

耦合

jsonp

jsonp的定义

表单

get请求

post方法:

耦合

彼此之间关系太紧密(这叫耦合):耦合不好,需要解耦!

```
response.end()
} else if (path === '/pay') {
  var amount = fs.readFileSync('./db', 'utf8') // 100
  var newAmount = amount - 1
  fs.writeFileSync('./db', newAmount)
  response.setHeader('Content-Type', 'application/javascript')
  response.statusCode = 200
  response.write(`
// 说明 jack.com 的后端程序员需要对 frank.com 的页面细节了解很清楚
// 耦合
| amount.innerText = amount.innerText - 1
`)
  response.end()
}
```

第一个网站的前端代码:

```
<link rel="stylesheet" href="/style.css">
<h5>您的账户余额是 <span id="amount">&&&amount&&&</span></h5>
<button id="button">打钱</button>
<script>
  window.yyy = function(result){
    alert('这是frank写的前端代码')
    alert(`我的到的结果是${result}`)
  }
  button.addEventListener('click', (e)=>{
    let script = document.createElement('script')
    script.src = 'http://jack.com:8002/pay?callbackName=yyy'
    document.body.appendChild(script)
    script.onload = function(e){
      e.currentTarget.remove()
    }
    script.onerror = function(){
      alert('fail')
      e.currentTarget.remove()
    }
  })
}
```

15195575825正在观看

```
<script>
  window.yyy = function(result){
    if(result === 'success'){
      amount.innerText = amount.innerText - 1
    }else{
    }
  }
  button.addEventListener('click', (e)=>{
    let script = document.createElement('script')
    script.src = 'http://jack.com:8002/pay?callbackName=yyy'
    document.body.appendChild(script)
    script.onload = function(e){
      e.currentTarget.remove()
    }
    script.onerror = function(){
      alert('fail')
      e.currentTarget.remove()
    }
  })
}
```

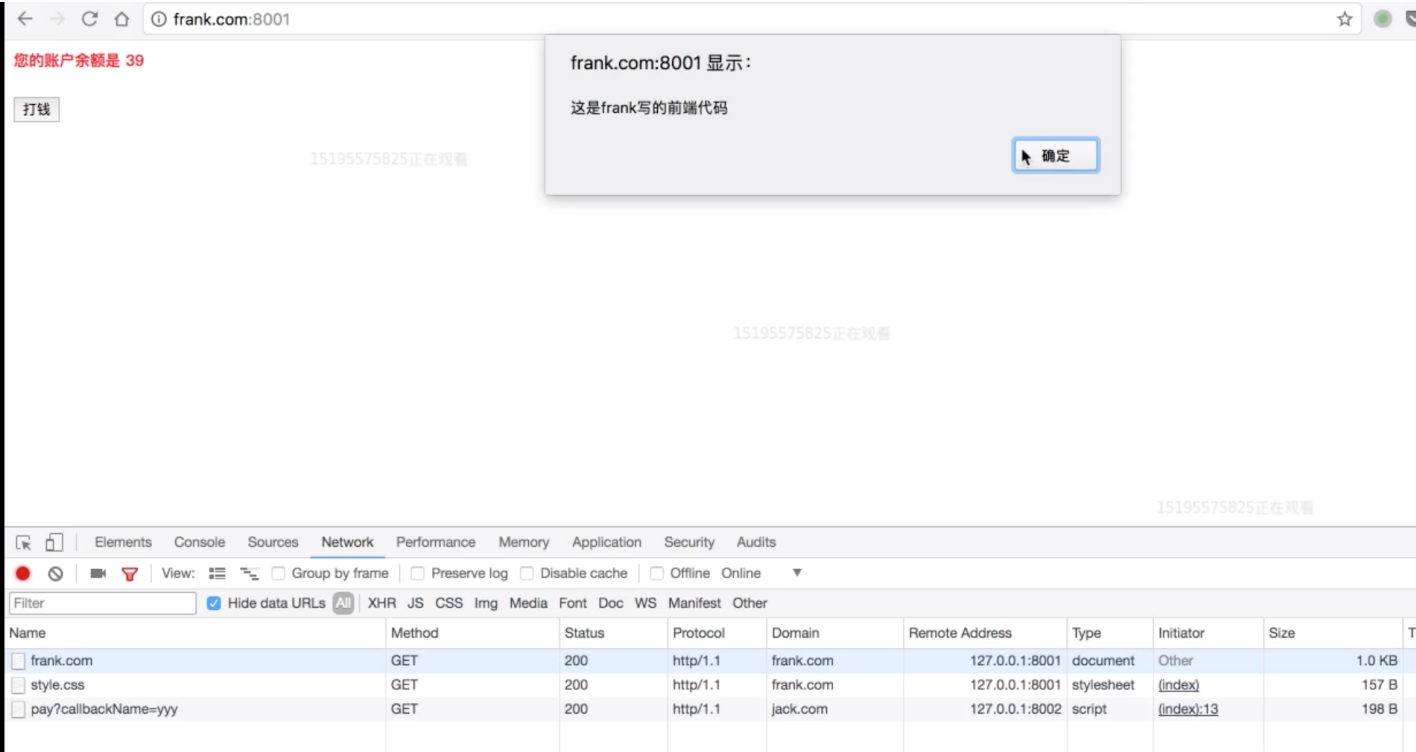
15195575825正在观看



第二个网站的后端代码:

```
}else if(path === '/pay'){
  var amount = fs.readFileSync('./db', 'utf8') // 100
  var newAmount = amount - 1
  fs.writeFileSync('./db', newAmount)
  response.setHeader('Content-Type', 'application/javascript')
  response.statusCode = 200
  response.write(`
    ${query.callbackName}.call(undefined, 'success')
  `)
  response.end()
}else{
  response.statusCode = 404
  response.setHeader('Content-Type', 'text/html; charset=utf-8')
  response.write('找不到对应的路径，你需要自行修改 index.js')
  response.end()
}
```

点击打钱之后:



点击确定之后:

您的账户余额是 39

打钱

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frank.com:8001 显示:

我的到的结果是success

确定

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Name	Method	Status	Protocol	Domain	Remote Address	Type	Initiator	Size
frank.com	GET	200	http/1.1	frank.com	127.0.0.1:8001	document	Other	1.0 KB
style.css	GET	200	http/1.1	frank.com	127.0.0.1:8001	stylesheet	(index)	157 B
pay?callbackName=yyy	GET	200	http/1.1	jack.com	127.0.0.1:8002	script	(index):13	198 B

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Name	Headers	Preview	Response	Timing
frank.com				
style.css				
pay?callbackName=yyy			yy.call(undefined, 'success')	

jsonp

```
}else if(path === '/pay'){
  var amount = fs.readFileSync('./db', 'utf8') // 100
  var newAmount = amount - 1
  fs.writeFileSync('./db', newAmount)
  response.setHeader('Content-Type', 'application/javascript')
  response.statusCode = 200
  response.write(`
    ${query.callbackName}.call(undefined, {
      "success": true,
      "left": ${newAmount}
    })
  `)
  JSON + padding = JSONP
  String + padding = StringP
}
response.end()
}else{
  response.statusCode = 404
  response.setHeader('Content-Type', 'text/html;charset=utf-8')
  response.write('找不到对应的路径，你需要自行修改 index.js')
  response.end()
}
```

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下面这是原来的代码(返回字符串),上面是改变之后(变成了一个对象,为jsonp)

```

} else if (path === '/pay') {
  var amount = fs.readFileSync('./db', 'utf8') // 100
  var newAmount = amount - 1
  fs.writeFileSync('./db', newAmount)
  response.setHeader('Content-Type', 'application/javascript')
  response.statusCode = 200
  response.write(`
    ${query.callbackName}.call(undefined, 'success')
  `)
  response.end()
} else {
  response.statusCode = 404
  response.setHeader('Content-Type', 'text/html; charset=utf-8')
  response.write('找不到对应的路径, 你需要自行修改 index.js!')
}
```

jsonp的定义

JSONP

请求方: frank.com 的前端程序员 (浏览器)

响应方: jack.com 的后端程序员 (服务器)

请求方动态创建 script, src 指向响应方, 同时传一个查询参数 ?callbackName=yyy

响应方根据查询参数callbackName, 构造形如

yyy.call(undefined, '你要的数据')

yyy('你要的数据')

这样的响应

浏览器接收到响应, 浏览器就会执行 yyy.call(undefined, '你要的数据')

那么请求方就知道了他要的数据

这就是 JSONP

约定:

callbackName -> callback

yyy -> 函数+ 随机数: frank12312312312321325()

\$.ajax({

url: "http://jack.com:8002/pay",

dataType: "jsonp",

success: function(response) {

if(response === 'success'){

amount.innerText = amount.innerText - 1

}

}

})

\$.jsonp()

注意:这里和AJAX没有任何关系

表单

HTML

<!DOCTYPE html>
<html>
<head>
 <meta charset="utf-8">
 <title>JS Bin</title>
</head>
<body>
<form action="/xxx" method=get>
 <input type="submit" >
</form>
</body>
</html>

Output

提交

HTML

<!DOCTYPE html>
<html>
<head>
 <meta charset="utf-8">
 <title>JS Bin</title>
</head>
<body>
<form action="/xxx" method=get>
 <input type="password" name ="secret">
 <input type="submit" >
</form>
</body>
</html>

Output

提交

填写的是111

Elements

Console

Network

Sources

Performance

Memory

Application

Security

Audits

Adblock Plus

Filter

Hide data URLs

XHR

JS

CSS

Img

Media

Font

Doc

WS

Manifest

Other

5 ms

10 ms

15 ms

20 ms

25 ms

30 ms

35 ms

40 ms

45 ms

50 ms

55 ms

60 ms

65 ms

70 ms

75 ms

80 ms

85 ms

90 ms

95 ms

get请求

HTML

<!DOCTYPE html>
<html>
<head>
 <meta charset="utf-8">
 <title>JS Bin</title>
</head>
<body>
<form action="/xxx" method=get>
 <input type="password" name ="secret">
 <input type="submit" >
</form>
</body>
</html>

Output

Run with JS

Aut

This page isn't here :-(

How about heading back to the [homepage](#) instead? It's nice there and there are lots of things to click on.

If you think there is supposed to be something here that isn't let us know via the [issues page](#).

Elements

Console

Network

Sources

Performance

Memory

Application

Security

Audits

Adblock Plus

Filter

Hide data URLs

XHR

JS

CSS

Img

Media

Font

Doc

WS

Manifest

Other

20 ms

40 ms

60 ms

80 ms

100 ms

120 ms

140 ms

160 ms

180 ms

200 ms

220 ms

240 ms

260 ms

280 ms

300 ms

Name

xxx?secret=111

static-page.css?73.25.5

dave.min.svg?73.25.5

Headers

Preview

Response

Cookies

Timing

General

Request URL: http://js.jirengu.com/xxx?secret=111

Request Method: GET

Status Code: 404 Not Found

Remote Address: 121.48.201.213:80

Referrer Policy: no-referrer-when-downgrade

Response Headers

view source

Content-Type: text/html


Chromium DevTools Network tab showing a GET request to `/xxx?secret=111`. The request headers are visible, including `Host: js.jirengu.com` and `Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8`. A red arrow points to the path `/xxx?secret=111` in the request headers, labeled "路径".


post方法:


HTML editor showing the form structure. The form action is `/xxx` and the method is `post`. The form contains a password input field named `secret` and a submit button. The output area shows the form data.


Chromium DevTools Network tab showing the POST request to `http://js.jirengu.com/xxx`. The request method is `POST`. The status code is `403 Forbidden`. The request headers are visible, including `POST /xxx HTTP/1.1`.

刚刚提交的数据:

dave.min.svg?3.25.5

xxx

static-page.css?3.25.5



4 requests

2.2 KB transferred

10.6 KB resources

20 ms

40 ms

60 ms

80 ms

100 ms

120 ms

140 ms

160 ms

180 ms


200 ms


220 ms


240 ms

260 ms

Name

dave.min.svg?3.25.5

xxx

static-page.css?3.25.5

Upgrade-Insecure-Requests: 1

Content-Type: application/x-www-form-urlencoded

User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_3) Appl

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,im

Referer: http://js.jirengu.com/runner

Accept-Encoding: gzip, deflate

Accept-Language: zh-CN,zh;q=0.9

Cookie: jsbin=s%3Aj%3A%7B%22version%22%3A%223.25.5%22%2C%22_csrf

=http%3A%2F%2Fjs.jirengu.com%2Fjufufiwake%2F1%2Fedit

▼ Form Data

view parsed

secret=123456

Request Headers

view parsed

POST /xxx HTTP/1.1

Host: js.jirengu.com

Connection: keep-alive

Content-Length: 13

Cache-Control: max-age=0

Origin: http://js.jirengu.com

Upgrade-Insecure-Requests: 1

Content-Type: application/x-www-form-urlencoded

User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_3) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.87 Safari/537.36

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3

Referer: http://js.jirengu.com/runner

Accept-Encoding: gzip, deflate

Accept-Language: zh-CN,zh;q=0.9

Cookie: jsbin=s%3Aj%3A%7B%22version%22%3A%223.25.5%22%2C%22_csrf%22%3A%22bUC9GtcV8TwQK19BhrUHPphk%22%2C%22flashCache%22%3A%7B%7D%7D.

=http%3A%2F%2Fjs.jirengu.com%2Fjufufiwake%2F1%2Fedit

▼ Form Data

view source

view URL encoded

secret: 123456

3 requests

1.7 KB transferred

10.6 KB resources