# How to apply CSS to iframe?

Asked 11 years, 6 months ago Active 4 months ago Viewed 1.2m times



I have a simple page that has some iframe sections (to display RSS links). How can I apply the same CSS format from the main page to the page displayed in the iframe?

1008

html css iframe rss





281



edited Dec 16 '19 at 4:55

Akshay Mulgavkar 1,262 5 21 asked Oct 20 '08 at 8:27 John

- 66 It is possible but only if the iframe's domain is the same as the parent gawpertron Jun 30 '10 at 23:50
- 13 gawpertron, just to clarify, are you saying if I use iFrame content from some other domain that I don't control, there is no way for me to control the CSS for that content? Ville M Dec 14 '10 at 0:19

Can you list a link to the page so that we might just be able to view our changes. – user3376708 Jul 15 '14 at 13:21

The domain, port and protocol have to be the same, doesn't work with subdomains either. – lee penkman Nov 11 '14 at 22:19

## 27 Answers





Edit: This does not work cross domain unless the appropriate CORS header is set.

430

There are two different things here: the style of the iframe block and the style of the page embedded in the iframe. You can set the style of the iframe block the usual way:





The style of the page embedded in the iframe must be either set by including it in the child page:

```
<link type="text/css" rel="Stylesheet" href="Style/simple.css" />
```

Or it can be loaded from the parent page with Javascript:

```
var cssLink = document.createElement("link");
cssLink.href = "style.css";
cssLink.rel = "stylesheet";
cssLink.type = "text/css";
frames['iframe1'].document.head.appendChild(cssLink);
```

edited May 17 '18 at 13:30 brauliobo answered Oct 20 '08 at 9:07

Tamas Czinege



**3,870** 3 23 31



**104k** 38 142 170

- Please note, it seems to me like some of the examples posted before are now invalid for html5. You can access the frame's contents as follows:

  document.getElementById("myframe").contentDocument. Embedding the css still doesn't seem to work for me though. Rehno Lindeque Feb 2 '11 at 19:54
- 35 link may only appear in the HEAD Knu May 23 '11 at 19:05
- 17 Worked for me only when I did ...document.head.appendChild(cssLink) Firefox and Safari. mojuba Sep 26 '11 at 12:47
- 24 Does this actually work cross-domain? I don't think it would. Simon East Nov 4 '11 at 0:52
- 89 Just so no1 else has to test it to find out: correct, it doesn't work cross-domain. Immediately upon doing frames['name'] you get "Unsafe JavaScript attempt to access frame with URL blah from frame with URL blah. Domains, protocols and ports must match." Kevin Nov 27 '11 at 17:37



I met this issue with **Google Calendar**. I wanted to style it on a darker background and change font.

204



Luckily, the URL from the embed code had no restriction on direct access, so by using PHP function <code>file\_get\_contents</code> it is possible to get the entire content from the page. Instead of calling the Google URL, it is possible to call a php file located on your server, ex. <code>google.php</code>, which will contain the original content with modifications:

**1** 

```
$content = file_get_contents('https://www.google.com/calendar/embed?
src=%23contacts%40group.v.calendar.google.com&ctz=America/Montreal');
```

Adding the path to your stylesheet:

```
$content = str_replace('</head>','<link rel="stylesheet"
href="http://www.yourwebsiteurl.com/google.css" /></head>', $content);
```

(This will place your stylesheet last just before the head end tag.)

Specify the base url form the original url in case css and js are called relatively:

```
$content = str_replace('</title>','</title><base href="https://www.google.com/calendar/"
/>', $content);
```

The final google.php file should look like this:

```
<?php
$content = file_get_contents('https://www.google.com/calendar/embed?
src=%23contacts%40group.v.calendar.google.com&ctz=America/Montreal');
$content = str_replace('</title>','</title><base href="https://www.google.com/calendar/"
/>', $content);
$content = str_replace('</head>','<link rel="stylesheet"
href="http://www.yourwebsiteurl.com/google.css" /></head>', $content);
echo $content;
```

Then you change the iframe embed code to:

```
<iframe src="http://www.yourwebsiteurl.com/google.php" style="border: 0" width="800"
height="600" frameborder="0" scrolling="no"></iframe>
```

Good luck!

#### edited Oct 4 '17 at 14:00



answered Sep 20 '12 at 22:21



- 61 FYI, this is basically hacking. Chris Houghton Aug 11 '14 at 16:13
- 71 You can call that hacking by definition if you want. But you didn't offer any better solution... This solution is not a way to dammage Google service or to trick people in a way to exploit their weakness.

   SequenceDigitale.com Aug 12 '14 at 16:58
- I would kill for a way to make this solution work with google docs. Its throwing all sorts of javascript errors. "Uncaught TypeError: Cannot read property 'a' of undefined " deweydb Aug 19 '14 at 23:52
- @ChrisHoughton FYI, it basically isn't. It might, however, render the entire iframe pointless (one reason for using iframes, for instance, is for security purposes, e.g. with card payments, and if you do what is suggested here you'll probably cause yourself problems). alastair Feb 5 '15 at 16:31
- 10 By doing this you are always getting the calendar as a non-logged in user. With the normal html iframe the user would see their own personal calendar if they were logged into google, but since your PHP code can't know the users Google session ID it can't fetch their personal calendar. bdsl Jan 10 '17 at 15:10



If the content of the iframe is not completely under your control or you want to access the content from different pages with different styles you could try manipulating it using JavaScript.



var frm = frames['frame'].document;
var otherhead = frm.getElementsByTagName("head")[0];
var link = frm.createElement("link");
link.setAttribute("rel", "stylesheet");
link.setAttribute("type", "text/css");
link.setAttribute("href", "style.css");
otherhead.appendChild(link);

Note that depending on what browser you use this might only work on pages served from the same domain.

answered Oct 20 '08 at 8:58



Horst Gutmann **8,242** 1 23 29

- 82 Might be worth noting that the same origin policy will stop this working if the page is on a different domain. ConroyP Oct 20 '08 at 9:00
- In the same line of thinking but more succinct: <iframe
   onload="this.contentDocument.body.style.overflow='hidden';" /> Protector one Sep 26 '16 at
   12:35

Even Firefox has gone CORS - user985399 Dec 25 '19 at 8:04



```
var $head = $("#eFormIFrame").contents().find("head");
```



rel: "stylesheet",
href: url,
type: "text/css"
}));



edited May 23 '17 at 14:51



**Angel Politis 8,994** 12 35 58

answered Nov 21 '12 at 16:17



Rami Sarieddine 4,731 29 38

@deweydb i used it with a cross domain iframe specifically. but I can only beg your forgiveness! – Rami Sarieddine Aug 22 '14 at 13:49

@ramie and you tested that in multiple browsers? most browsers are throwing a security error. – deweydb Aug 22 '14 at 20:56

I saw this idea before but add a link to file its really great and professional ... +up – J.Tural Dec 24 '15 at 9:24 //



An iframe is universally handled like a different HTML page by most browsers. If you want to apply the same stylesheet to the content of the iframe, just reference it from the pages used in there.





edited Jun 4 '11 at 8:32



**Peter Mortensen 25.6k** 21 90 118

answered Oct 20 '08 at 8:37



hangy 10.3k 6 39 6

21 @hangry but... how? - A Child of God Jan 17 '18 at 17:45



Here is how to apply CSS code directly without using link> to load an extra stylesheet.







**(1)** 

This hides the banner in the iframe page. Thank you for your suggestions!

edited Oct 16 '13 at 9:31

answered Oct 15 '13 at 22:47



domih 888 10 15

- 1 Does this need an iframe with the id of iframe ? Jeremy Nov 22 '13 at 19:18
- 1 @jmalais Just replace #iframe with #<id> or even iframe to select all iframe s Zeb McCorkle Aug 13 '14 at 19:01
- 3 This doesn't seem to be working for me. The iframe that I'm trying to edit also doesn't have head directly below it in the dom. So does that mean that I need to access the head inside of the html document or is that something that the jquery find function should be able to do by itself? David A. French Nov 29 '17 at 4:04
- 1 Checked the console and it looks like it's been blocked from accessing the iframe contents due to a domain mismatch. I'm using chrome and hosting my dev environment locally currently. –

  David A. French Nov 29 '17 at 4:14

Uncaught DOMException: Blocked a frame with origin it gives me this error – priyanka patel Dec 17 '19 at 11:10



If you control the page in the iframe, as hangy said, the easiest approach is to create a shared CSS file with common styles, then just link to it from your html pages.

26

Otherwise it is unlikely you will be able to dynamically change the style of a page from an external page in your iframe. This is because browsers have tightened the security on cross frame dom scripting due to possible misuse for spoofing and other hacks.

**(**)

<u>This tutorial</u> may provide you with more information on scripting iframes in general. <u>About cross frame scripting</u> explains the security restrictions from the IE perspective.

answered Oct 20 '08 at 8:52





The above with a little change works:

```
var cssLink = document.createElement("link")
    cssLink.href = "pFstylesEditor.css";
    cssLink.rel = "stylesheet";
    cssLink.type = "text/css";
```

**4**3

```
//Instead of this
//frames['frame1'].document.body.appendChild(cssLink);
//Do this

var doc=document.getElementById("edit").contentWindow.document;
//If you are doing any dynamic writing do that first
doc.open();
doc.write(myData);
doc.close();
//Then append child
doc.body.appendChild(cssLink);
```

Works fine with ff3 and ie8 at least

edited Sep 28 '15 at 4:04

Eric

6.068 5 34 5

answered Jul 28 '09 at 22:53

Tom Merchant

- 7 What's myData and where does it come from Tigran Dec 10 '10 at 0:25
- 1 @Tigran it is for dynamic data Akash Sep 13 '16 at 6:04



If you want to reuse CSS and JavaScript from the main page maybe you should consider replacing <IFRAME> with a Ajax loaded content. This is more SEO friendly now when search bots are able to execute JavaScript.



This is <u>jQuery</u> example that includes another html page into your document. This is much more SEO friendly than <u>iframe</u>. In order to be sure that the bots are not indexing the included



page just add it to disallow in robots.txt

You could also include jQuery directly from Google:

<u>http://code.google.com/apis/ajaxlibs/documentation/</u> - this means optional auto-inclusion of newer versions and some significant speed increase. Also, means that you have to trust them for delivering you just the jQuery;)



answered Mar 2 '10 at 7:16



sorin

1**22k** 127 423 645

1 One should note that this solution does not work if the content of the page is dynamic in any way. – nickdnk Apr 15 '16 at 12:48



The following worked for me.

12



edited Jun 4 '11 at 8:35



Peter Mortensen **25.6k** 21 90 11

answered May 23 '11 at 16:22



peter 129 1 2

1 Error: Uncaught TypeError: Cannot read property 'open' of undefined — KingRider Sep 19'16 at 18:05



Expanding on the above jQuery solution to cope with any delays in loading the frame contents.

10



```
$('iframe').each(function(){
    function injectCSS(){
        $iframe.contents().find('head').append(
             $('<link/>', { rel: 'stylesheet', href: 'iframe.css', type: 'text/css' })
    );
}
```

```
var $iframe = $(this);
```

```
$iframe.on('load', injectCSS);
    injectCSS();
});
```

edited Feb 20 '17 at 10:45

answered Jun 24 '13 at 11:14



The '\$this' is need to be a '\$(this)' for it to work. Nice when it does:) - h.coates Jul 7 '14 at 7:34



My compact version:

</script>







```
<script type="text/javascript">
$(window).load(function () {
   var frame = $('iframe').get(0);
    if (frame != null) {
        var frmHead = $(frame).contents().find('head');
        if (frmHead != null) {
            frmHead.append($('style, link[rel=stylesheet]').clone()); // clone existing
css link
            //frmHead.append($("<link/>", { rel: "stylesheet", href:
"/styles/style.css", type: "text/css" })); // or create css link yourself
    }
});
```

However, sometimes the iframe is not ready on window loaded, so there is a need of using a timer.

Ready-to-use code (with timer):

```
<script type="text/javascript">
 var frameListener;
 $(window).load(function () {
     frameListener = setInterval("frameLoaded()", 50);
 });
 function frameLoaded() {
    var frame = $('iframe').get(0);
     if (frame != null) {
         var frmHead = $(frame).contents().find('head');
         if (frmHead != null) {
             clearInterval(frameListener); // stop the listener
             frmHead.append($('style, link[rel=stylesheet]').clone()); // clone existing
 css link
             //frmHead.append($("<link/>", { rel: "stylesheet", href:
 "/styles/style.css", type: "text/css" })); // or create css link yourself
         }
     }
 </script>
...and jQuery link:
 <script src="https://ajax.aspnetcdn.com/ajax/jQuery/jquery-1.9.1.min.js"</pre>
 type="text/javascript"></script>
```

edited Sep 28 '15 at 4:09

answered Mar 21 '13 at 9:07



**6,068** 5 34 58





Other answers here seem to use jQuery and CSS links.

This code uses vanilla JavaScript. It creates a new <style> element. It sets the text content of that element to be a string containing the new CSS. And it appends that element directly to the iframe document's head.



```
var iframe = document.getElementById('the-iframe');
var style = document.createElement('style');
style.textContent =
   '.some-class-name {' +
   ' some-style-name: some-value;' +
   '}';
;;
iframe.contentDocument.head.appendChild(style);
```

answered Jul 7 '16 at 0:59





use can try this:

7

```
$('iframe').load( function() {
    $('iframe').contents().find("head")
    .append($("<style type='text/css'> .my-class{display:none;} </style>"));
});
```



answered Sep 1 '17 at 10:15



3 If your iframe comes from different origin, the CORS mechanism will not allow this workarround. – Mr. Anderson Nov 9 '17 at 13:14

What if the iframe-url is CORS enabled for all locations? - adrhc Oct 25 '18 at 20:35



When you say "doc.open()" it means you can write whatever HTML tag inside the iframe, so you should write all the basic tags for the HTML page and if you want to have a CSS link in your iframe head just write an iframe with CSS link in it. I give you an example:



doc.open();

**(**)

```
doc.write('<!DOCTYPE html><html><head><meta charset="utf-8"/><meta http-quiv="Content-
Type" content="text/html; charset=utf-8"/><title>Print Frame</title><link
rel="stylesheet" type="text/css" href="/css/print.css"/></head><body>' + out + '</body></html>');
doc.close();
```

edited Jun 4 '11 at 8:34

Peter Mortensen

answered Nov 8 '10 at 6:25

parham fazel



**25.6k** 21 90 118



3**1** 1



You will not be able to style the contents of the iframe this way. My suggestion would be to use serverside scripting (PHP, ASP, or a Perl script) or find an online service that will convert a feed to JavaScript code. The only other way to do it would be if you can do a serverside include.







answered Mar 31 '09 at 21:36 PageCandy

29 Careful when you say that something cannot be done, when in reality it is just difficult – Lathan Oct 12 '10 at 14:19



As many answers are written for the same domains, I'll write how to do this in cross domains.

First, you need to know the <u>Post Message API</u>. We need a messenger to communicate between two windows.



Here's a messenger I created.

**£** 

```
* Creates a messenger between two windows
 * which have two different domains
class CrossMessenger {
    /**
     * @param {object} otherWindow - window object of the other
     * @param {string} targetDomain - domain of the other window
     * \ensuremath{\text{\textit{o}}}param \ensuremath{\text{\textit{o}}}bject\ensuremath{\text{\textit{e}}} eventHandlers - all the event names and handlers
    constructor(otherWindow, targetDomain, eventHandlers = {}) {
         this.otherWindow = otherWindow;
         this.targetDomain = targetDomain;
         this.eventHandlers = eventHandlers;
        window.addEventListener("message", (e) => this.receive.call(this, e));
    }
    post(event, data) {
         try {
             // data obj should have event name
             var json = JSON.stringify({
                 event,
                  data
             });
             this.otherWindow.postMessage(json, this.targetDomain);
         } catch (e) {}
    }
    receive(e) {
         var json;
         try {
             json = JSON.parse(e.data ? e.data : "{}");
         } catch (e) {
             return;
```

Using this in two windows to communicate can solve your problem.

In the main windows,

```
var msger = new CrossMessenger(iframe.contentWindow, "https://iframe.s.domain");
var cssContent = Array.prototype.map.call(yourCSSElement.sheet.cssRules,
css_text).join('\n');
msger.post("cssContent", {
   css: cssContent
})
```

Then, receive the event from the Iframe.

In the Iframe:

```
var msger = new CrossMessenger(window.parent, "https://parent.window.domain", {
    cssContent: (data) => {
        var cssElem = document.createElement("style");
        cssElem.innerHTML = data.css;
        document.head.appendChild(cssElem);
    }
})
```

See the Complete <u>Javascript and Iframes</u> tutorial for more details.

answered Nov 6 '19 at 3:53





Incase if you have access to iframe page and want a different CSS to apply on it only when you load it via iframe on your page, here I found a solution for these kind of things



this works even if iframe is loading a different domain



check about postMessage()



plan is, send the css to iframe as a message like

```
iframenode.postMessage('h2{color:red;}','*');
```

\* is to send this message irrespective of what domain it is in iframe

and receive the message in iframe and add the received message(CSS) to that document head.

code to add in iframe page

```
window.addEventListener('message',function(e){
   if(e.data == 'send_user_details')
   document.head.appendChild('<style>'+e.data+'</style>');
});
```

edited May 19 '16 at 20:26

answered May 19 '16 at 20:20





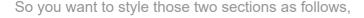
Here, There are two things inside the domain

3

1. iFrame Section



2. Page Loaded inside the iFrame



Ð

### 1. Style for the iFrame Section

It can style using CSS with that respected id or class name. You can just style it in your parent Style sheets also.

```
<style>
#my_iFrame{
height: 300px;
width: 100%;
position:absolute;
top:0;
left:0;
border: 1px black solid;
}
</style>
<iframe name='iframe1' id="my_iFrame" src="#" cellspacing="0"></iframe>
```

#### 2. Style the Page Loaded inside the iFrame

This Styles can be loaded from the parent page with the help of Javascript

```
var cssFile = document.createElement("link")
cssFile.rel = "stylesheet";
cssFile.type = "text/css";
cssFile.href = "iFramePage.css";
```

then set that CSS file to the respected iFrame section

```
//to Load in the Body Part
frames['my_iFrame'].document.body.appendChild(cssFile);
//to Load in the Head Part
frames['my_iFrame'].document.head.appendChild(cssFile);
```

Here, You can edit the Head Part of the Page inside the iFrame using this way also

```
var $iFrameHead = $("#my_iFrame").contents().find("head");
$iFrameHead.append(
    $("<link/>",{
        rel: "stylesheet",
        href: urlPath,
        type: "text/css" }
    ));
```

edited Nov 27 '18 at 7:11

Jee Mok 3,189 7 24 51 answered Dec 29 '16 at 3:47



K.Suthagar 1,592 1 11 25



I found another solution to put the style in the main html like this

J



```
color: white;
    background: black;
}
</style>
<style>
    html {
        color: initial;
        background: initial;
}
    iframe {
        border: none;
}
```

<style id="iframestyle">

html {

</style>

and then in iframe do this (see the js onload)

```
<iframe onload="iframe.document.head.appendChild(ifstyle)" name="log"
src="/upgrading.log"></iframe>
and in js
```

```
<script>
   ifstyle = document.getElementById('iframestyle')
   iframe = top.frames["log"];
</script>
```

It may not be the best solution, and it certainly can be improved, but it is another option if you want to keep a "style" tag in parent window

answered Mar 18 '15 at 14:51



**5,980** 4 38 76



We can insert style tag into iframe. Posted also here...



```
<style type="text/css" id="cssID">
.className
{
   background-color: red;
```



edited May 23 '17 at 11:33

Community ◆
1 1

answered Sep 2 '14 at 15:18



1 This doesn't work. Seems to insert the style tag correctly but there's no content inside it and no ID. – darylknight Sep 26 '14 at 12:11









answered Oct 28 '16 at 3:14



- 1 I have checked this answer many times what is richTextField here? Kirankumar Dafda Dec 3 '16 at 9:12
- 1 it's the iframe name Jeeva Dec 3 '16 at 10:35

I didn't tried, but I guess It won't because its against the sandbox - Jeeva Dec 5 '16 at 22:15



I think the easiest way is to add another div, in the same place as the iframe, then



make its z-index bigger than the iframe container, so you can easly just style your own div. If you need to click on it, just use pointer-events:none on your own div, so the iframe would be working in case you need to click on it;)



I hope It will help someone;)

answered Jul 31 '14 at 12:34



Mateusz Winnicki
131 1 11



There is a <u>wonderful script</u> that replaces a node with an iframe version of itself. <u>CodePen</u> **Demo** 





This is a component. Under 400px, the border of this component will go pink.



This is the same component as before. It gets encapsulated in a 399px wide iframe. Yay for faked element queries!

### **Usage Examples:**

```
// Single node
var component = document.querySelector('.component');
var iframe = iframify(component);

// Collection of nodes
var components = document.querySelectorAll('.component');
var iframes = Array.prototype.map.call(components, function (component) {
   return iframify(component, {});
});

// With options
var component = document.querySelector('.component');
var iframe = iframify(component, {
   headExtra: '<style>.component { color: red; }</style>',
   metaViewport: '<meta name="viewport" content="width=device-width">'
});
```

answered Oct 3 '16 at 19:41



1 Why would you want to do that?! - Dylan Watson Nov 7 '18 at 23:59



As an alternative, you can use CSS-in-JS technology, like below lib:

1

https://github.com/cssobj/cssobj



It can inject JS object as CSS to iframe, dynamically







This is just a concept, but don't implement this without security checks and filtering! Otherwise script could hack your site!



Answer: if you control target site, you can setup the receiver script like:



1) set the iframe link with style parameter, like:



http://your\_site.com/target.php?color=red

(the last phrase is a{color:red} encoded by urlencode function.

2) set the receiver page target.php like this:

```
<head>
$col = FILTER_VAR(SANITIZE_STRING, $_GET['color']);
<style>.xyz{color: <?php echo (in_array( $col, ['red','yellow','green'])? $col :</pre>
"black") ;?> } </style>
. . . . . . . . . .
```

edited Aug 16 '19 at 17:16

answered Oct 17 '16 at 8:01



T.Todua 39k

14 168 161

- Warning: this is injection at its finest. kano Aug 21 '18 at 12:16
- yap, do NOT do this, except you want a load of pen-test bots and script kiddies on your server =)... exside Jul 22 '19 at 13:45
- I've updated answer now, with added security warning T.Todua Aug 16 '19 at 17:12



Well, I have followed these steps:



- 1. Div with a class to hold iframe
- 2. Add iframe to the div.





```
divClass { width: 500px; height: 500px; }
divClass iframe { width: 100%; height: 100%; }
```

This works in IE 6. Should work in other browsers, do check!

edited Sep 28 '15 at 4:10



6,068 34 answered Dec 8 '10 at 9:46



need to control div inside of iframe, this does not - MSD Mar 7 '11 at 18:12

Highly active question. Earn 10 reputation in order to answer this question. The reputation requirement helps protect this question from spam and non-answer activity.