更了不起的Node.js

从零开始构建一个Node.js Web框架（基于Koa 2.x）

i5ting：一个开源爱好者

StuQ明星讲师

Node.js布道者

空弦科技CTO

Cnodejs管理员

https://github.com/i5ting

以前我们总是喜欢拿异步说事儿

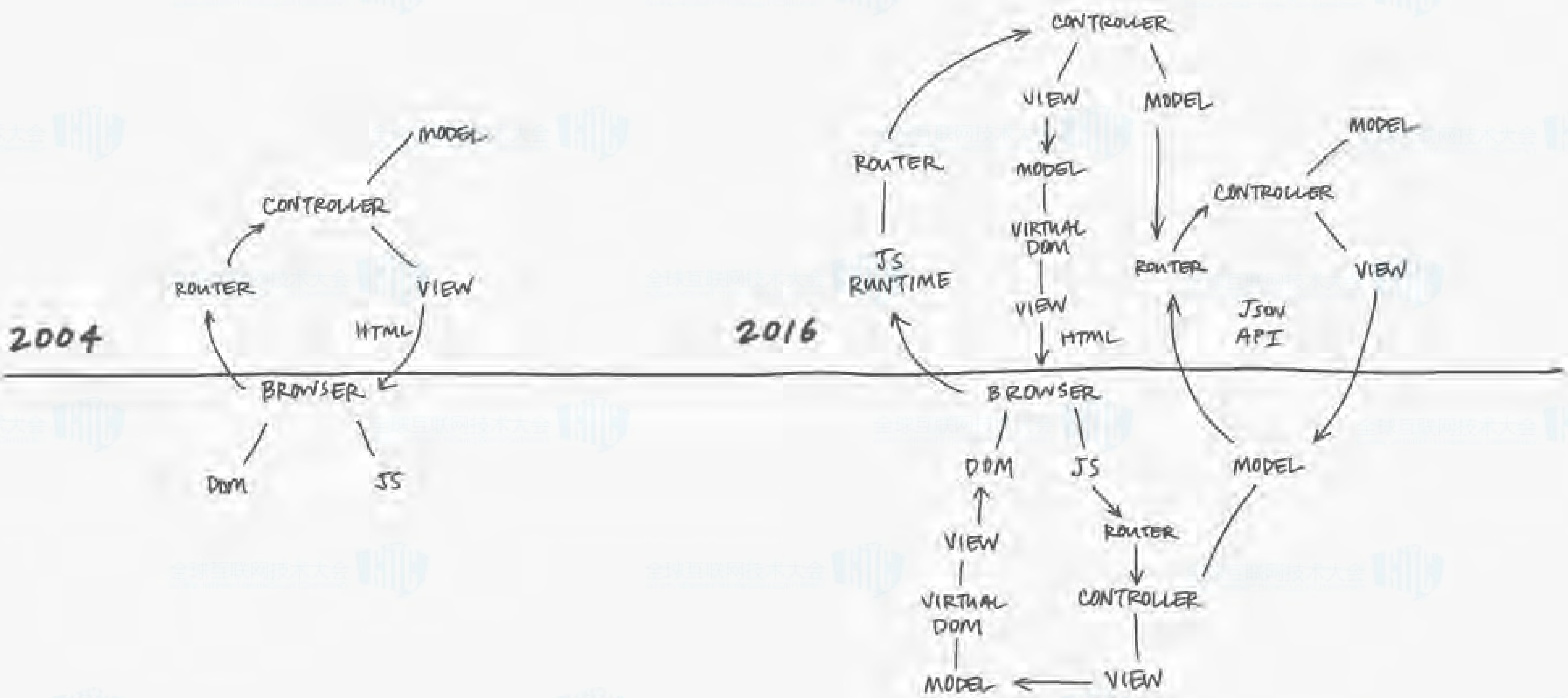
现在我们拿都小程序说事儿

除了性能
其他都是病？

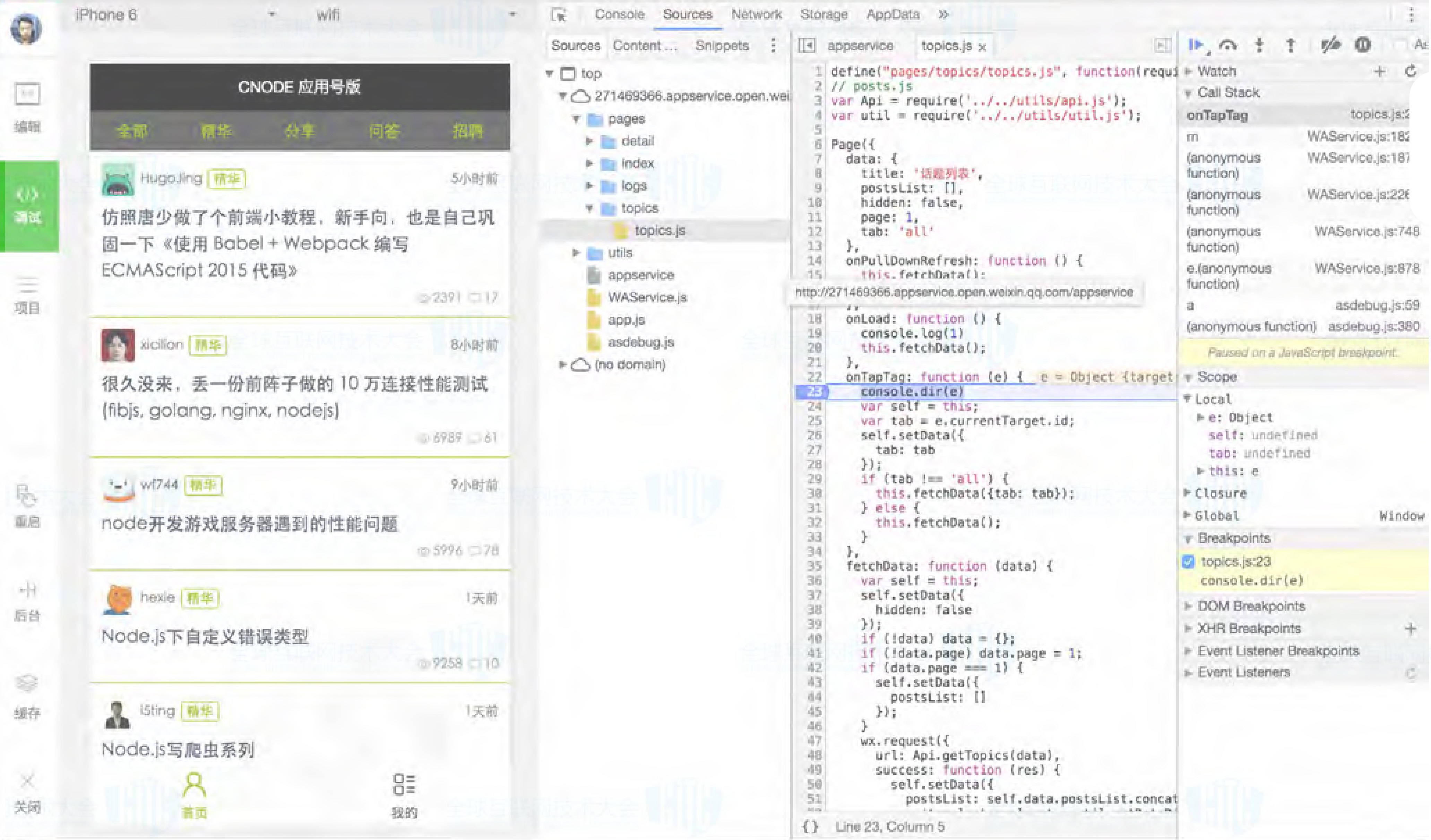
不按照流程办事，当然都是病

更了不起的Node.js

- 跨平台
- 无处不在的npm
- Async/await
- Koa 2.x
- 从零开始构建一个Node.js Web 框架


2004
MODEL
CONTROLLER
ROUTER
VIEW
HTML
BROWSER
DOM
JS
2016
CONTROLLER
VIEW
MODEL
ROUTER
MODEL
VIRTUAL DOM
JS RUNTIME
VIEW
HTML
MODEL
CONTROLLER
ROUTER
VIEW
JSON API
BROWSER
DOM
JS
MODEL
VIEW
ROUTER
VIRTUAL DOM
CONTROLLER
MODEL
VIEW

跨平台


iPhone 6
wifi
编辑
调试
项目
重启
后台
缓存
关闭
Console
Sources
Network
Storage
AppData
Sources
Content ...
Snippets
top
271469366.appservice.open.wei
pages
detail
index
logs
topics
topics.js
utils
appservice
WAService.js
app.js
asdebug.js
(no domain)
appservice
topics.js
Watch
Call Stack
onTapTag topics.js:2
m WAService.js:182
(anonymous function) WAService.js:187
(anonymous function) WAService.js:226
(anonymous function) WAService.js:748
e.(anonymous function) WAService.js:878
a asdebug.js:59
(anonymous function) asdebug.js:380
Paused on a JavaScript breakpoint.
Scope
Local
e: Object
self: undefined
tab: undefined
this: e
Closure
Global Window
Breakpoints
topics.js:23
console.dir(e)
DOM Breakpoints
XHR Breakpoints
Event Listener Breakpoints
Event Listeners
首页
我的

CNODE 应用号版

全部 精华 分享 问答 招聘

HugoJing 精华 5小时前
仿照唐少做了个前端小教程，新手向，也是自己巩固一下《使用 Babel + Webpack 编写 ECMAScript 2015 代码》
2391 17

xicilion 精华 8小时前
很久没来，丢一份前阵子做的 10 万连接性能测试 (fibjs, golang, nginx, nodejs)
6989 61

wf744 精华 9小时前
node开发游戏服务器遇到的性能问题
5996 78

hexie 精华 1天前
Node.js下自定义错误类型
9258 10

iSting 精华 1天前
Node.js写爬虫系列

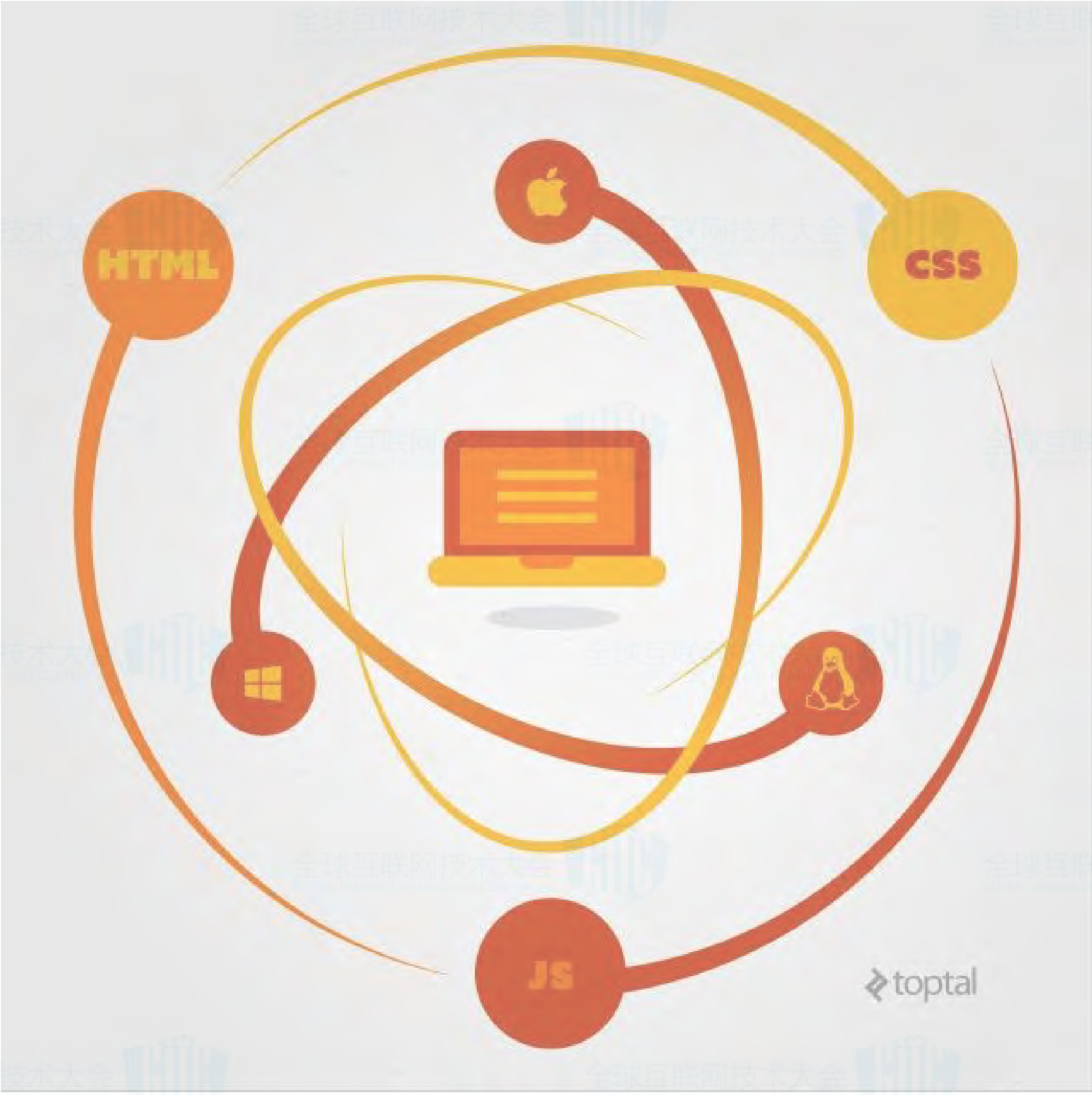
```
define("pages/topics/topics.js", function(requi
// posts.js
var Api = require('../../utils/api.js');
var util = require('../../utils/util.js');

Page({
  data: {
    title: '话题列表',
    postsList: [],
    hidden: false,
    page: 1,
    tab: 'all'
  },
  onPullDownRefresh: function () {
    this.fetchData();
```

http://271469366.appservice.open.weixin.qq.com/appservice

```
  onLoad: function () {
    console.log(1)
    this.fetchData();
  },
  onTapTag: function (e) {  e = Object {target
    console.dir(e)
    var self = this;
    var tab = e.currentTarget.id;
    self.setData({
      tab: tab
    });
    if (tab !== 'all') {
      this.fetchData({tab: tab});
    } else {
      this.fetchData();
    }
  },
  fetchData: function (data) {
    var self = this;
    self.setData({
      hidden: false
    });
    if (!data) data = {};
    if (!data.page) data.page = 1;
    if (data.page === 1) {
      self.setData({
        postsList: []
      });
    }
    wx.request({
      url: Api.getTopics(data),
      success: function (res) {
        self.setData({
          postsList: self.data.postsList.concat
```

Line 23, Column 5

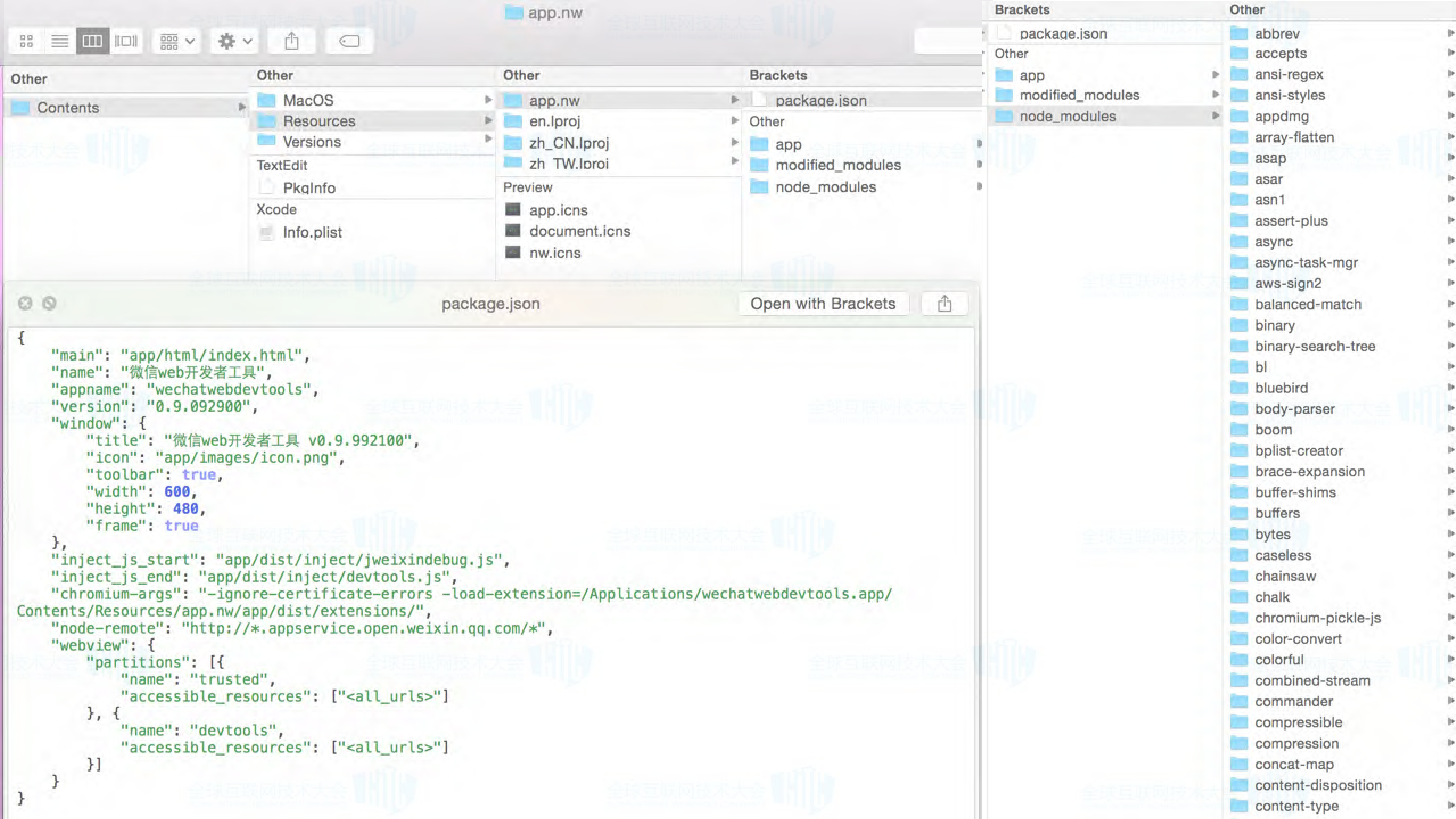
眼熟么？


HTML
CSS
JS
toptal

ELECTRON

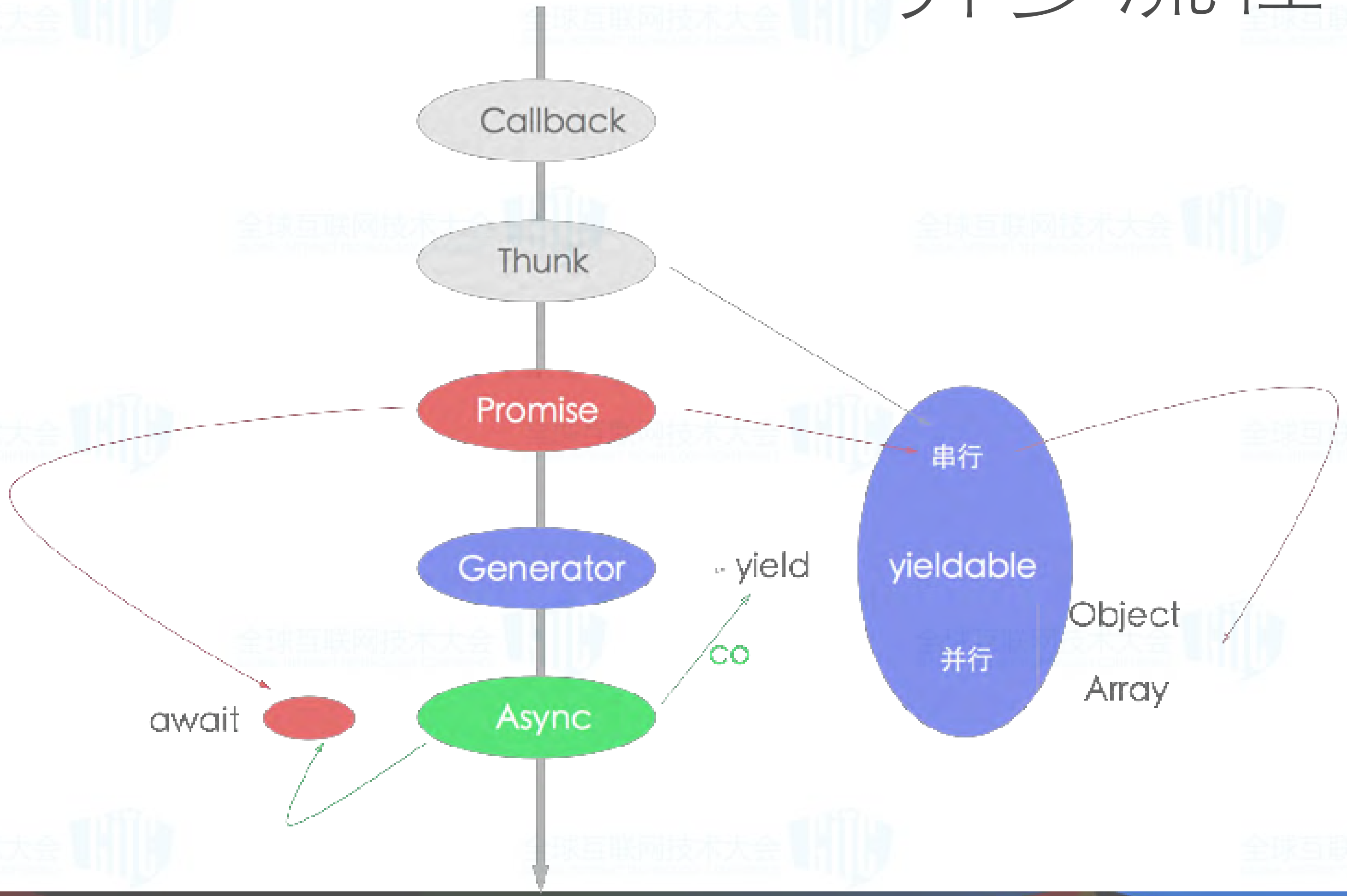
NW.js

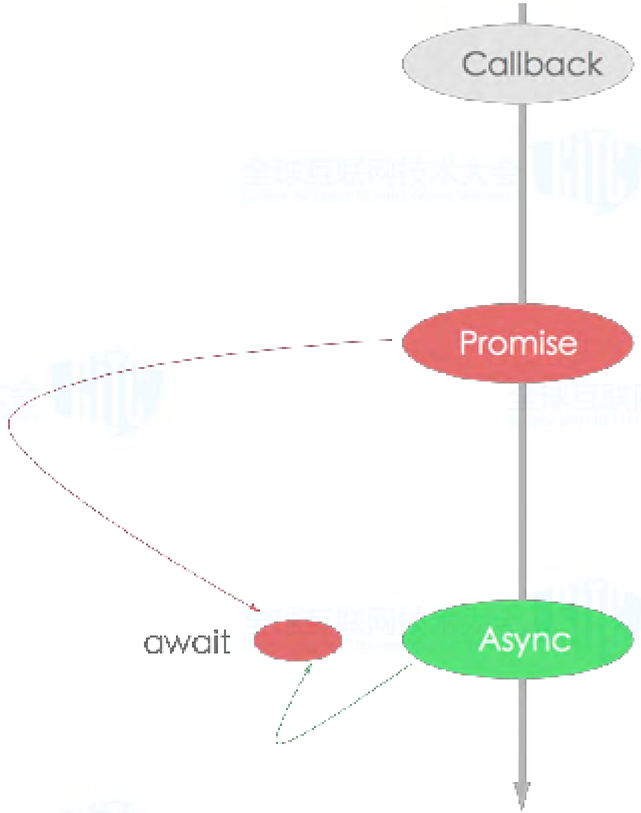
无处不在的npm

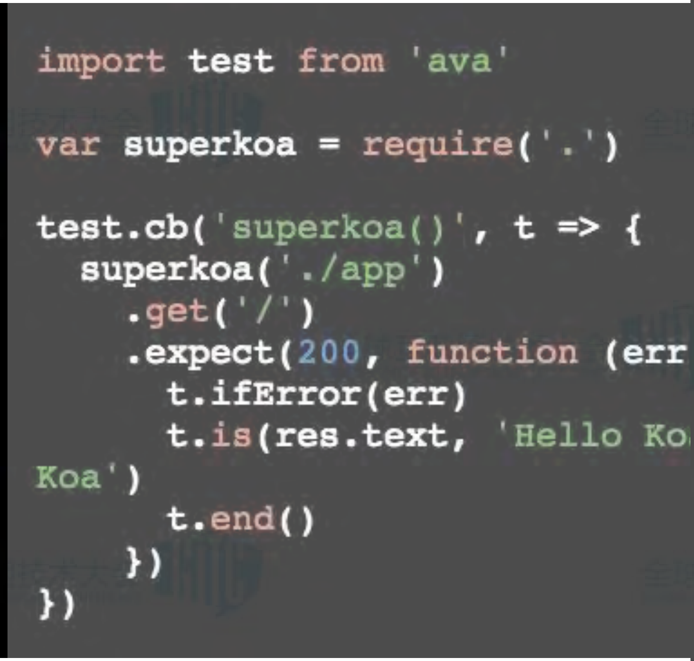

app.nw
Other
Contents
Other
MacOS
Resources
Versions
TextEdit
PkgInfo
Xcode
Info.plist
Other
app.nw
en.lproj
zh_CN.lproj
zh_TW.lproj
Preview
app.icns
document.icns
nw.icns
Brackets
package.json
Other
app
modified_modules
node_modules
Brackets
package.json
Other
app
modified_modules
node_modules
Other
abbrev
accepts
ansi-regex
ansi-styles
appdmg
array-flatten
asap
asar
asn1
assert-plus
async
async-task-mgr
aws-sign2
balanced-match
binary
binary-search-tree
bl
bluebird
body-parser
boom
bplist-creator
brace-expansion
buffer-shims
buffers
bytes
caseless
chainsaw
chalk
chromium-pickle-js
color-convert
colorful
combined-stream
commander
compressible
compression
concat-map
content-disposition
content-type
package.json
Open with Brackets

```
{
    "main": "app/html/index.html",
    "name": "微信web开发者工具",
    "appname": "wechatwebdevtools",
    "version": "0.9.092900",
    "window": {
        "title": "微信web开发者工具 v0.9.992100",
        "icon": "app/images/icon.png",
        "toolbar": true,
        "width": 600,
        "height": 480,
        "frame": true
    },
    "inject_js_start": "app/dist/inject/jweixindebug.js",
    "inject_js_end": "app/dist/inject/devtools.js",
    "chromium-args": "-ignore-certificate-errors -load-extension=/Applications/wechatwebdevtools.app/
Contents/Resources/app.nw/app/dist/extensions/",
    "node-remote": "http://*.appservice.open.weixin.qq.com/*",
    "webview": {
        "partitions": [{
            "name": "trusted",
            "accessible_resources": ["<all_urls>"]
        }, {
            "name": "devtools",
            "accessible_resources": ["<all_urls>"]
        }]
    }
}
```

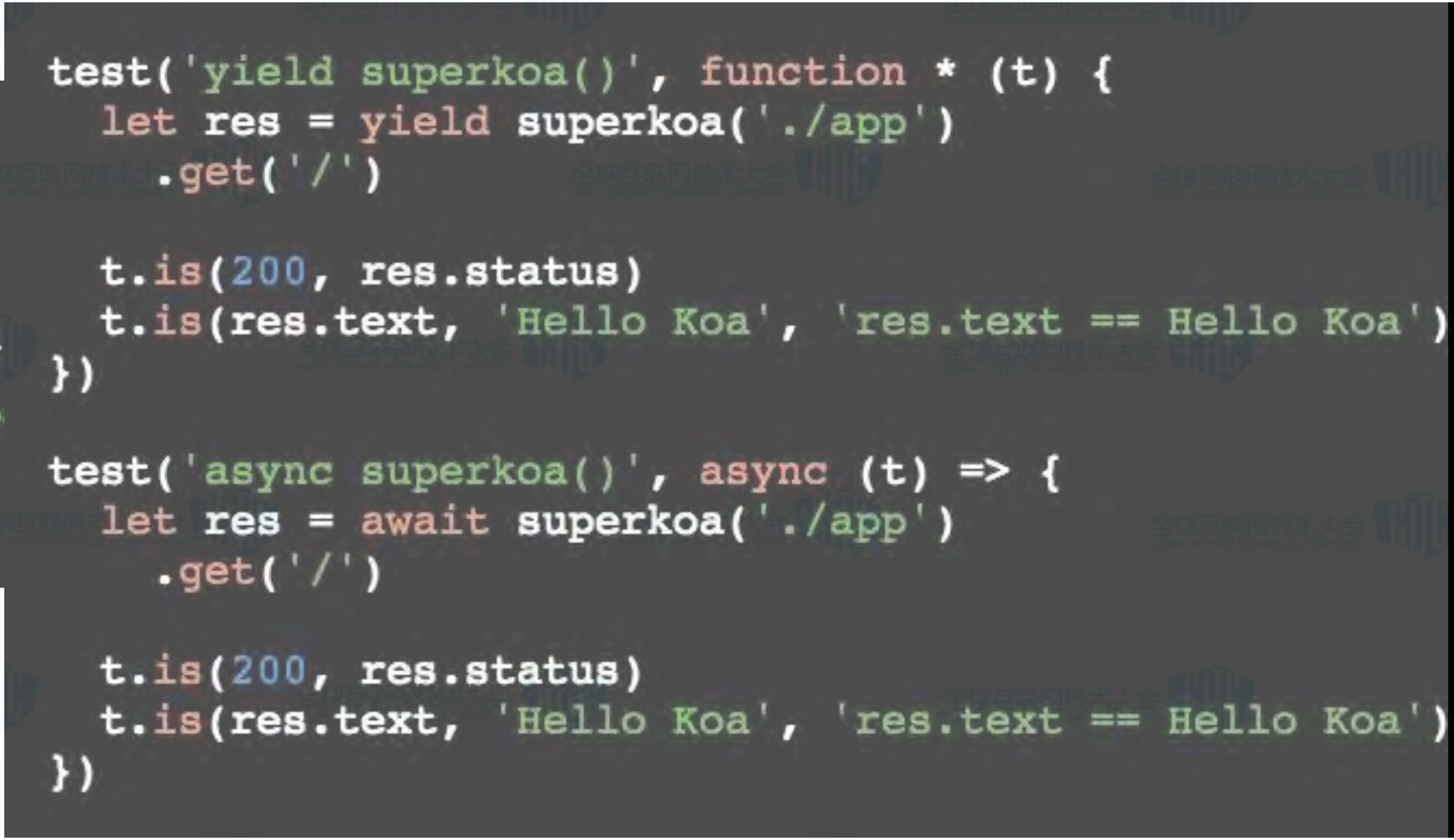
异步流程


Callback
Thunk
Promise
Generator
Async
await
yield
co
串行
yieldable
并行
Object
Array


Callback
Promise
await
Async

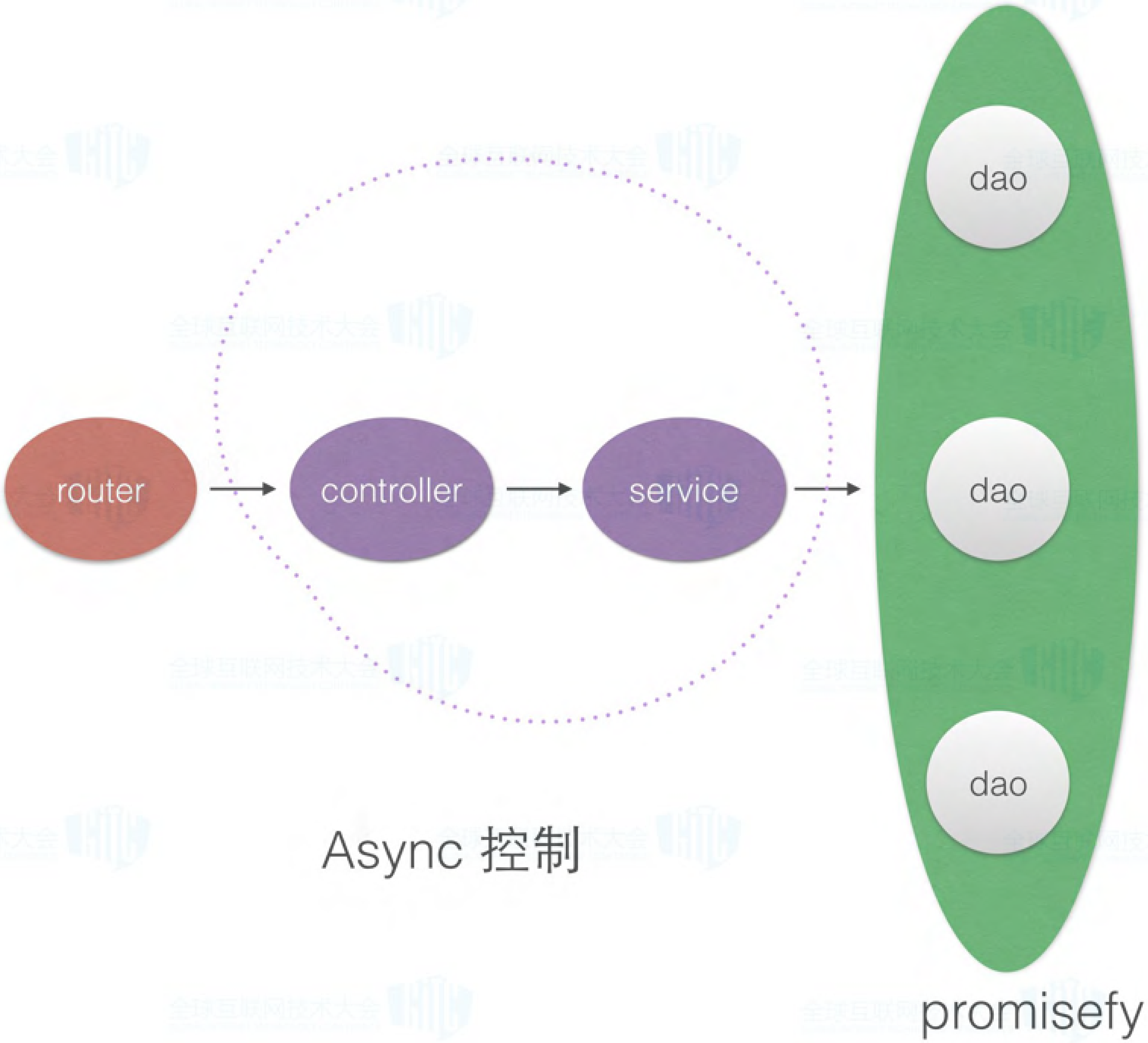


```
import test from 'ava'

var superkoa = require('.')

test.cb('superkoa()', t => {
  superkoa('./app')
    .get('/')
    .expect(200, function (err
      t.ifError(err)
      t.is(res.text, 'Hello Ko
Koa')
      t.end()
    })
})
```



```
test('yield superkoa()', function * (t) {
  let res = yield superkoa('./app')
    .get('/')

  t.is(200, res.status)
  t.is(res.text, 'Hello Koa', 'res.text == Hello Koa')
})

test('async superkoa()', async (t) => {
  let res = await superkoa('./app')
    .get('/')

  t.is(200, res.status)
  t.is(res.text, 'Hello Koa', 'res.text == Hello Koa')
})
```

Node Style



router

controller

service

dao

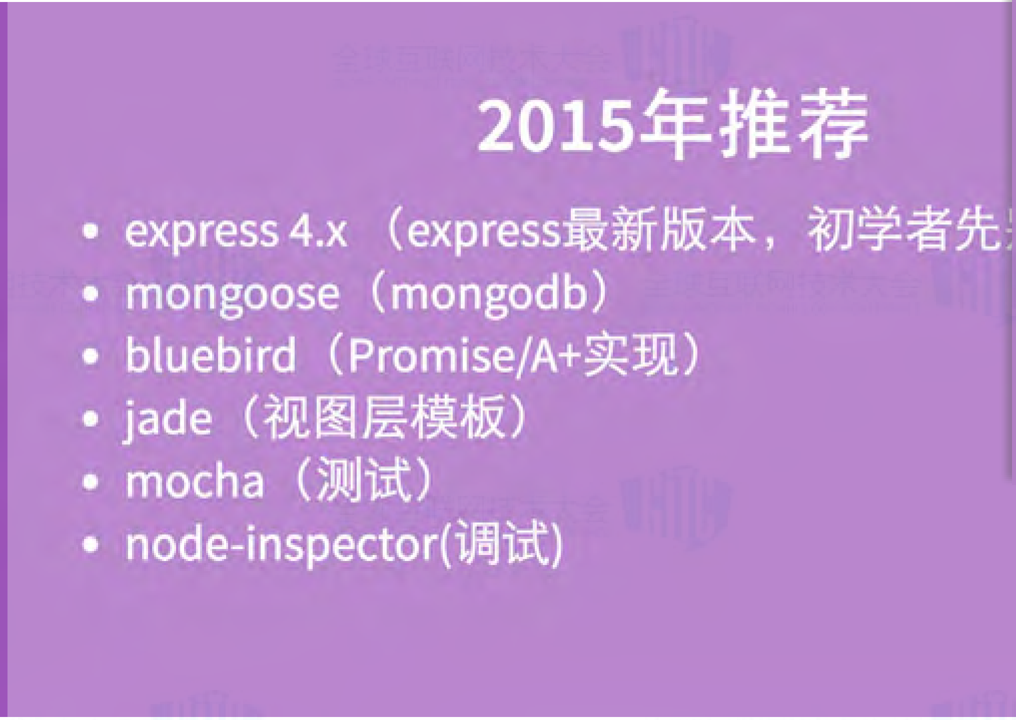
dao

dao

Async 控制

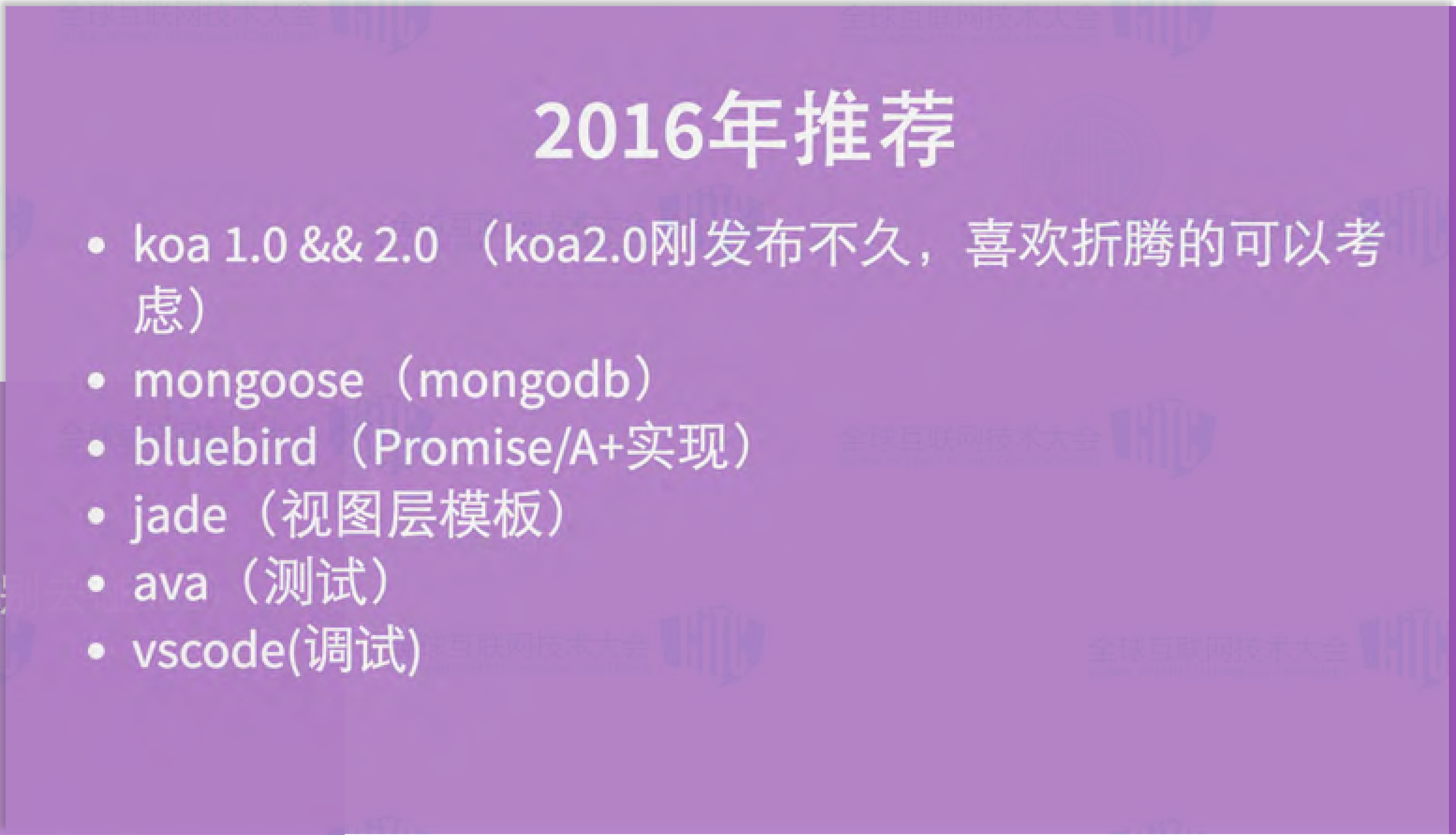
promisefy

技术选型



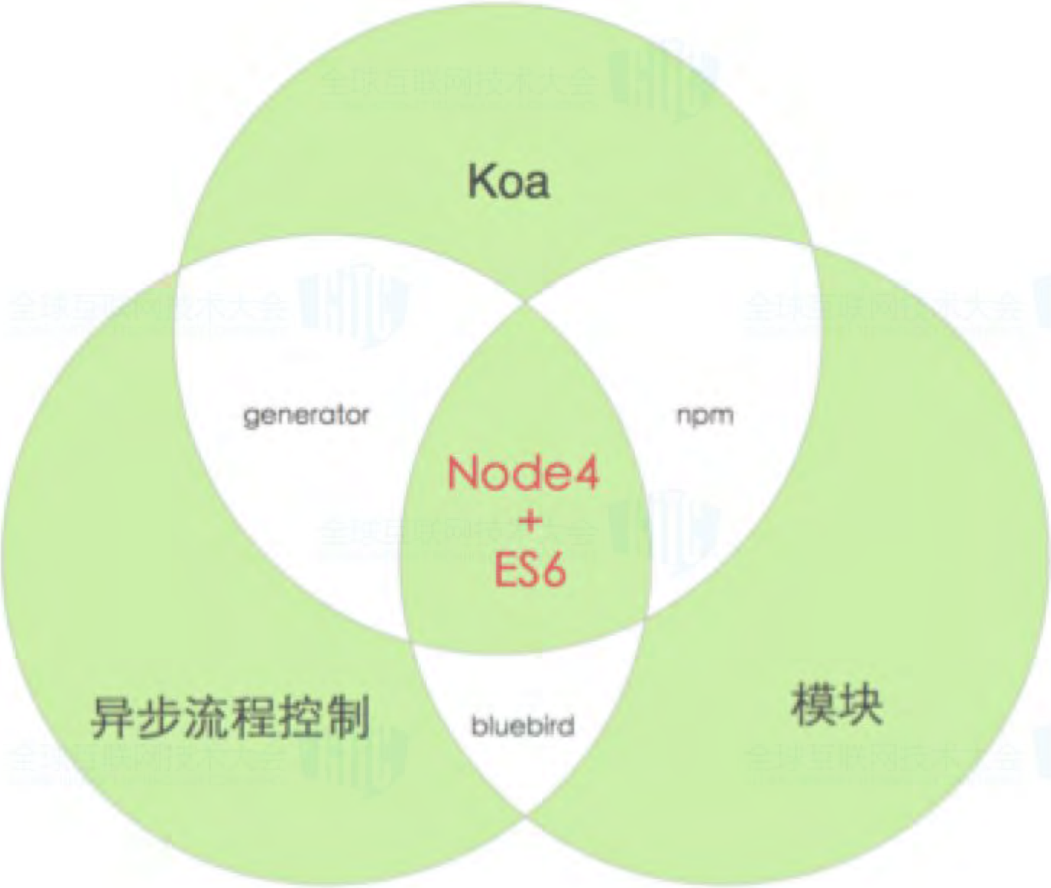
2015年推荐

- express 4.x （express最新版本，初学者先
- mongoose（mongodb）
- bluebird（Promise/A+实现）
- jade（视图层模板）
- mocha（测试）
- node-inspector(调试)



2016年推荐

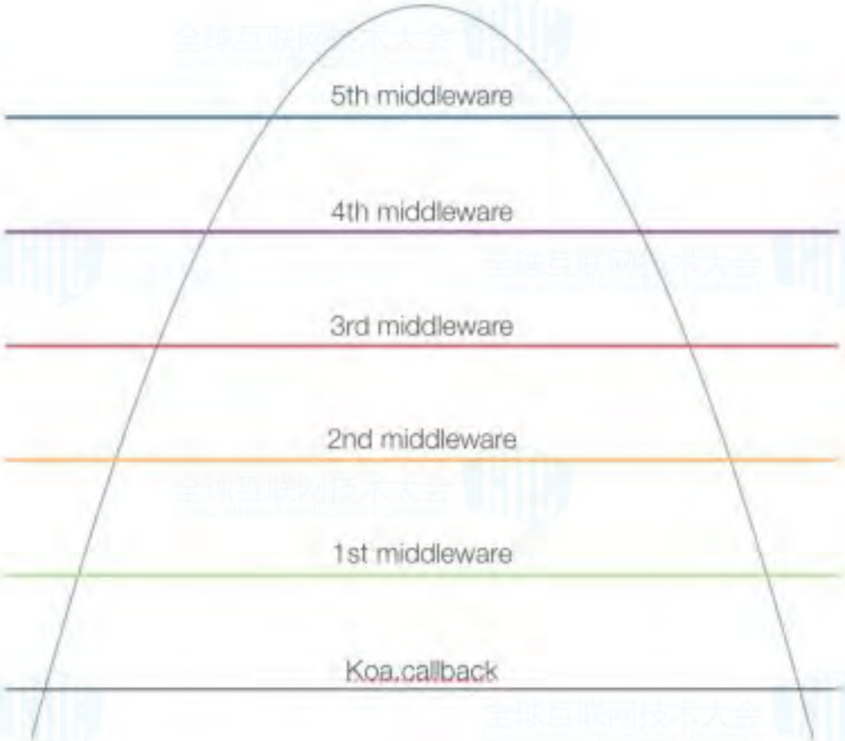
- koa 1.0 && 2.0 （koa2.0刚发布不久，喜欢折腾的可以考虑）
- mongoose（mongodb）
- bluebird（Promise/A+实现）
- jade（视图层模板）
- ava（测试）
- vscode(调试)

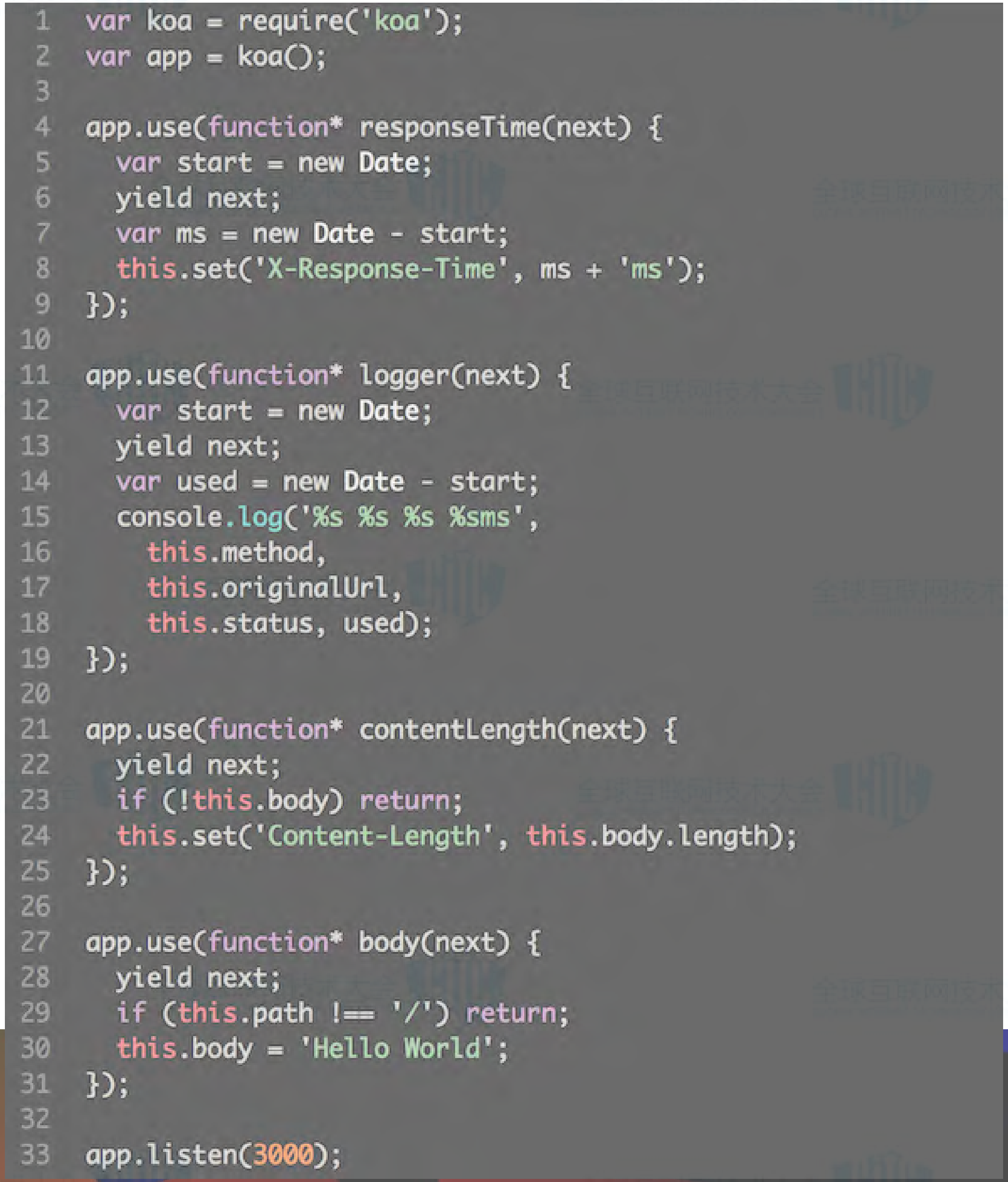

Koa
generator
npm
Node4
+
ES6
异步流程控制
bluebird
模块

变化

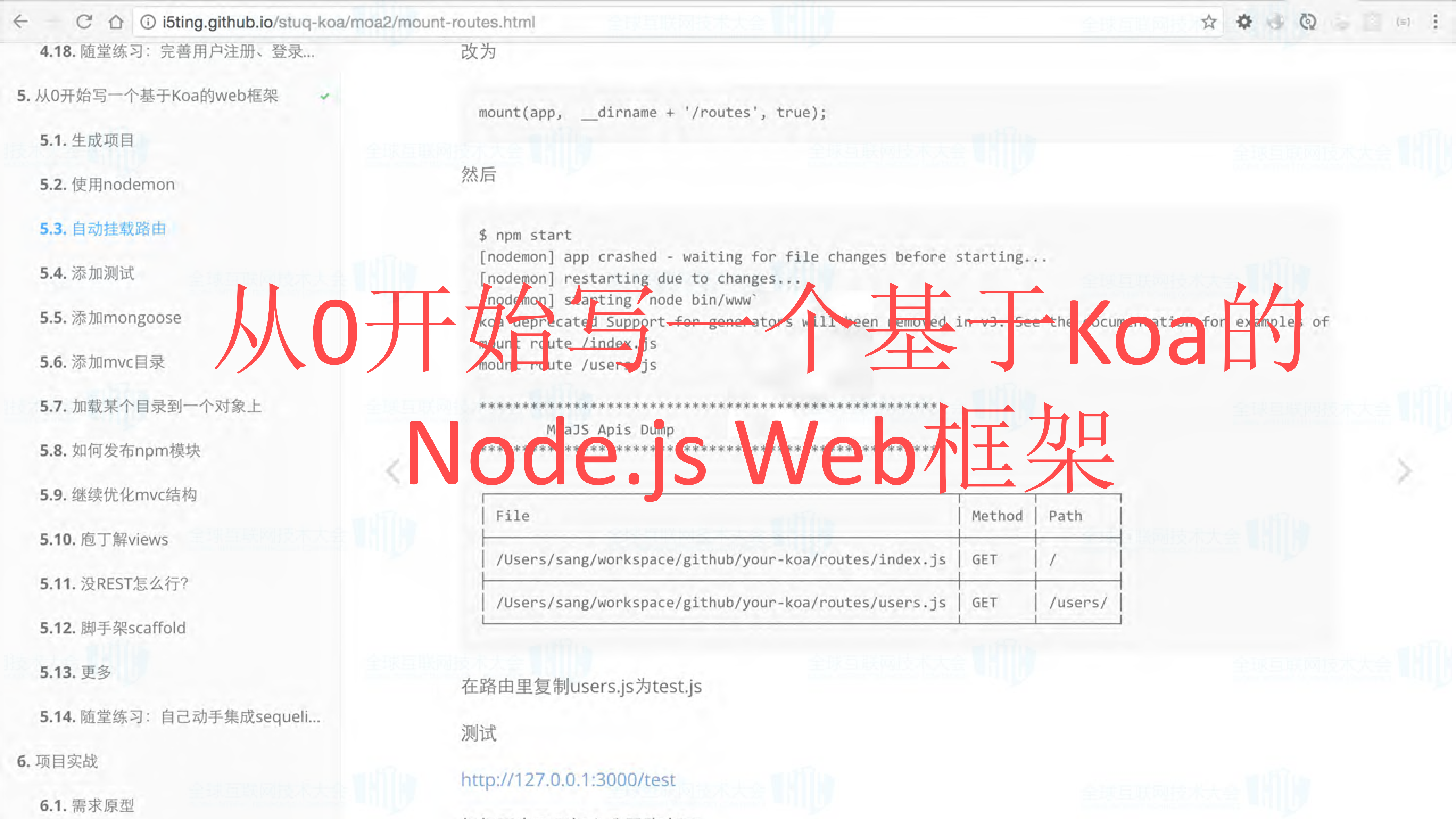
- Es6语法
- 异步流程控制
- Koa框架

一个回形针
三种中间件


5th middleware
4th middleware
3rd middleware
2nd middleware
1st middleware
Koa.callback



```
var koa = require('koa');
var app = koa();

app.use(function* responseTime(next) {
  var start = new Date;
  yield next;
  var ms = new Date - start;
  this.set('X-Response-Time', ms + 'ms');
});

app.use(function* logger(next) {
  var start = new Date;
  yield next;
  var used = new Date - start;
  console.log('%s %s %s %sms',
    this.method,
    this.originalUrl,
    this.status, used);
});

app.use(function* contentLength(next) {
  yield next;
  if (!this.body) return;
  this.set('Content-Length', this.body.length);
});

app.use(function* body(next) {
  yield next;
  if (this.path !== '/') return;
  this.body = 'Hello World';
});

app.listen(3000);
```



从0开始写一个基于Koa的 Node.js Web框架

4.18. 随堂练习：完善用户注册、登录...

5. 从0开始写一个基于Koa的web框架 ✓
  5.1. 生成项目
  5.2. 使用nodemon
  5.3. 自动挂载路由
  5.4. 添加测试
  5.5. 添加mongoose
  5.6. 添加mvc目录
  5.7. 加载某个目录到一个对象上
  5.8. 如何发布npm模块
  5.9. 继续优化mvc结构
  5.10. 庖丁解views
  5.11. 没REST怎么行?
  5.12. 脚手架scaffold
  5.13. 更多
  5.14. 随堂练习：自己动手集成sequeli...

6. 项目实战
  6.1. 需求原型

改为

```
mount(app,  __dirname + '/routes', true);
```

然后

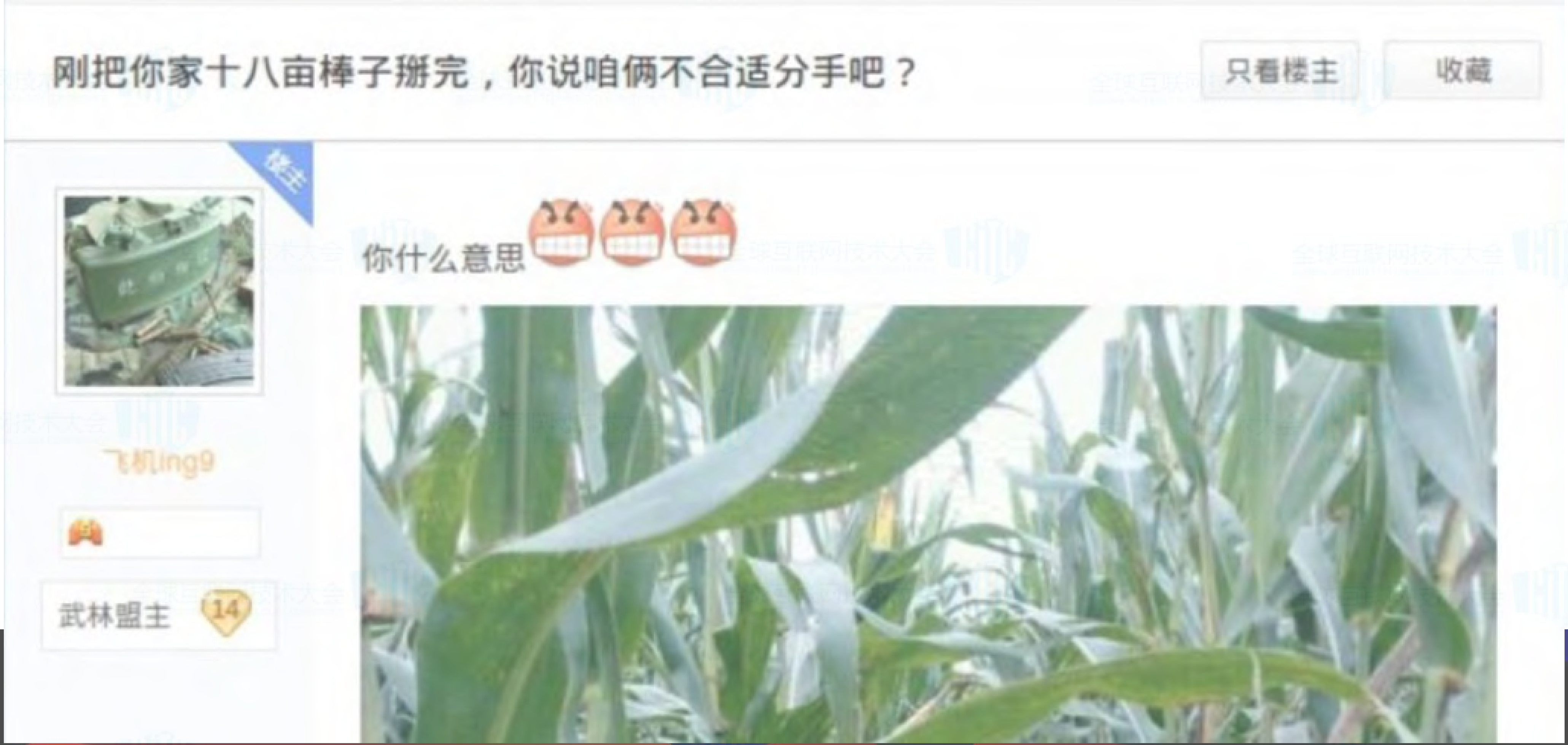
```
$ npm start
[nodemon] app crashed - waiting for file changes before starting...
[nodemon] restarting due to changes...
[nodemon] starting `node bin/www`
koa deprecated Support for generators will been removed in v3. See the documentation for examples of
mount route /index.js
mount route /users.js

*************************************************************
          MoaJS Apis Dump
*************************************************************

| File                                                   | Method | Path    |
|--------------------------------------------------------|--------|---------|
| /Users/sang/workspace/github/your-koa/routes/index.js  | GET    | /       |
|--------------------------------------------------------|--------|---------|
| /Users/sang/workspace/github/your-koa/routes/users.js  | GET    | /users/ |
```

在路由里复制users.js为test.js

测试

http://127.0.0.1:3000/test

真正的喜爱，才没有伤害



刚把你家十八亩棒子掰完，你说咱俩不合适分手吧？

你什么意思

只看楼主
收藏
楼主
飞机ing9
武林盟主
14

Aircos®桑世龙

console.log('The End, Thanks')

https://github.com/i5ting