

Build your own browser extension

Enhancing twitter profiles with the FullContact API

The image shows a Twitter profile for Dan Lynn (@danklynn) with a FullContact overlay. The profile includes a bio, location, website, and a list of social media links. The FullContact overlay is a white box with a red logo and text that reads "FullContact for Twitter" and "FullContact enhances your Twitter contacts using rich social profiles from the web and other public sources." It also contains a "FullContact API key" input field, a "Get FullContact API key here" link, and "Save" and "Reset" buttons.

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Dan Lynn
@danklynn FOLLOWS YOU
Co-Founder & CTO of <http://fullcontact.com>, musician, purveyor of fine punditry.
Denver, CO · <http://about.me/danklynn>

Dan Lynn
Co-Founder / CTO, FullContact
male, 32 years old
Denver, CO
[Twitter](#) [GitHub](#) [LinkedIn](#) [P](#) [Facebook](#) [Dribbble](#) [iK](#) [SoundCloud](#) [me](#) [Q](#) [Google](#) [Email](#) [git](#) [RSS](#) [+](#) [Dribbble](#) [t](#)
Other Organizations:
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Provided By **FullContact**

Followed by Ben Deda, FullContact, sharesprout and 10+ others.

5,249 TWEETS 410 FOLLOWING 606 FOLLOWERS

Following  View more Tweets →

Dan Lynn @danklynn 3h
"She also found that feelings of insecurity were oddly contagious" awe.sm/5hnAm

Dan Lynn @danklynn 16h
BREAKING: Saved by the bell is on [Netflix](#).

Dan Lynn @danklynn 18h
GPS maxed out at 62mph skiing today. [#zoom](#)

17 Mar
Twitter
y/1IFTz6

17 Mar

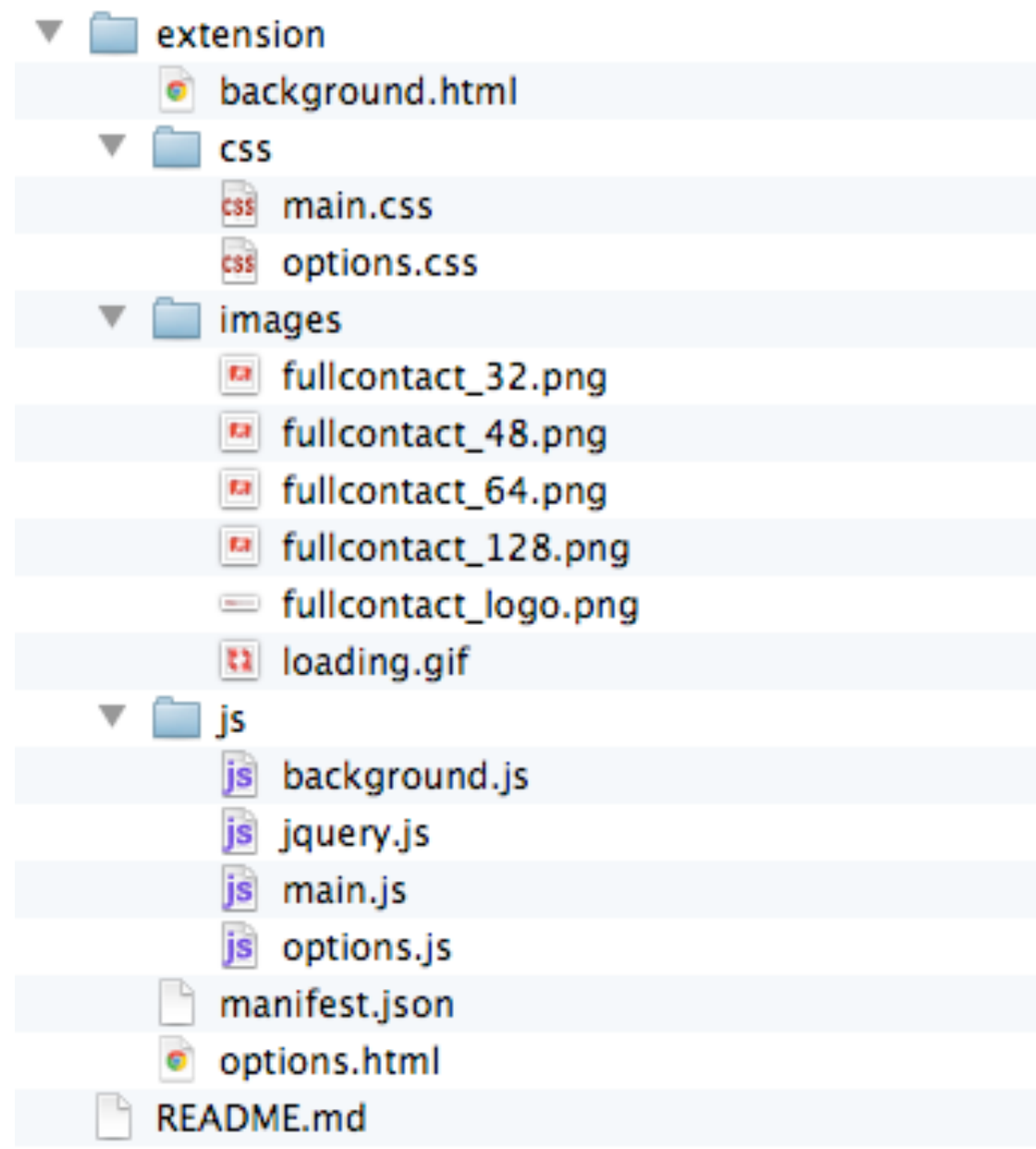
17 Mar

17 Mar
f tablets

Enhanced twitter profile

Key Components

- FullContact API
- Manifest.json
- Background page
- Options page
- Content Scripts



FullContact API

Lookup by Twitter

Use the person method to request more information about a specific person by **twitter**.

Requests



```
https://api.fullcontact.com/v2/person.json?twitter=lorangb&apiKey=xxxx
```

<http://developer.fullcontact.com/documentation/?category=person>

[curl -D - https://api.fullcontact.com/v2/person.json?
twitter=kurtharriger&apiKey=\\$FULLCONTACT_APIKEY](https://api.fullcontact.com/v2/person.json?twitter=kurtharriger&apiKey=$FULLCONTACT_APIKEY)

Manifest.json

- Background Page
- Browser Actions
- Options Page
- Content Scripts
- Permissions

```
{
  "name": "FullContact for Twitter",
  "version": "1.0",
  "description": "FullContact for Twitter Chrome Plugin",
  "browser_action": {
    "default_icon": "images/fullcontact_32.png",
    "popup": "options.html"
  },
  "icons": {
    "128": "images/fullcontact_128.png",
    "64": "images/fullcontact_64.png",
    "48": "images/fullcontact_48.png",
    "32": "images/fullcontact_32.png"
  },
  "permissions": [
    "https://api.fullcontact.com/*"
  ],
  "background_page": "background.html",
  "options_page": "options.html",
  "content_scripts": [
    {
      "matches": ["https://*.twitter.com/*"],
      "css": ["css/main.css"],
      "js": ["js/jquery.js", "js/main.js"]
    }
  ]
}
```

Background Page

```
<html>
<head>
  <script src="js/jquery.js" type="text/javascript"></script>
  <script src="js/background.js" type="text/javascript"></script>
</head>
</html>
```

Background Page

```
function getFullContactProfile(request, sendResponse) {  
    ...  
}
```

```
function requestHandler(request, sender, sendResponse) {  
    ...  
}
```

```
chrome.extension.onRequest.addListener(requestHandler);  
chrome.extension.onRequestExternal.addListener(requestHandler);
```

Background Page

```
function getFullContactProfile(request, sendResponse) {  
    var apiKey = localStorage['fullcontact_apikey'];  
    if(apiKey) {  
        var url = 'https://api.fullcontact.com/v2/person.html';  
        $.get(url, {'twitter': request.username, 'apiKey': apiKey})  
        .complete(function(jqXHR) {  
            if(jqXHR.status == 202) {  
                setTimeout(function() { getFullContactProfile(request, sendResponse); }, 1000);  
            }  
            else {  
                var data = {'status':jqXHR.status, 'responseText': jqXHR.responseText};  
                sendResponse(data);  
            }  
        });  
    }  
    else {  
        sendResponse({'status': 'apikey not set'});  
    }  
}
```


Background Page

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Background Page

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    }  
}
```

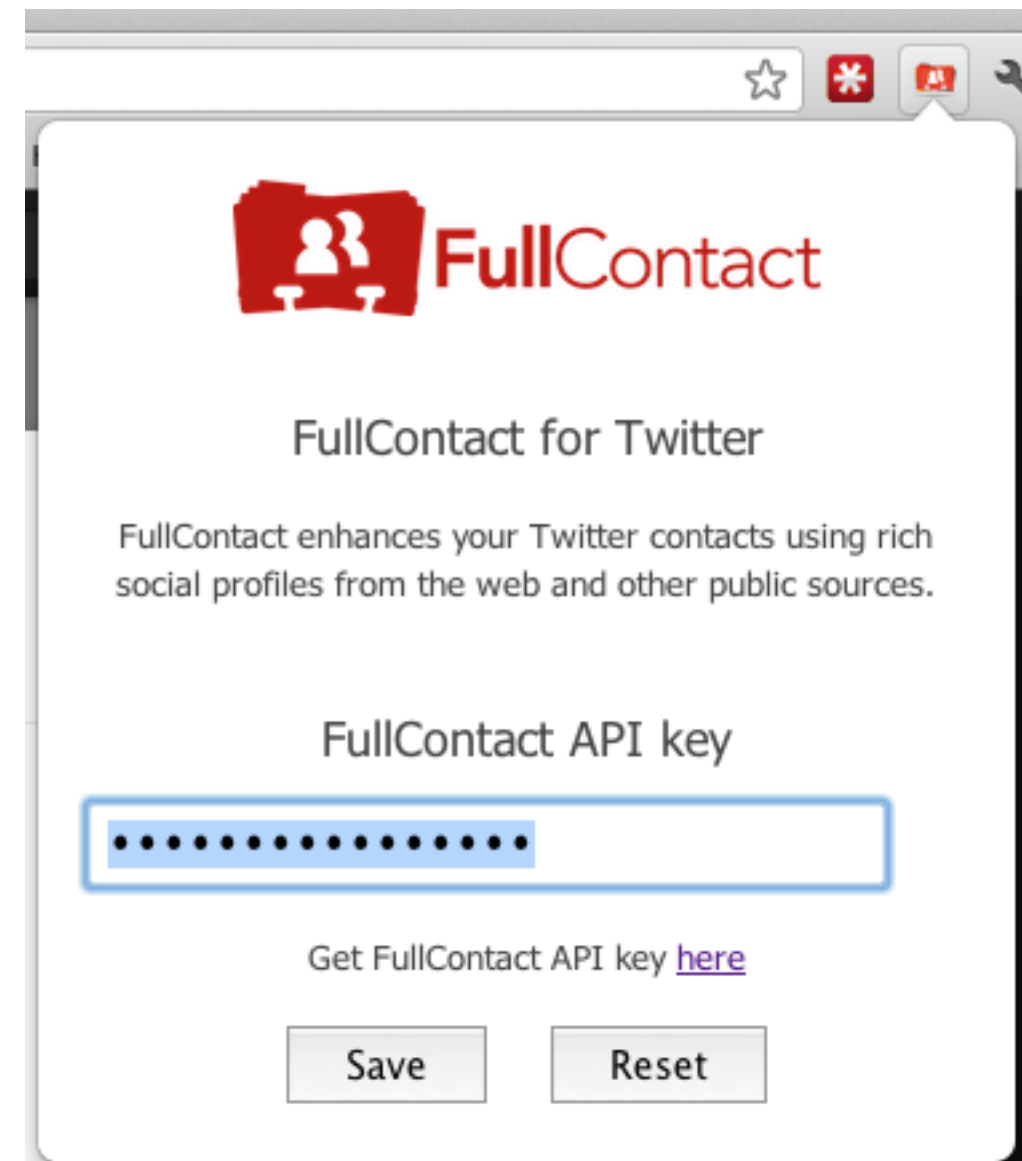
Background Page

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            }  
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                sendResponse(data);  
            }  
        });  
    }  
    else {  
        sendResponse({'status': 'apikey not set'});  
    }  
}
```

Options Page

```
<html>
<head>
  <title>FullContact API Key</title>
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/options.js"></script>
  <link rel="stylesheet" type="text/css" href="css/options.css"></link>
</head>
<body>
  <img class="fullcontact_logo"/>
  <h2>FullContact for Twitter</h2>
  <p>
    FullContact enhances your Twitter contacts using rich social
    profiles from the web and other public sources.
  </p>

  <h2>FullContact API key</h2>
  <input type="password" id="fullcontact_apikey" val="" />
  <p>
    Get FullContact API key <a href="http://fullcontact.com/getkey/"
      target="_blank">here</a>
  </p>
  <div>
    <button class="save">Save</button>
    <button class="reset">Reset</button>
    <p class="status"></p>
  </div>
</body>
</html>
```

A screenshot of a web browser window displaying the 'FullContact for Twitter' options page. The page features the FullContact logo at the top, followed by the title 'FullContact for Twitter' and a descriptive paragraph. Below this is a section titled 'FullContact API key' which contains a password input field filled with dots. Underneath the input field is a link that says 'Get FullContact API key here'. At the bottom of the form are two buttons labeled 'Save' and 'Reset'. The browser's address bar and various icons are visible at the top of the window.

Content Scripts

- Read and modify host page DOM
- Can register event handlers
- Isolated JavaScript Execution Environment
- May need to poll for DOM changes

PRO TIP:

To debug content scripts insert a “debugger;” statement into your javascript file. Chrome will display a javascript console within the javascript extensions execution context.

```
$(document).ready(function () {  
  
    function add_indicator_to_stream() { ... }  
    function extend_profile_dialog() { ... }  
  
    function update_ui() {  
        add_indicator_to_stream();  
        extend_profile_dialog();  
    }  
  
    setInterval(update_ui, 1000);  
});
```

Content Scripts

```
function getFullContactProfile(username, callback) { ... }
function rate_limit_exceeded(username, callback) { ... }
function add_indicator_to_stream() {
  $(".stream-item-header").each(function () {
    if (!$(this).find('.fullcontact_info').length) {
      var username = $(this).find('.username').text();
      var data = fullcontact[username];
      if (!data) {
        getFullContactProfile(username, update_ui);
      } else {
        if (data.status == 200) {
          $('<img/>')
            .addClass('fullcontact_info')
            .prependTo(this);
        } else {
          if (data.status == 403) {
            rate_limit_exceeded();
          }
        }
      }
    }
  });
}
```

Content Scripts

```
function getFullContactProfile(username, callback) { ... }
function extend_profile_dialog() {
  if ($('.profile-modal').length
    && !$('.profile-modal .fullcontact-profile-container').length) {

    var username = $('.profile-modal .js-screen-name').text();
    getFullContactProfile(username, function (data) {
      if (data.status == 200) {
        var container = $('<div>')
          .addClass('fullcontact-profile-container')
          .insertBefore('.profile-modal .social-proof');

        var contactInfo = $(data.responseText);
        contactInfo.appendTo(container);
        $('.twtr-dialog-container, .twtr-dialog-content').width('700px');
      }
    });
  }
}
```


Content Scripts

```
var fullcontact = {};  
  
function getFullContactProfile(username, callback) {  
  if (fullcontact[username]) {  
    callback(fullcontact[username]);  
  } else {  
    fullcontact[username] = {};  
    chrome.extension.sendRequest({  
      'method': 'getFullContactProfile',  
      'username': username  
    }, function (data) {  
      fullcontact[username] = data;  
      callback(data);  
    });  
  }  
}
```

Key Components

- FullContact API
 - Social Data
- Manifest.json
 - Extension Meta Data
- Background page
 - Core Functionality
- Options page
 - Configuration
- Content Scripts
 - Extend third party page

Why stop here?

<https://github.com/fullcontact/FullContact-Twitter-Extension>

- Enhance other social web sites?
- Or, ALL WEB SITES via pattern matching?
- GMAIL (e.g. Mingly)?
- Enhance your internal CRM system?
- Or build a better one... (e.g. Contactually)

Kurt Harriger

@kurtharriger

kurt@fullcontact.com

<https://github.com/kurtharriger>

@FullContactAPI

<http://developer.fullcontact.com>

<https://github.com/fullcontact>

