```
2. rebecca.murphey@rmurphey-mbpro: ~/code/firebird (zsh)
→ firebird git:(master) grunt local-config
Running "local-config" task
path.existsSync is now called `fs.existsSync`.
>> Removing old configs
>> Using path /Users/rebecca.murphey/code/firebird
>> Updated config/local/nginx-dev.conf
>> Updated config/BV/Loyalty API Client Leaderboard calls
>> Hey! If you are not using `withClientName` method in local/nginx-
x-build.conf
    ✓ should respect limit
    ✓ should set page number
Done, without errors.
→ firebird git:(master) grunt BV/Loyalty API Client Author calls
    ✓ should set client name using `withClientName` method
    ✓ should respect limit
    ✓ should set page number
→ firebird git:(master) grunt feature:myNewFeature
Running "feature:myNewFeature" (feature) task
Test the parameter path.existsSync is now called `fs.existsSync`.
Do not enable links
    ✓ Generated: static/dev/scripts/bv/ugc/feature/model/myNewFeature.js
    ✓ Generated: static/dev/scripts/bv/ugc/feature/view/myNewFeature.js
    ✓ no links generated
Enable links
    ✓ Done, without errors.
    ✓ tags, links are enabled
    ✓ should enable links and email.
    ✓ should be able to enable multiple exactly same links.
904 tests complete (2 seconds)
```



**document**





# About Firebird

## Firebird the Framework

---

Firebird is the framework that powers the consumer-facing interface for Conversations 2013 (C2013) applications. It is a configuration-driven framework that uses a client-specific configuration file to generate the user interface for an application *at runtime*. It was designed with a few key concepts in mind:

- **Self-serve** A growing client base means we need to reduce the effort required to launch each new client. Whereas Firebird's predecessor provided a base application on top of which implementation engineers could apply customizations via JavaScript and CSS, a scalable solution requires that clients themselves be able to control how their application looks, feels, and behaves. Customers make these decisions via the Config Hub tool; Firebird takes the output of the Config Hub tool and turn it into an application.
- **Flexibility** In order to support the various decisions that customers can make, Firebird supports arbitrary combinations of arbitrary components, and arbitrary interactions between them. These combinations and interactions are described entirely in the application's configuration; there is never any custom code for a given application. Firebird turns an application's configuration into a working user interface *at runtime*.
- **Performance** While customers can choose arbitrary combinations of arbitrary components, Firebird must ensure that the production files for a given application contain *only* what the application requires in order to minimize the size of the file that a customer's users have to download. Generally, Firebird must also ensure that its applications have no adverse

example-feature.md

# Creating a Feature

This document will step through the process of creating a simple feature and adding it to Firebird. The feature we will add is a “Latest Review” box, which will be displayed at the top of the review list. When we’re done, we’ll have something that looks like this:

Reviews

Write a review

Latest Review

I couldn't find the power button

You are in 'detached HEAD' state. You can look around, make experimental changes and commit them, and you can discard any commits you make in this state without impacting any branches by performing another checkout.

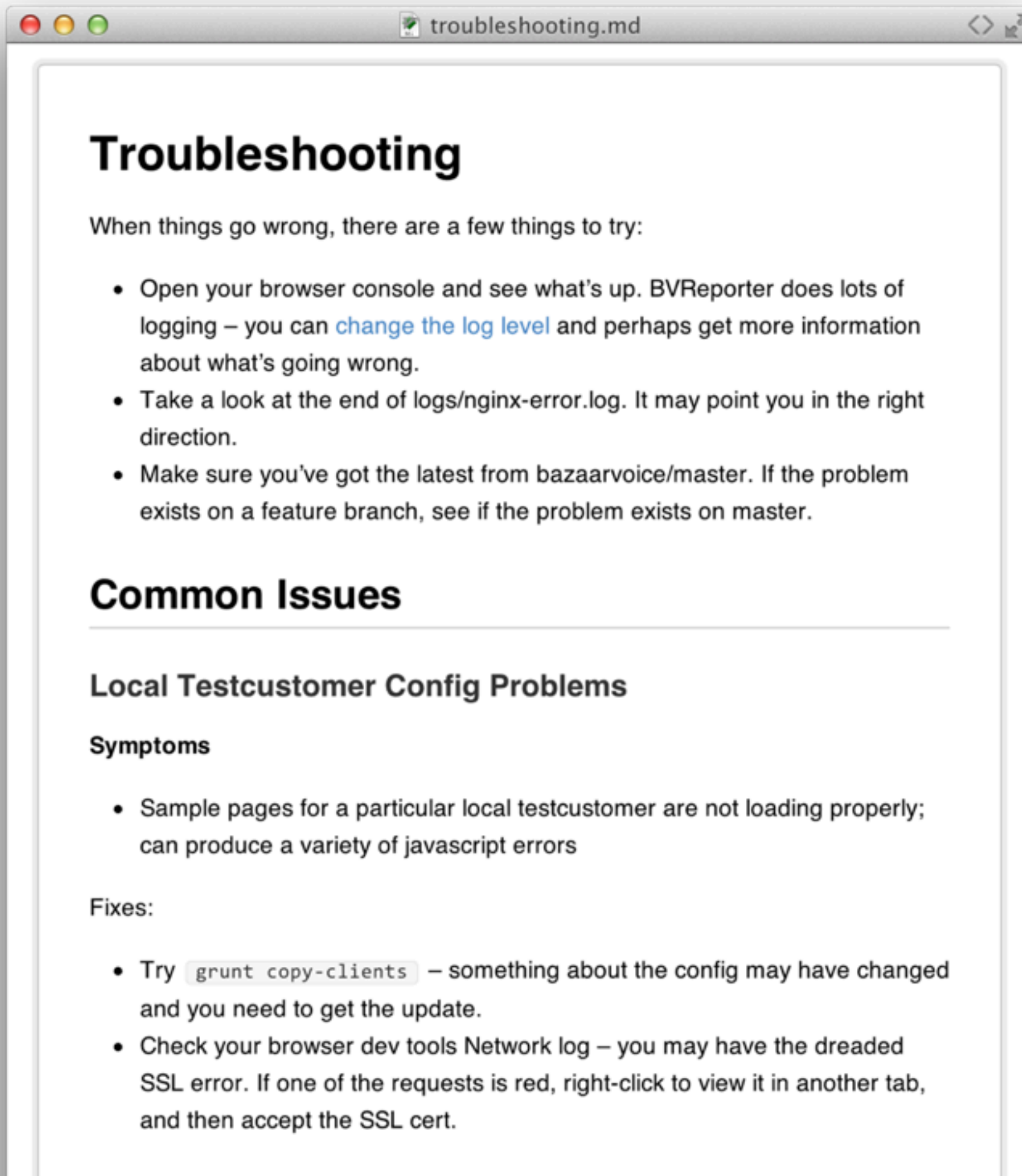
Rating Snapshot	Average Customer Ratings
5★ <div><div></div></div> 55	Overall <div><div></div></div> 4.2
4★ <div><div></div></div> 74	Quality <div><div></div></div> 3.9
3★ <div><div></div></div> 8	Value <div><div></div></div> 3.9
2★ <div><div></div></div> 4	
1★ <div><div></div></div> 4	

Latest Review Feature

If you’re following along with this example, you should create a “feature branch” from the master branch of the repo:

```
git checkout -b example_feature
```

This way, you can commit as you go without affecting the master branch. If you



# Firebird Directory Structure

This document describes the key directories for Firebird development. It is not an exhaustive description of all directories, just the ones you are likely to work with often.

## /

---

The root of the repo contains several useful shell scripts. You will use **serveLocal.sh** to run a local instance of Firebird. You will use **vagrant.sh** if you want to [use vagrant to run Firebird](#).

The root also contains **grunt.js**, which loads all of our [Grunt](#) tasks; and **.jshinttrc**, which some [JSHint](#) editor plugins will use to verify that code complies with our formatting requirements.

## build

---

This directory contains most of the files concerned with generating Firebird builds. It also contains the **build/tasks** directory, which contains all of our Grunt tasks, and the **build/templates** directory, which contains all of the templates associated with the Grunt tasks. Our Grunt tasks are not well documented at the moment, but you may be interested in the [scaffolding](#) task if you're working on feature development.

## config

---

This directory contains configs for various environments. When you set up



# Contributing to Firebird

This document assumes you set up Firebird according to [these instructions](#).

*You should never do work in the master branch, and you should keep the master branch updated from the main repo by pulling often – things change fast and it's easy to get behind.*

```
git checkout master
git pull bv master      # assumes your bazaarvoice remote is named "bv"
git push origin master  # assumes your remote is named "origin"
```

When you are ready to start working on a new feature, you should create a branch.

```
git checkout master      # make sure you're on master first
git pull bv master       # assumes your bazaarvoice remote is named "bv"
git checkout -b my_new_branch # create a new branch based on master
```

You can update your branch with the latest master, which is a good thing to do so they don't get out of sync.

```
git checkout master
git pull bv master
git checkout my_new_branch
git merge master
```

When you are ready for others to see your work, you should push your branch

changelog.md

# Changelog

This page is to document changes to Firebird that are *developer facing*.

The changelogs are written by hand. If the git command from the last entry is `git log abcdef..ghijkl --merges` then you should run `git log ghijkl..HEAD --merges` to see what's new, and then look to see what the last commit is in order to come up with the git command you'll put into the new entry.

## 2013-05-15 `git log 41b7d8..ebed3f --merges`

- Added a test to verify serverrender isn't broken; this test only runs locally, not in TeamCity.
- Added `enableLinks` option to the paragraphize Handlebars helper, which will linkify any URLs in the text. This should only be used for client content.
- Added utility to provide a standard way to get IE version information.
- BComponent now waits for all models (not just top model) to call `.dataReady()` before rendering the component's view. This fixes an issue where headToHead wast not rendering because its data was not ready at component render time.
- Fixed an issue where publish/subscribe didn't include content type information.
- Tests can now specify `.implementation()` to use something other than `Main Implementation`

## 2013-05-04 `git log 312fd8..41b7d8 --merges`



Wednesday, May 29, 13



**measure progress  
(and side effects)**

Halstead: 27.5

| Effort: 13612

| Volume: 495.00

| Vocabulary: 22

✓ static/dev/scripts/bv/util/formMemory.js

✓ static/dev/scripts/bv/util/geoLocation.js

✓ static/dev/scripts/bv/util/grammr.js

✓ static/dev/scripts/bv/util/janrain.js

✗ static/dev/scripts/bv/util/janrain.js:19 - &lt;anonymous&gt; is too complicated

Cyclomatic: 5

Halstead: 24.32857142857143

| Effort: 33833

| Volume: 1390.7

| Vocabulary: 48

✓ static/dev/scripts/bv/util/loadingOverlay.js

✗ static/dev/scripts/bv/util/localeMapping.js

✓ static/dev/scripts/bv/util/normalizeParams.js

✗ static/dev/scripts/bv/util/pageInfo.js

✗ static/dev/scripts/bv/util/pageInfo.js:21 - getPageInfo is too complicated

Cyclomatic: 7

Halstead: 35.52173913043478

| Effort: 28157

| Volume: 792.67

| Vocabulary: 42

✓ static/dev/scripts/bv/util/queryrouter.js

✓ static/dev/scripts/bv/util/referenceCache.js

✓ static/dev/scripts/bv/util/session.js

✓ static/dev/scripts/bv/util/socialAvatar.js

✓ static/dev/scripts/bv/util/spiffybox.js

✗ static/dev/scripts/bv/util/spiffybox.js:131 - open is too complicated

Cyclomatic: 16

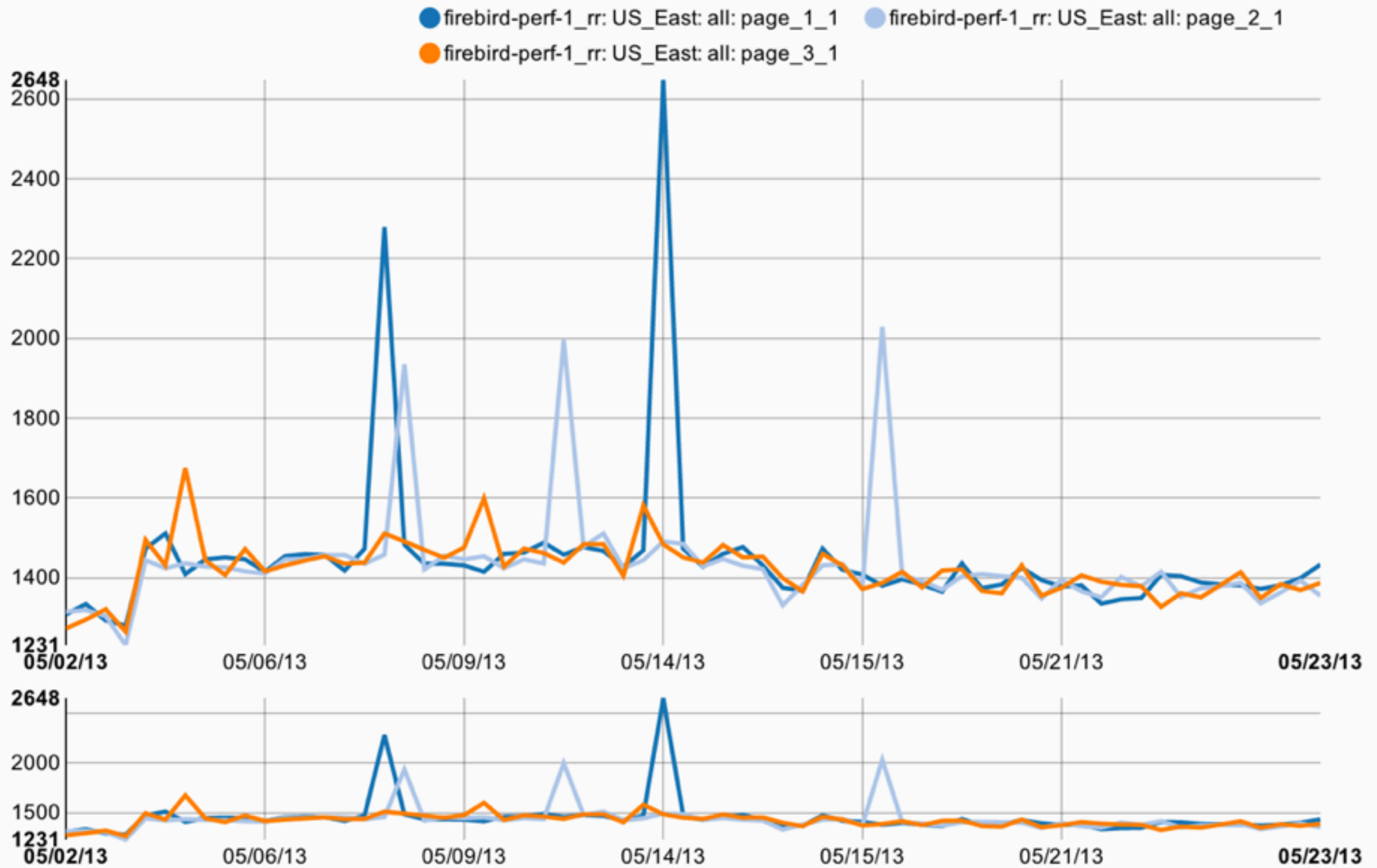
Halstead: 30.079646017699115

| Effort: 1.2453e+5

| Volume: 4139.9



# Time to PageView Event (Repeat View): rr



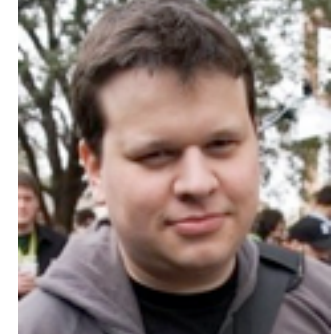
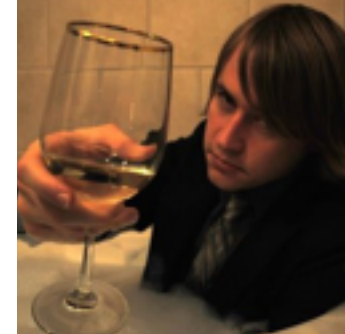
“I wish I’d had this documentation when I was building that feature last week.”

“So I can just add my own logging and they’ll show up in these groups automatically?”

“The assertion stuff just caught an error in my code that I would have missed.”

are we there yet?





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