How to apply CSS to iframe?

Asked 16 years, 2 months ago Modified 1 month ago Viewed 1.7m times



1229

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?



html

CSS

iframe

rss



1

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edited Dec 16, 2019 at 4:55

Akshay Mulgavkar

Aksnay Mulgavka **1,738** ● 12 ● 22

asked Oct 20, 2008 at 8:27



John

- 83 It is possible but only if the iframe's domain is the same as the parent gawpertron Jun 30, 2010 at 23:50
- 14 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, 2010 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, 2014 at 13:21

The domain, port and protocol have to be the same, doesn't work with subdomains either. – lee penkman Nov 11, 2014 at 22:19

29 Answers

Sorted by:

Highest score (default)





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

514



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:



```
<iframe name="iframe1" id="iframe1" src="empty.htm"
frameborder="0" border="0" cellspacing="0"
style="border-style: none;width: 100%; height:</pre>
```

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/sim"</pre>
```

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);
```



answered Oct 20, 2008 at 9:07



- 43 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").contentDocume
 nt . Embedding the css still doesn't seem to work for me
 though. Rehno Lindeque Feb 2, 2011 at 19:54

 ✓
- 38 link may only appear in the HEAD Knu May 23, 2011 at 19:05 ✓
- Worked for me only when I did
 ...document.head.appendChild(cssLink) Firefox
 and Safari. mojuba Sep 26, 2011 at 12:47
- Does this actually work cross-domain? I don't think it would.Simon E. Nov 4, 2011 at 0:52
- 98 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, 2011 at 17:37



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

225



Luckily, the URL from the embed code had no restriction on direct access, so by using PHP function

file_get_contents 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.

google.php, which will contain the original content with modifications:

```
$content = file_get_contents('https://www.google.com/c
src=%23contacts%40group.v.calendar.google.com&ctz=Amer
```

Adding the path to your stylesheet:

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

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

Specify the base url form the original url in case css and is 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/c
src=%23contacts%40group.v.calendar.google.com&ctz=Amer
$content = str_replace('</title>','</title><base
href="https://www.google.com/calendar/" />', $content)
$content = str_replace('</head>','<link rel="styleshee
href="http://www.yourwebsiteurl.com/google.css" /></he
echo $content;</pre>
```

Then you change the iframe embed code to:

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

Good luck!

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edited Oct 4, 2017 at 14:00



answered Sep 20, 2012 at 22:21

SequenceDigitale.com
4,094 • 1 • 26 • 23

- 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, 2014 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 "
 Do Not Track Me Aug 19, 2014 at 23:52

- 211 @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). al45tair Feb 5, 2015 at 16:31
- By doing this you are always getting the calendar as a nonlogged 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, 2017 at 15:10
```



87

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.

Share Improve this answer Follow

edited Jun 10, 2021 at 1:47

niccord
844 • 5 • 20



- 103 Might be worth noting that the same origin policy will stop this working if the page is on a different domain. ConroyP Oct 20, 2008 at 9:00
- In the same line of thinking but more succinct: <iframe onload="this.contentDocument.body.style.overflow='hidden';" /> Protector one Sep 26, 2016 at 12:35

Even Firefox has gone CORS – user985399 Dec 25, 2019 at 8:04

The snippet <iframe id="iframe-payment2" onload="this.style.height='1600px';" frameborder="0" scrolling="no" height="1800" src="<?php echo "//" . \$_SERVER['HTTP_HOST']; ?>/payment/" ></iframe> worked for me. — Pavan Yogi Sep 30, 2020 at 9:30

```
var frm = frames['frame'].document; should be
var frm = window.frames['frame'].document;
Nevertheless, still doesn't work, document comes back as
undefined. - Rogier de Ruijter Jan 17, 2021 at 13:52
```



66



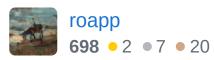
```
var $head = $("#eFormIFrame").contents().find("head");

$head.append($("<link/>", {
    rel: "stylesheet",
    href: url,
    type: "text/css"
}));
```









answered Nov 21, 2012 at 16:17





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

37





45)

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

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edited Jul 20, 2023 at 19:05



roapp

698 • 2 • 7 • 20

answered Oct 15, 2013 at 22:47



domih 1,558 • 18 • 20

Does this also get around the CORS restrictions?

Artemis Prime Oct 29, 2023 at 21:47



27

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.



()

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.

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

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answered Oct 20, 2008 at 8:52





23



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from the pages used in there.

edited Jun 4, 2011 at 8:32



Peter Mortensen **31.6k** • 22 • 109 • 133

1

answered Oct 20, 2008 at 8:37



hangy

10.9k • 6 • 45 • 63



The above with a little change works:

20







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

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

var doc=document.getElementById("edit").contentWindow.

//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

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edited Jul 21, 2023 at 0:09

roapp
698 • 2 • 7 • 20

answered Jul 28, 2009 at 22:53



Tom Merchant



16







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answered May 23, 2011 at 16:22





13



This is <u>iQuery</u> example that includes another html page into your document. This is much more SEO friendly than iframe. In order to be sure that the bots are not indexing the included page just add it to disallow in robots.txt

If you want to reuse CSS and JavaScript from the main

with a Ajax loaded content. This is more SEO friendly now

page maybe you should consider replacing <IFRAME>

when search bots are able to execute JavaScript.

```
<html>
  <header>
    <script src="/js/jquery.js" type="text/javascript"</pre>
  </header>
  <body>
    <div id='include-from-outside'></div>
    <script type='text/javascript'>
```

```
$('#include-from-outside').load('http://example.
     </script>
     </body>
     </html>
```

You could also include jQuery directly from Google: http://code.google.com/apis/ajaxlibs/documentation/ - 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;)

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170k • 190 • 568 • 843



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

13







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

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

answered Jun 24, 2013 at 11:14





You can try this:

13

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



43

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edited Dec 1, 2023 at 3:09



answered Sep 1, 2017 at 10:15



If your iframe comes from different origin, the CORS mechanism will not allow this workarround. – Mr. Anderson Nov 9, 2017 at 13:14



My compact version:

11

```
<script type="text/javascript">
$(window).load(function () {
```



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 = $(frame).contents().find('head')
        if (frmHead != null) {
            clearInterval(frameListener); // stop the
            frmHead.append($('style, link[rel=styleshe
existing css link
            //frmHead.append($("<link/>", { rel: "styl
"/styles/style.css", type: "text/css" })); // or creat
        }
</script>
```

<script src="https://ajax.aspnetcdn.com/ajax/jQuery/jq
type="text/javascript"></script>

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Eric **6,349** • 6 • 48 • 71

answered Mar 21, 2013 at 9:07

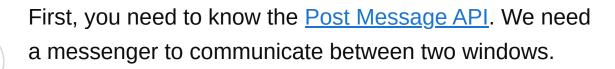


Chris W **1,702** • 23 • 28



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







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
    * @param {string} targetDomain - domain of the ot
    * @param {object} eventHandlers - all the event n
    */
    constructor(otherWindow, targetDomain, eventHandle
        this.otherWindow = otherWindow;
        this.targetDomain = targetDomain;
        this.eventHandlers = eventHandlers;
```

```
window.addEventListener("message", (e) => this
    }
    post(event, data) {
        try {
            // data obj should have event name
            var json = JSON.stringify({
                event,
                data
            });
            this.otherWindow.postMessage(json, this.ta
        } catch (e) {}
    }
    receive(e) {
        var json;
        try {
            json = JSON.parse(e.data ? e.data : "{}");
        } catch (e) {
            return;
        }
        var eventName = json.event,
            data = json.data;
        if (e.origin !== this.targetDomain)
            return;
        if (typeof this.eventHandlers[eventName] === "
            this.eventHandlers[eventName](data);
    }
}
```

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(yourCSSEleme
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:/
    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.

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answered Nov 6, 2019 at 3:53

Supun Kavinda

1.484 • 16 • 15



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);
```

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edited Jul 19, 2023 at 16:15

answered Jul 7, 2016 at 0:59





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:



8

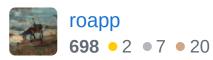
```
doc.open();

doc.write('<!DOCTYPE html><html><head><meta charset="u
quiv="Content-Type" content="text/html; charset=utf-8"
Frame</title><link rel="stylesheet" type="text/css" hr
</head><body></body></html>');

doc.close();
```

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edited Jul 21, 2023 at 11:47



answered Nov 8, 2010 at 6:25





6



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.



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edited Jun 4, 2011 at 8:33



Peter Mortensen **31.6k** • 22 • 109 • 133

answered Mar 31, 2009 at 21:36



PageCandy

31 Careful when you say that something cannot be done, when in reality it is just difficult – Lathan Oct 12, 2010 at 14:19



This is how I'm doing in production. It's worth bearing in mind that if the iframe belongs to other website, it will trigger the CORS error and will not work.



```
var $iframe = document.querySelector(`iframe`);
var doc = $iframe.contentDocument;
```

```
W
D
```

```
var style = doc.createElement("style");
style.textContent = `*{display:none!important;}`;
doc.head.append(style);
```

In some cases you may also want to attach a load event to the iframe:

```
var $iframe = document.querySelector(`iframe`);

$iframe.addEventListener("load", function() {
   var doc = $iframe.contentDocument;
   var style = doc.createElement("style");
   style.textContent = `*{display:none!important;}`;
   doc.head.append(style);
});
```

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answered Nov 17, 2021 at 1:47



it doesn't work on me, always get this error \$iframe is null. I try use defer and move code to bottom. but still not work

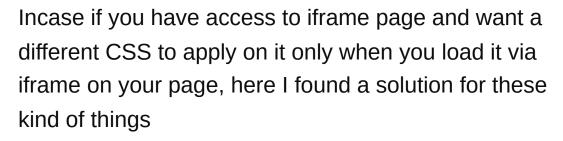
– Dedi Ananto Feb 17, 2022 at 11:44

@DediAnanto if the iframe is coming from a different URL then it won't work. Injecting CSS on cross origin iframes is not possible. In this case you may want to try to extract the iframe's content, something <u>like this</u>, but there is not a guarantee it will work either. – Diego Fortes Feb 17, 2022 at 12:14

ah I found the issue. it is because I use pdf on iframe. it works when iframe has html as content, but if I use pdf on iframe, it got error Permission denied to access property "document" on cross-origin object. any suggestion for this? or I need to create new question — Dedi Ananto Feb 17, 2022 at 12:31



4





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

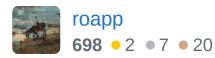
and receive the message in iframe and add the received message(CSS) to that document head.

code to add in iframe page

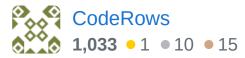
```
window.addEventListener('message', function(e) {
   if(e.data == 'send_user_details')
   document.head.appendChild('<style>'+e.data+'</style
});</pre>
```

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answered May 19, 2016 at 20:20





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

3



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;)

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answered Jul 31, 2014 at 12:34

Mateusz Winnicki

151 • 2 • 11



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

3





```
<style id="iframestyle">
   html {
      color: white;
      background: black;
}
```



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

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

```
<iframe onload="iframe.document.head.appendChild(ifst
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

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answered Mar 18, 2015 at 14:51

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jperelli
7,167 • 6 • 53 • 88



We can insert style tag into iframe.

3







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edited Sep 17, 2020 at 9:33

Follow

answered Sep 2, 2014 at 15:18

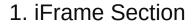


2 This doesn't work. Seems to insert the style tag correctly but there's no content inside it and no ID. – darylknight Sep 26, 2014 at 12:11



Here, There are two things inside the domain

3



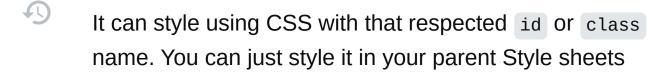


2. Page Loaded inside the iFrame

So you want to style those two sections as follows,

1. Style for the iFrame Section

also.



```
#my_iFrame {
    height: 300px;
    width: 100%;
    position:absolute;
    top:0;
    left:0;
    border: 1px black solid;
}
```

```
<iframe name='iframe1' id="my_iFrame" src="#" cellspac
```

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

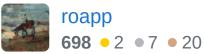
```
//to Load in the Body Part
frames['my_iFrame'].document.body.appendChild(cssFile)
//to Load in the Head Part
frames['my_iFrame'].document.head.appendChild(cssFile)
```

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

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

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edited Jul 18, 2023 at 14:40



answered Dec 29, 2016 at 3:47



K.Suthagar2,306 • 1 • 17 • 28



2





1



Run code snippet

☑ Expand snippet

- I have checked this answer many times what is richTextField here? Kirankumar Dafda Dec 3, 2016 at 9:12
- 2 it's the iframe name Jeeva Dec 3, 2016 at 10:35

I didn't tried, but I guess It won't because its against the sandbox – Jeeva Dec 5, 2016 at 22:15



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



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answered Jan 4, 2017 at 2:27



James Yang 1,416 • 4 • 18 • 27



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

1



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, fun
    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=
});</pre>
```

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edited Jul 20, 2023 at 11:38

roapp
698 • 2 • 7 • 20

answered Oct 3, 2016 at 19:41



6 Why would you want to do that?! – Dylan Watson Nov 7, 2018 at 23:59



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', : "black") ;?> } </style>
......
```

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edited Aug 16, 2019 at 17:16

answered Oct 17, 2016 at 8:01



- 7 Warning: this is injection at its finest. kano Aug 21, 2018 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, 2019 at 13:45

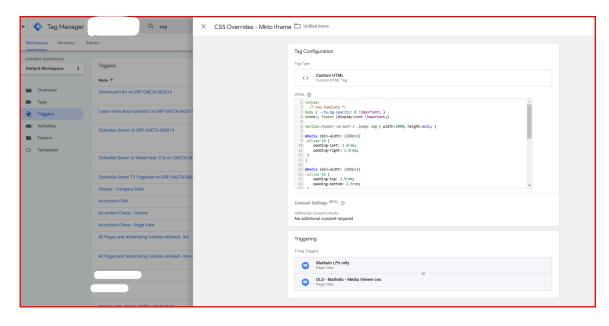


Use Google Tag Manager for an easy method. Add the triggers and specify changes to implement either styling or scripting









```
<script>
    var $iframe = document.querySelector(`iframe`);
    $iframe.addEventListener("load", function() {
        var doc = $iframe.contentDocument;
        var style = doc.createElement("style");
        style.textContent = `*{display:none!important;
        doc.head.append(style);
    });
  </script>
<style>
section.header-variant-3 .image img { width:100%; heig
@media (min-width: 1280px){
.xl\:px-16 {
    padding-left: 1.5rem;
    padding-right: 1.5rem;
 }
```

```
}
@media (min-width: 1280px){
.xl\:py-16 {
    padding-top: 2.5rem;
    padding-bottom: 2.5rem;
}
}
</style>
```

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answered Oct 30 at 14:28





Well, I have followed these steps:

-20

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



3. In CSS file,



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

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

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edited Sep 28, 2015 at 4:10 Eric **6,349** • 6 • 48 • 71



12 need to control div inside of iframe, this does not – MSD Mar 7, 2011 at 18:12

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