

# Storyboarding meets BDD

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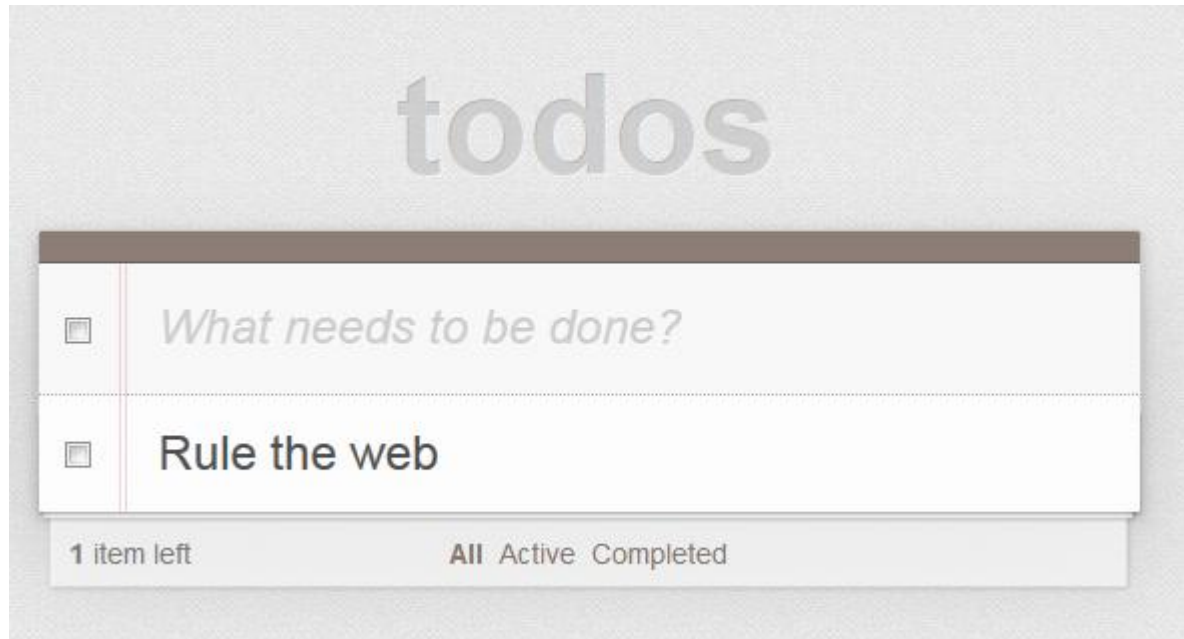
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BDD is the best but the best can be improved.

Especially for frontend.

First, let me show you the issues.

# Let's make this app with BDD of course.



# Step 1. write specs

## Stories

As a user I want to manage my todos so that I can achieve more in my life.

## Scenarios

it should open the app

Given no app

when opening the app

then the title is shown

and the list is empty

it should add an item

Given an open app

when adding "Rule the web"

then "Rule the web" will shown in the list

# Step 2. write tests

```
describe("As a user I want to manage my todos so that I can achieve more in my life.", function(){

  beforeEach(function(done){
    //when opening the app
    open(done);
  });
  afterEach(function(){
    //Given no app
    close();
  });
  it("should open the app", function(){
    //then the title is shown
    expect($('h1').text()).toEqual('todos');
    //and the list is empty
    expect($('ul').html()).toEqual('');
  });

  it("should add an item", function(){
    //when adding "Rule the web"
    $('input').val("Rule the web");
    $('form').submit();

    //then "Rule the web" will shown in the list
    expect($('ul li').text()).toEqual('Rule the web');
  });

});
```

# Step 3. make it red.

```
Jasmine 2.0.0 Finished in 2.04s  
XX  
2 specs, 2 failures raise exceptions  
Spec List | Failures  
  
As a user I want to manage my todos so that I can achieve more in my life, should open the app  
  
Expected '' to equal 'todos'.  
stack@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1293:11  
buildExpectationResult@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1270:1  
Env/expectationResultFactory@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:484:11  
Spec.prototype.addExpectationResult@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:260:5  
addExpectationResult@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:442:9  
Expectation.prototype.wrapCompare/<@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1216:1  
@http://localhost:8111/test/todos.js:13:9  
attemptSync@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1510:9  
QueueRunner.prototype.run@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1498:9  
attemptAsync/next@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1517:32  
timeoutable/</callDone@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:287:11  
open/<@http://localhost:8111/test/lib/init.js:7:9  
  
Expected undefined to equal ''.  
stack@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1293:11  
buildExpectationResult@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1270:1  
Env/expectationResultFactory@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:484:11  
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Expectation.prototype.wrapCompare/<@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1216:1  
@http://localhost:8111/test/todos.js:15:9  
attemptSync@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1510:9  
QueueRunner.prototype.run@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1498:9  
attemptAsync/next@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1517:32  
timeoutable/</callDone@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:287:11  
open/<@http://localhost:8111/test/lib/init.js:7:9  
  
As a user I want to manage my todos so that I can achieve more in my life, should add an item  
  
Expected '' to equal 'Rule the web'.  
stack@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1293:11  
buildExpectationResult@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1270:1  
Env/expectationResultFactory@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:484:11  
Spec.prototype.addExpectationResult@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:260:5  
addExpectationResult@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:442:9  
Expectation.prototype.wrapCompare/<@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1216:1  
@http://localhost:8111/test/todos.js:24:9  
attemptSync@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1510:9  
QueueRunner.prototype.run@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1498:9  
attemptAsync/next@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:1517:32  
timeoutable/</callDone@http://localhost:8111/test/lib/jasmine-2.0.0/jasmine.js:287:11  
open/<@http://localhost:8111/test/lib/init.js:7:9
```

# Step 4. write the app.

## HTML

```
<!DOCTYPE>
<HTML>
  <head>
    <link rel="stylesheet" type="text/css" href="css/base.css" />
    <script src="lib/jquery-2.1.0.min.js"></script>
  </head>
  <body>
    <h1>todos</h1>
    <ul></ul>
    <form>
      <input/>
    </form>
    <script src='js/app.js'></script>
  </body>
</HTML>
```

## JS

```
$(document).ready(function(){
  $('form').submit(function(event){
    event.preventDefault();
    $('ul').append('<li><div class="view"><label>' + $('input').val() +
      '</label></div></li>');
  });
});
```

# Step 5. make it green.

Jasmine 2.0.0

finished in 2.062s

• •

2 specs, 0 failures

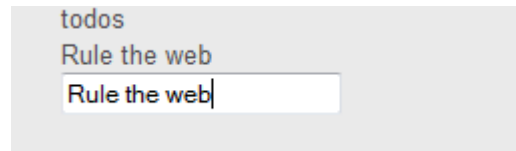
raise exceptions



As a user I want to manage my todos so that I can achieve more in my life.  
  should open the app  
  should add an item



# The result



A screenshot of a web application interface. It features a light gray background. At the top left, the word 'todos' is displayed in a small, dark font. Below it, the text 'Rule the web' appears. Underneath that, there is a white input field with a thin gray border, containing the text 'Rule the web' and a vertical cursor at the end of the string.

No!! We can't sent this to production.

# No worries I will improve.

## What are the issues?

- Over complex test scripts.
- No tests for styling.
- Unreadable specs for the business.

# Step 1. reuse specs in storyboard

## todos

As an user I want to manage my todo so I can achieve more in my life

it should add a todo

opening the app



adding 'Rule the web'

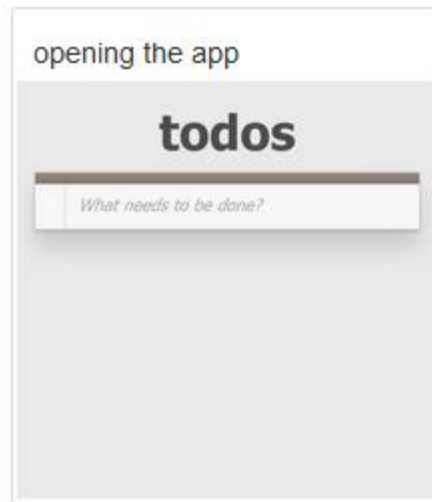


# Step 2. create views

## todos

As an user I want to manage my todo so I can achieve more in my life.

it should add a todo



# Step 3. make it red

## todos

As an user I want to manage my todo so I can achieve more in my life

it should add a todo

❌ opening the app

### todos

*What needs to be done?*

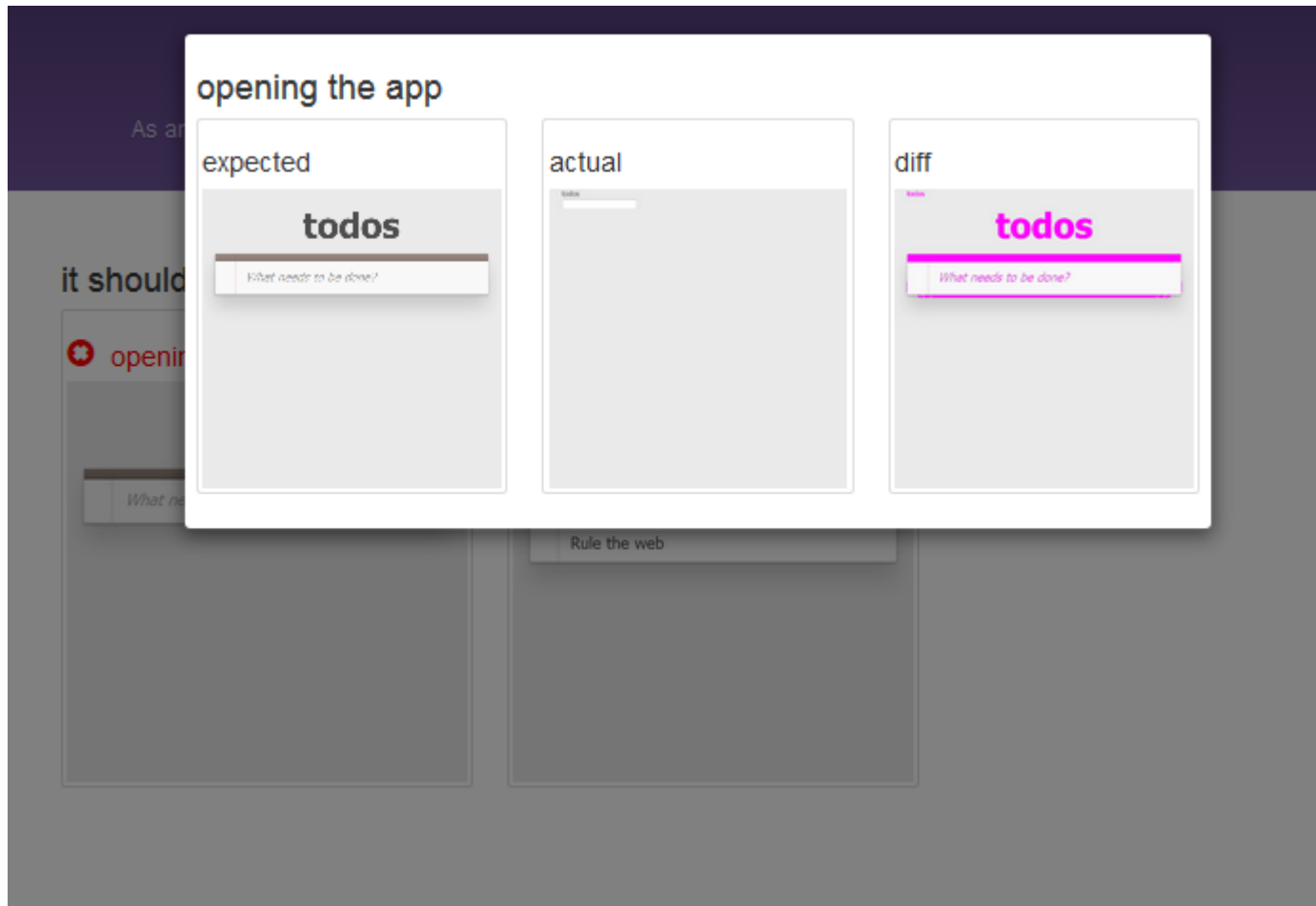
❌ adding 'Rule the web'

### todos

*What needs to be done?*

Rule the web

# Step 3. what is wrong?



# Step 4. make it green.

## todos

As an user I want to manage my todo so I can achieve more in my life

it should add a todo

✔ opening the app

### todos

What needs to be done?

✔ adding 'Rule the web'

### todos

What needs to be done?

Rule the web

# The result

## todos

*|What needs to be done?*

Rul the web

Yes!! Let's rule the web.



Yes it is on GITHUB

[https://github.com/ov0364/xp2014\\_todos](https://github.com/ov0364/xp2014_todos)

# Very Special Thanks

Jasmine

Bootstrap

PhantomCSS

Mustache

CasperJs

jQuery

PhantomJs

TodoMVC