

# Github API - via Ajax

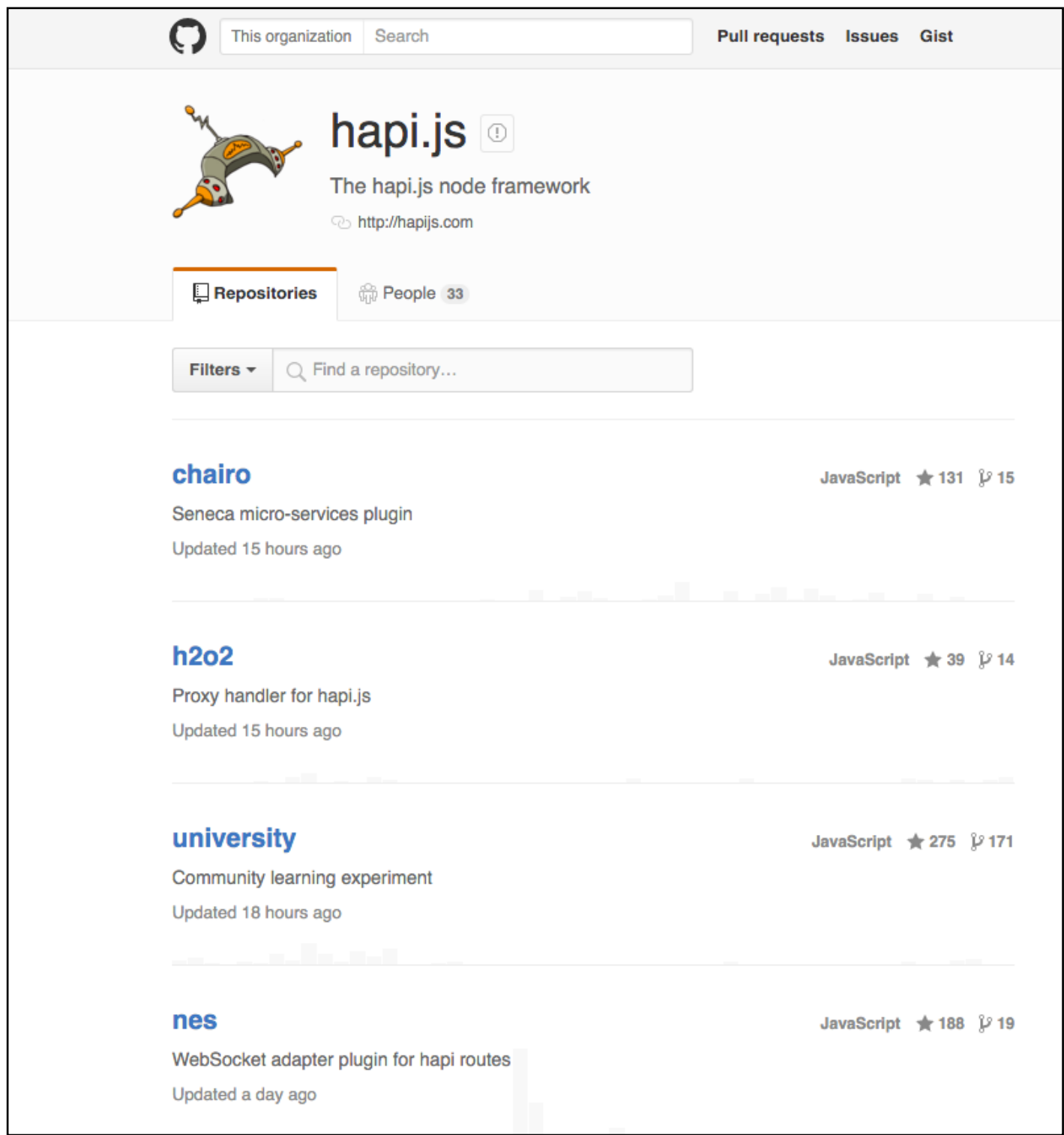
---

APIs in  
jQuery



Experiments in invoking a  
the Github API using JQuery

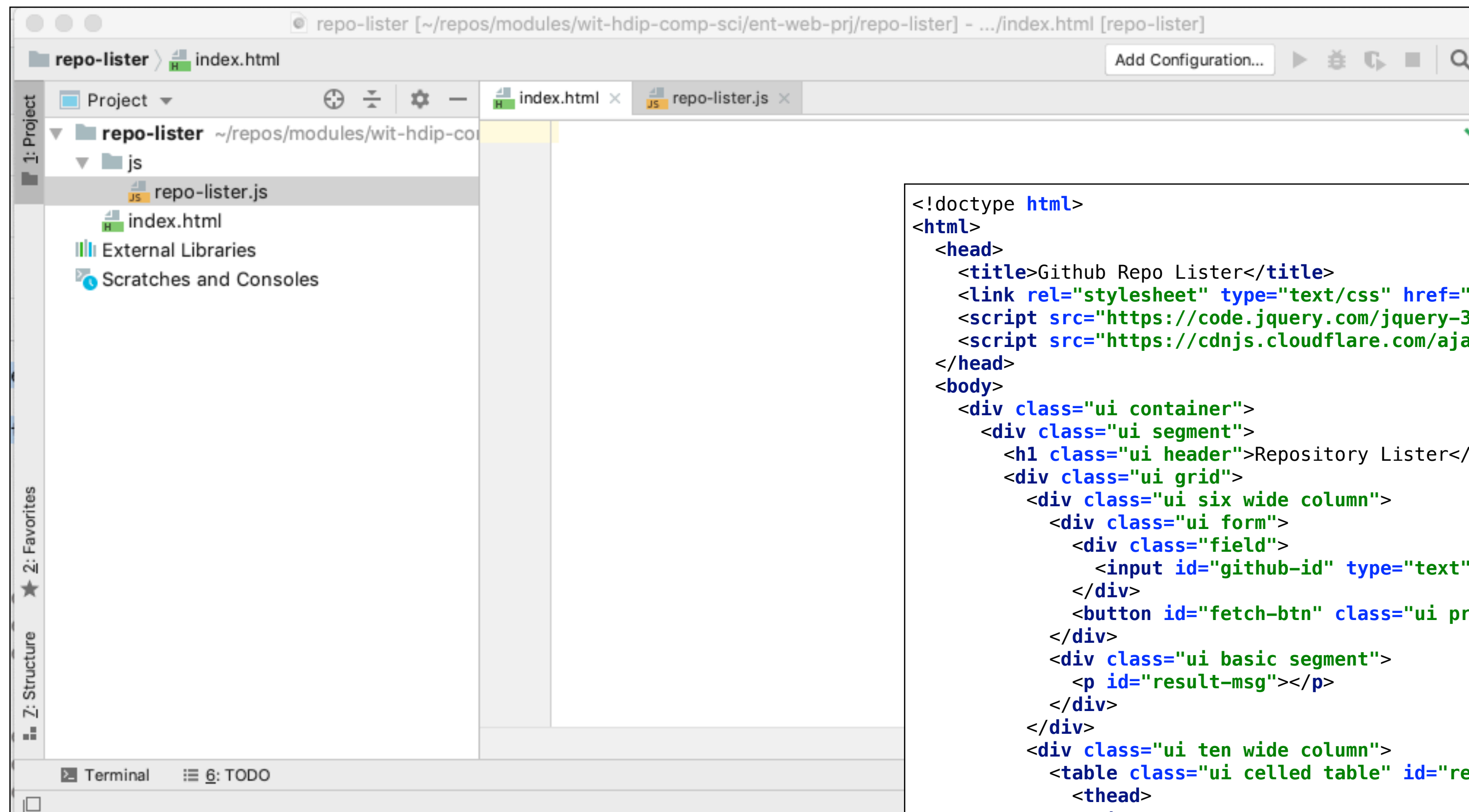
# Web Page API Explorer



Repository Lister	
<input type="text" value="hapijs"/>	
<button>Fetch</button>	
30 repos	
Repo Name	Url
joi	<a href="#">link</a>
hapi	<a href="#">link</a>
boom	<a href="#">link</a>
hapijs.com	<a href="#">link</a>
call	<a href="#">link</a>
catbox	<a href="#">link</a>
inert	<a href="#">link</a>
podium	<a href="#">link</a>
joi-date-extensions	<a href="#">link</a>
glue	<a href="#">link</a>
lab	<a href="#">link</a>
cryptiles	<a href="#">link</a>
confidence	<a href="#">link</a>
bell	<a href="#">link</a>
nes	<a href="#">link</a>
makemehapi	<a href="#">link</a>
discuss	<a href="#">link</a>

# Web Page API Explorer

style.css



Simple  
WebStorm  
project

```
<!doctype html>
<html>
  <head>
    <title>Github Repo Lister</title>
    <link rel="stylesheet" type="text/css" href="https://cdnjs.cloudflare.com/ajax/libs/semantic-ui/2.4.1/semantic.min.css">
    <script src="https://code.jquery.com/jquery-3.1.1.min.js"></script>
    <script src="https://cdnjs.cloudflare.com/ajax/libs/semantic-ui/2.4.1/semantic.min.js"></script>
  </head>
  <body>
    <div class="ui container">
      <div class="ui segment">
        <h1 class="ui header">Repository Lister</h1>
        <div class="ui grid">
          <div class="ui six wide column">
            <div class="ui form">
              <div class="field">
                <input id="github-id" type="text" placeholder="Github id...">
              </div>
              <button id="fetch-btn" class="ui primary button">Fetch</button>
            </div>
            <div class="ui basic segment">
              <p id="result-msg"></p>
            </div>
          </div>
          <div class="ui ten wide column">
            <table class="ui celled table" id="repo-table">
              <thead>
                <tr>
                  <th>Repo Name</th>
                  <th>Url</th>
                </tr>
              </thead>
              <tbody>
                </tbody>
            </table>
          </div>
        </div>
      </div>
    </div>
  </body>
</html>
```

index.html

```
<div class="ui container">
  <div class="ui segment">
    <h1 class="ui header">Repository Lister</h1>
    <div class="ui grid">
      <div class="ui six wide column">
        <div class="ui form">
          <div class="field">
            <input id="github-id" type="text" placeholder="Github id...">
          </div>
          <button id="fetch-btn" class="ui primary button">Fetch</button>
        </div>
        <div class="ui basic segment">
          <p id="result-msg"></p>
        </div>
      </div>
      <div class="ui ten wide column">
        <table class="ui celled table" id="repo-table">
          <thead>
            <tr>
              <th>Repo Name</th>
              <th>Url</th>
            </tr>
          </thead>
          <tbody>
          </tbody>
        </table>
      </div>
    </div>
  </div>
</div>
```

## Repository Lister

Repo Name	Url
-----------	-----

```

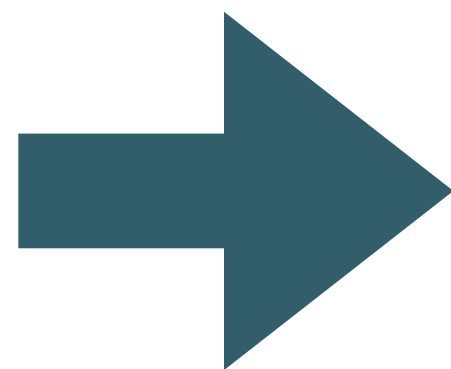
<div class="ui container">
  <div class="ui segment">
    ...
    <div class="field">
      <input id="github-id" type="text" placeholder="Github id...">
    </div>
    <button id="fetch-btn" class="ui primary button">Fetch</button>
    ...
  </div>
<script src="js/repo-lister.js" type="text/javascript"></script>

```

## Repository Lister



- JQuery event handler, triggered when 'fetch' button pressed.
- Retrieve text and log to browser console



### repo-lister.js

```

$('#fetch-btn').click(function () {
  var githubId = $('#github-id').val();
  console.log(githubId);
});

```

Github Repo Lister

×

+

←

→

↻

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📄

File

|

file:///Users/edeleastar/repos/modules/wit-hdip-comp-sci/ent-web-prj/repo-lister/index.html?

☆

🔍

👤

⋮

# Repository Lister

Github id...

Fetch

Repo Name

🔍

📄

Elements

Console

Sources

Network

Performance

Memory

Application

Security

Audits

⋮

×

Page

Filesystem

»

⋮

🔍

jquery-3.1.1.min.js

repo-lister.js

×

🔍

⏸

🔄

⬇

⬆

➡

🔇

⏹

▼

📁

top

▼

☁

file://

▼

📁

Users/edeleastar/repos/modul

▼

📁

js

📄

repo-lister.js

📄

index.html

▶

☁

cdnjs.cloudflare.com

▶

☁

code.jquery.com

▶

☁

fonts.googleapis.com

▶

☁

fonts.gstatic.com

1

\$('#fetch-btn').click(function () {

2

var githubId = \$('#github-id').val();

3

console.log(githubId);

4

});

5

▶

Watch

▼

Call Stack

Not paused

▼

Scope

Not paused

▼

Breakpoints

No breakpoints

▶

XHR/fetch Breakpoints

▶

DOM Breakpoints

▶

Global Listeners

▶

Event Listener Breakpoints

{ }

Line 2, Column 20

⋮

Console

What's New

×

🔍

🔇

top

▼

👁

Filter

Default levels

▼

1 hidden

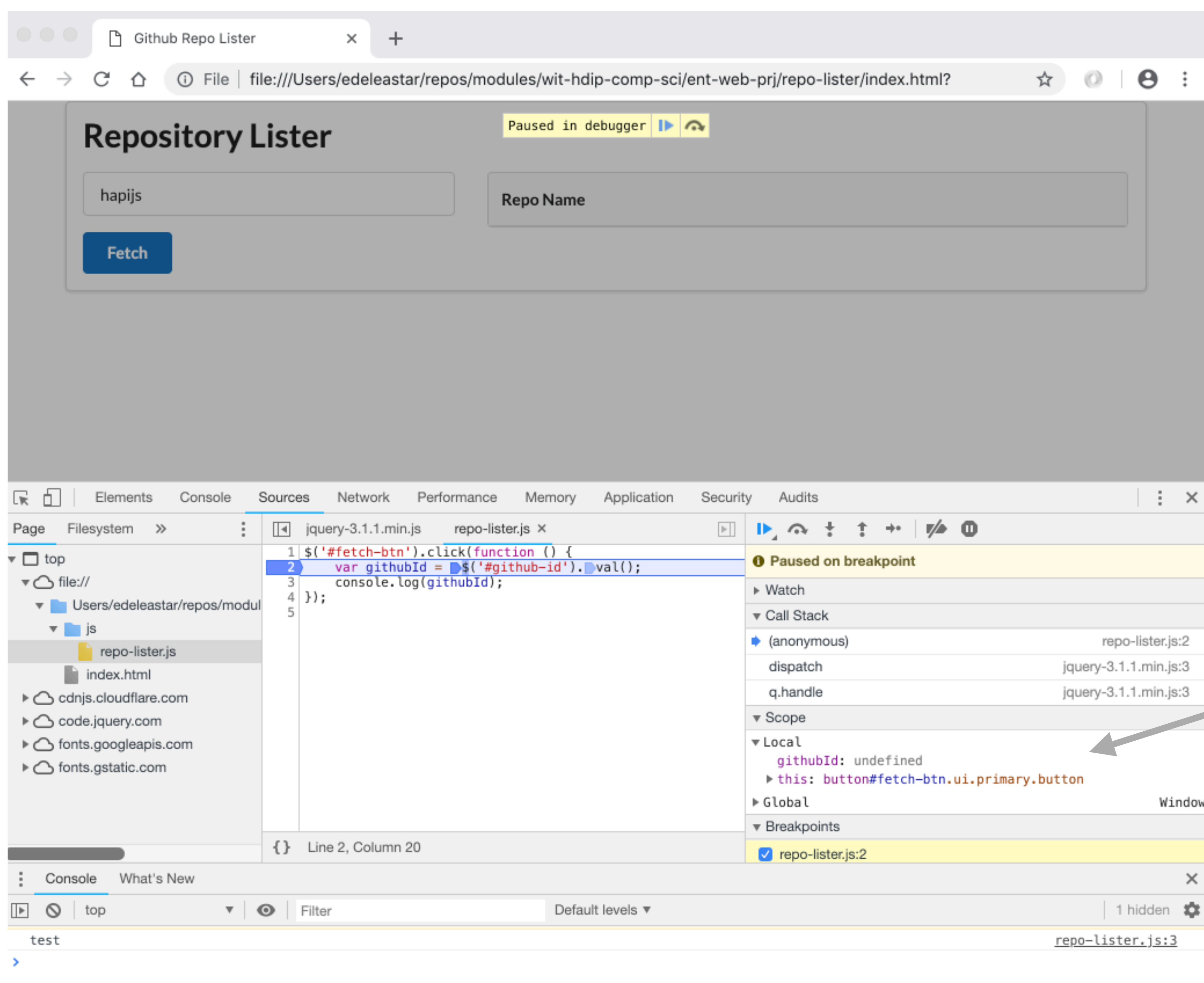
⚙

test

repo-lister.js:3

>





- Breakpoints facilitate exploration of JS data structures in 'Scope' panel

## JQuery ajax call

```
$("#fetch-btn").click(function() {  
    var githubId = $("#github-id").val();  
    console.log(githubId);  
  
    $.ajax({  
        dataType: "json",  
        url: "https://api.github.com/users/" + githubId + "/repos",  
        success: function(data) {  
            console.log("success");  
        },  
  
        error: function(err) {  
            console.log("fail");  
            console.log(err.statusText);  
        }  
    });  
});
```



Github Repo Lister

Paused in debugger

Repository Lister

hapijs

Fetch

Repo Name

Elements

Console

Sources

Network

Performance

Memory

Application

Security

Audits

Page

Filesystem

top

file://

Users/edeleastar/repos/modules

js

index.html

cdnjs.cloudflare.com

code.jquery.com

fonts.googleapis.com

fonts.gstatic.com

jquery-3.1.1.min.js

repo-lister.js

1 \$( "#fetch-btn" ).click(function() {

2 var githubId = \$( "#github-id" ).val();

3 console.log( githubId );

4

5 \$.ajax({

6   dataType: "json",

7   url: "https://api.github.com/users/" + githubId + "/repos",

8   success: function( data ) { data = Array(30)

9     console.log( "success" );

10   },

11

12   error: function( err ) {

13     console.log( "fail" );

14     console.log( err.statusText );

15   }

16   });

17 });

18 }

Line 9, Column 7

Paused on breakpoint

Watch

githubId: <not available>

Call Stack

Scope

Local

data: Array(30)

0: {id: 24743682, node\_id: "MDEwOJlhcG9zaXRvcnkyNDc0M..."}

1: {id: 26795773, node\_id: "MDEwOJlhcG9zaXRvcnkyNjc5N..."}

2: {id: 2157354, node\_id: "MDEwOJlhcG9zaXRvcnkyMTU3Mz..."}

3: {id: 8560345, node\_id: "MDEwOJlhcG9zaXRvcnk4NTYwMz..."}

4: {id: 20395079, node\_id: "MDEwOJlhcG9zaXRvcnkyMDM5N..."}

5: {id: 7579902, node\_id: "MDEwOJlhcG9zaXRvcnk3NTc5OT..."}

6: {id: 22635050, node\_id: "MDEwOJlhcG9zaXRvcnkyMjYzN..."}

7: {id: 100181461, node\_id: "MDEwOJlhcG9zaXRvcnkyMDkx..."}

Console

What's New

top

Filter

Default levels

1 hidden

hapijs

repo-lister.js:3

- Scope -> Locals to explore parameter returned by ajax call

```
index.html style.css repo-list.js x
1 $("#search_btn").click(function () {
2
3   var userName = $("#username").val()
4   console.log(userName);
5
6   $.ajax({
7     dataType: 'json',
8     url: 'https://api.github.com/users/' + userName + '/repos',
9     //data: {},
10    success: function (data) { data = Array[30]
11    console.log('success');
12  },
13  error: function (err) {
14    console.log('fail');
15    console.log(err.statusText);
16  }
17 });
18
19 });
```

{ } Line 11, Column 7

```
▼ Scope
▼ Local
  ▼ data: Array[30]
    ▼ 0: Object
      archive_url: "https://api.github.com/repos/hapijs/accept/zipball/2014-10-03T01:53:04Z"
      assignees_url: "https://api.github.com/repos/hapijs/accept/assignees"
      blobs_url: "https://api.github.com/repos/hapijs/accept/git/blobs"
      branches_url: "https://api.github.com/repos/hapijs/accept/branches"
      clone_url: "https://github.com/hapijs/accept"
      collaborators_url: "https://api.github.com/repos/hapijs/accept/collaborators"
      comments_url: "https://api.github.com/repos/hapijs/accept/comments"
      commits_url: "https://api.github.com/repos/hapijs/accept/commits"
      compare_url: "https://api.github.com/repos/hapijs/accept/compare"
      contents_url: "https://api.github.com/repos/hapijs/accept/contents"
      contributors_url: "https://api.github.com/repos/hapijs/accept/contributors"
      created_at: "2014-10-03T01:53:04Z"
      default_branch: "master"
      deployments_url: "https://api.github.com/repos/hapijs/accept/deployments"
      description: "HTTP Accept-* headers parser"
      downloads_url: "https://api.github.com/repos/hapijs/accept/downloads"
      events_url: "https://api.github.com/repos/hapijs/accept/events"
      fork: false
      forks: 2
      forks_count: 2
      forks_url: "https://api.github.com/repos/hapijs/accept/forks"
      full_name: "hapijs/accept"
      git_commits_url: "https://api.github.com/repos/hapijs/accept/git/commits"
      git_refs_url: "https://api.github.com/repos/hapijs/accept/git/refs"
      git_tags_url: "https://api.github.com/repos/hapijs/accept/git/tags"
      git_url: "git://github.com:hapijs/accept"
      has_downloads: true
```



▼ Scope

▼ Local

▼ data: Array[30]

▼ 0: Object

```
archive_url: "https://api.github.com/repos/hapijs/accept/branches"
assignees_url: "https://api.github.com/repos/hapijs/accept/assignees"
blobs_url: "https://api.github.com/repos/hapijs/accept/git/blobs"
branches_url: "https://api.github.com/repos/hapijs/accept/branches"
clone_url: "https://github.com/hapijs/accept"
collaborators_url: "https://api.github.com/repos/hapijs/accept/collaborators"
comments_url: "https://api.github.com/repos/hapijs/accept/comments"
commits_url: "https://api.github.com/repos/hapijs/accept/commits"
compare_url: "https://api.github.com/repos/hapijs/accept/compare"
contents_url: "https://api.github.com/repos/hapijs/accept/contents"
contributors_url: "https://api.github.com/repos/hapijs/accept/contributors"
created_at: "2014-10-03T01:53:04Z"
default_branch: "master"
deployments_url: "https://api.github.com/repos/hapijs/accept/deployments"
description: "HTTP Accept-* headers parser"
downloads_url: "https://api.github.com/repos/hapijs/accept/downloads"
events_url: "https://api.github.com/repos/hapijs/accept/events"
fork: false
forks: 2
forks_count: 2
forks_url: "https://api.github.com/repos/hapijs/accept/forks"
full_name: "hapijs/accept"
git_commits_url: "https://api.github.com/repos/hapijs/accept/git/commits"
git_refs_url: "https://api.github.com/repos/hapijs/accept/git/refs"
git_tags_url: "https://api.github.com/repos/hapijs/accept/git/tags"
git_url: "git://github.com:hapijs/accept.git"
has_downloads: true
```

```
success: function (data) {
  console.log('success');
  for (let i = 0; i < data.length; i++) {
    console.log(data[i].name);
  }
},
```

- Browser console

⋮ Console

🚫 🔍 top ▼ ☐ Preserve log

hapijs
success
accept
ammo
b64
bassmaster
bell
boom
bossy
call
catbox
catbox-memcached
catbox-memory
catbox-mongodb
catbox-redis
chair

▼ Scope

▼ Local

▼ data: Array[30]

▼ 0: Object

archive\_url: "https://api.github.com/repos/hapijs/accept"

assignees\_url: "https://api.github.com/repos/hapijs/accept/assignees"

blobs\_url: "https://api.github.com/repos/hapijs/accept/git/blobs"

branches\_url: "https://api.github.com/repos/hapijs/accept/git/branches"

clone\_url: "https://github.com/hapijs/accept"

collaborators\_url: "https://api.github.com/repos/hapijs/accept/collaborators"

comments\_url: "https://api.github.com/repos/hapijs/accept/comments"

commits\_url: "https://api.github.com/repos/hapijs/accept/commits"

compare\_url: "https://api.github.com/repos/hapijs/accept/compare"

contents\_url: "https://api.github.com/repos/hapijs/accept/contents"

contributors\_url: "https://api.github.com/repos/hapijs/accept/contributors"

created\_at: "2014-10-03T01:53:04Z"

default\_branch: "master"

deployments\_url: "https://api.github.com/repos/hapijs/accept/deployments"

description: "HTTP Accept-\* headers parser"

downloads\_url: "https://api.github.com/repos/hapijs/accept/downloads"

events\_url: "https://api.github.com/repos/hapijs/accept/events"

fork: false

forks: 2

forks\_count: 2

forks\_url: "https://api.github.com/repos/hapijs/accept/forks"

full\_name: "hapijs/accept"

git\_commits\_url: "https://api.github.com/repos/hapijs/accept/git/commits"

git\_refs\_url: "https://api.github.com/repos/hapijs/accept/git/refs"

git\_tags\_url: "https://api.github.com/repos/hapijs/accept/git/tags"

git\_url: "git://github.com:hapijs/accept"

has\_downloads: true

```
success: function(data) {  
  console.log("success");  
  for (let i = 0; i < data.length; i++) {  
    $("#repo-table").append("<tr><td>" + data[i].name + "</td></tr>");  
  }  
},
```



## Repository Lister

Repo Name
accept
ammo
b64
bassmaster
bell
boom
bossy
bounce
call
catbox
catbox-memcached
catbox-memory

```

function updateResult(result) {
    $("#result-msg").text(result);
}

function populateTable(repoList) {
    for (var i = 0; i < repoList.length; i++) {
        $("#repo-table tbody").append("<tr><td>" + repoList[i].name + "</td></tr>");
    }
}

```

```

$("#fetch-btn").click(function() {
    var githubId = $("#github-id").val();
    console.log(githubId);

    $.ajax({
        dataType: "json",
        url: "https://api.github.com/users/" + githubId + "/repos",

        success: function(data) {
            updateResult(data.length + " repos");
            populateTable(data);
        },

        error: function(err) {
            updateResult("Invalid id?");
        }
    });
});

```