

## New! OverflowAI: Where Community &amp; AI Come Together

# How to trigger a file download when clicking an HTML button or JavaScript

Asked 11 years ago Modified 2 months ago Viewed 1.6m times



This is crazy but I don't know how to do this, and because of how common the words are, it's hard to find what I need on search engines. I'm thinking this should be an easy one to answer.

655



I want a simple file download, that would do the same as this:



<a href="file.doc">Download!</a>



But I want to use an HTML button, e.g. either of these:

```
<input type="button" value="Download!">  
<button>Download!</button>
```

Likewise, is it possible to trigger a simple download via JavaScript?

```
$("#fileRequest").click(function(){ /* code to download? */ });
```

I'm definitely *not* looking for a way to create an anchor that looks like a button, use any back-end scripts, or mess with server headers or mime types.

javascript html download

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edited Jul 23, 2017 at 11:43

asked Jul 23, 2012 at 21:22



Brett DeWoody

59.6k 28 134 183



brentonstrine

21.6k 25 72 119

39 Thanks to you "how to trigger a file download in javascript" would give answers much faster for any future searcher. – [Danubian Sailor](#) Mar 6, 2014 at 17:07

1 Your restrictions in your final paragraph don't make much sense to me. If you're open to answers that use JavaScript (since you say so) or that require changing the DOM structure (like the one you've accepted), why not also an anchor styled as a button? I can't imagine a scenario where the first two would be fine but the anchor as a button would be problematic. – [Mark Amery](#) Apr 5, 2021 at 19:22

## 24 Answers

Sorted by: Highest score (default) 

You can trigger a download with the HTML5 `download` attribute.



**638** `<a href="path_to_file" download="proposed_file_name">Download</a>`

Where:



- `path_to_file` is a path that resolves to an URL **on the same origin**. That means the page and the file must share the same domain, subdomain, protocol (HTTP vs. HTTPS), and port (if specified). Exceptions are `blob:` and `data:` (which always work), and `file:` (which never works).
- `proposed_file_name` is the filename to save to. If it is blank, the browser defaults to the file's name.

Documentation: [MDN](#), [HTML Standard on downloading](#), [HTML Standard on download](#), [CanIUse](#)

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edited Sep 23, 2019 at 3:57



MultiplyByZero

6,232 3 31 48

answered Sep 7, 2013 at 22:54



Joe Pigott

7,931 6 31 43

- 
- 43 Not Work With Safari and certain IE versions – [Mohamed Hussain](#) Jul 18, 2016 at 5:47 
- 12 Using a combination of `download` and `target="_blank"` seems to be sufficient to cover most use cases. Browsers that understand `download` treat it as a download, otherwise it's opened in a new tab. – [MK10](#) Jan 16, 2017 at 14:05
- 25 How can this be applied to a `button` object instead of just an `a` tag? – [storm\\_m2138](#) Mar 29, 2017 at 22:00 
- 17 Actually this only works for urls of the same origin as mentioned in the MDN docs. This is a huge limitation if we are looking to develop a generic solution – [Akshat Gupta](#) Aug 28, 2017 at 11:38
- 19 The question is explicitly asking to use a button instead of a link – [Quentin](#) Jul 1, 2019 at 13:15
- 



For the button you can do



**339**

```
<form method="get" action="file.doc">
    <button type="submit">Download!</button>
</form>
```



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edited Jun 8, 2017 at 14:29



Gray

115k 24 293 354

answered Jul 23, 2012 at 21:26



Cfreak

19.2k 6 49 60



- 
- 19 doesn't work as a trigger, just redirect to the url as 'a' tag. – [fdrv](#) Apr 5, 2016 at 15:02
  - 18 This works better : <a href="path\_to\_file" download="proposed\_file\_name">Download</a> – [kscius](#) Jul 7, 2016 at 3:33
  - 15 @kscius even today the download attribute is not supported in IE 11 (it is now supported in Edge) and it is not supported in Safari. In 2012 when the answer was originally posted it wasn't supported in any major browser. – [Cfreak](#) Jul 7, 2016 at 3:40
  - 2 what's the difference between having an anchor with button styling and having a form with a button? – [Andrei Epure is hiring](#) Feb 23, 2017 at 9:52
  - 7 This doesn't necessarily trigger a download. It simply causes the browser to navigate to `file.doc`. Whether that results in `file.doc` being downloaded or being shown as a page in the browser depends upon the headers returned by the server when it serves `file.doc` and on what file types the browser is capable of rendering. – [Mark Amery](#) Apr 5, 2021 at 19:25 
- 



A simple JS solution:

133

```
function download(url) {  
  const a = document.createElement('a')  
  a.href = url  
  a.download = url.split('/').pop()  
  document.body.appendChild(a)  
  a.click()  
  document.body.removeChild(a)  
}
```



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edited Jun 4, 2021 at 10:12

answered Apr 19, 2018 at 9:08



[syntagma](#)

23.3k 16 78 133



[Stefanos Chrs](#)

2,168 3 19 46

- 
- 63 @NicholasKyriakides Kind of reminds me of this gem: [image.ibb.co/dtkUWJ/Selection\\_002.png](https://image.ibb.co/dtkUWJ/Selection_002.png) – [Stefanos Chrs](#) May 17, 2018 at 14:07 
  - 2 @BryanLarsen You are right, Firefox doesn't allow this without adding the element to body first. Thank you, updating the answer – [Stefanos Chrs](#) Feb 19, 2019 at 20:58
  - 2 Is there a way that javascript function be triggered once the download finishes? Just trying to show a message once downloads start and remove the message once download completes. – [mohit bansal](#) Mar 21, 2019 at 20:06 
  - 2 @mohitbansal (un)fortunately no as it's in the browser level – [Stefanos Chrs](#) Mar 22, 2019 at 6:49
  - 6 This is best solution out here and should be accepted answer. – [ScienceDiscoverer](#) Mar 31, 2021 at 5:35
-



HTML:

122

```
<button type="submit" onclick="window.open('file.doc')>Download!</button>
```



Share Follow

edited Jul 26, 2016 at 9:41

answered Sep 7, 2013 at 18:57



Ani Menon

27.1k 16 105 125



sleepyup

1,331 1 9 2

4 What if i wanna download a xml file? – [g07kore](#) May 12, 2015 at 20:072 Thanks for your code. I have tested, it can working in IE, Chrome, Firefox. – [muthukumar](#) Sep 22, 2016 at 9:1116 If you have a file acceptable by the browser like a PDF it will open in new tab instead to show download dialog. – [WindRider](#) Jan 25, 2017 at 18:07 3 window.open can trigger popup-blocking in a browser and is thus not recommended. You could use window.location = 'path' , although that would go to the location in the same browser window. – [Lenka Pitonakova](#) Dec 6, 2018 at 14:14 2 This doesn't necessarily trigger a download. It simply causes the browser to navigate to file.doc . Whether that results in file.doc being downloaded or being shown as a page in the browser depends upon the headers returned by the server when it serves file.doc and on what file types the browser is capable of rendering. – [Mark Amery](#) Apr 5, 2021 at 19:31

With jQuery:

75

```
$("#fileRequest").click(function() {  
    // hope the server sets Content-Disposition: attachment!  
    window.location = 'file.doc';  
});
```



Share Follow

edited Apr 5, 2021 at 19:33

answered Jul 23, 2012 at 21:23



Mark Amery

142k 80 405 459



Matt Ball

354k 99 647 709

- 
- 2 Perfect, thanks. Do you happen to know if most servers will set the Content-Disposition to 'attachment' by default? – [brentonstrine](#) Jul 23, 2012 at 21:38
- 8 There is no "most." It completely depends. Don't rely on it being set. – [Matt Ball](#) Jul 23, 2012 at 21:43
- 
- 3 This issue has been driving me ballistic, and this was the only option that worked (and is supported by IE). I'll add for any n00bs like me that to set the Content-Disposition, all you have to do is: <?php header('Content-Disposition: attachment; filename="filename.here"'); ?> – [user124384](#) Jul 24, 2015 at 15:08 
- 
- 4 No jquery. Period. – [Adam Arold](#) Apr 1, 2018 at 22:17
- 
- 3 This doest work if you're trying to download an image, it would open the image in the browser – [some\\_groceries](#) Aug 12, 2019 at 12:45
- 



You can do it with "trick" with invisible iframe. When you set "src" to it, browser reacts as if you would click a link with the same "href". As opposite to solution with form, it enables you to embed additional logic, for example activating download after timeout, when some conditions are met etc.

**26**

It is also very silent, there's no blinking new window/tab like when using `window.open`.



HTML:



```
<iframe id="invisible" style="display:none;"></iframe>
```

Javascript:

```
function download() {
    var iframe = document.getElementById('invisible');
    iframe.src = "file.doc";
}
```

Share Follow

answered Mar 6, 2014 at 16:57



Danubian Sailor

1

It does, at least if you actually apprnf the iframe to document.body. – [yxhuvud](#) May 27, 2016 at 8:01

2 This doesn't seem to be working in Chrome right now, although it used to work. I wonder if it kind of intermittently stops working in different versions of Chrome. – [Dobes Vandermeer](#) Oct 21, 2016 at 18:08

1 Works in Chrome as of Version 61.0.3163.100 (Official Build) (64-bit) – [AndrewBenjamin](#) Sep 25, 2017 at 18:51

Does not work with images in Firefox v57. It just renders the image in the iframe. – [Antony](#) Nov 21, 2017 at 22:31

This will fail silently if the file is of a type the browser knows how to render itself, though (unless the server returns a `Content-Disposition` header indicating the file should be downloaded).

– [Mark Amery](#) Apr 5, 2021 at 19:42



## Bootstrap Version

20

```
<a class="btn btn-danger" role="button" href="path_to_file"
    download="proposed_file_name">
    Download
</a>
```



Documented [in Bootstrap 4 docs](#), and works in Bootstrap 3 as well.



Share Follow

edited Dec 26, 2018 at 18:40

answered Apr 8, 2018 at 19:34



georgeawg

48.6k 13 72 95



Apps-n-Add-Ons

2,026 1 17 28

22 The only thing this has to do with Bootstrap is the class names, it's just the power of HTML5.

– [Machado](#) Feb 13, 2019 at 12:39

5 The question is explicitly asking how to do this with a button instead of a link. – [Quentin](#) Jul 1, 2019 at 13:13

3 if you knew anything at all about bootstrap, you would see that it IS a button. – [John Lord](#) Feb 4, 2020 at 17:39

1 The button tag didn't work for me. But this one did. – [abrsh](#) Feb 1, 2022 at 20:40

I think this is the solution you were looking for

17

```
<button type="submit" onclick="window.location.href='file.doc'">Download!</button>
```

I had a case where my Javascript generated a CSV file. Since there is no remote URL to download it I use the following implementation.

```
downloadCSV: function(data){  
    var MIME_TYPE = "text/csv";  
  
    var blob = new Blob([data], {type: MIME_TYPE});  
    window.location.href = window.URL.createObjectURL(blob);  
}
```

Share Follow

answered Mar 22, 2017 at 19:28

 **Delconis**  
324 2 9

on 404 -> page change to a 404 error page. same problem as stated on the other `location.href` solutions. – [BananaAcid](#) Aug 18, 2019 at 13:19

- 1 This (at least the first implementation) doesn't necessarily trigger a download. It simply causes the browser to navigate to `file.doc`. Whether that results in `file.doc` being downloaded or being shown as a page in the browser depends upon the headers returned by the server when it serves `file.doc` and on what file types the browser is capable of rendering. – [Mark Amery](#) Apr 5, 2021 at 19:44

You can hide the download link and make the button click it.

11

```
<button onclick="document.getElementById('link').click()">Download!</button>  
<a id="link" href="file.doc" download hidden></a>
```

Share Follow

answered Jun 9, 2017 at 17:28

 **Starwarswii**  
2,177 1 16 17

- 1 For this to work in Firefox, the resource has to be on the same domain as the document. Setting CORS headers does *not* help. – [Antony](#) Nov 21, 2017 at 21:50
- 5 Don't ever do this – [Wannes](#) Jan 4, 2019 at 14:51



What about:

8

```
<input type="button" value="Download Now!" onclick="window.location = 'file.doc';">
```



Share Follow

edited Jun 27, 2017 at 21:30

answered Jul 22, 2013 at 3:23



John Weisz

29.9k 12 88 131



oliver\_siegel

1,666 3 22 37



- 
- 7 This does not work, if your file, for example, is an image, since it would just be opened in the browser. – [Lumnezia](#) Feb 2, 2018 at 14:47

Another issue occurs which is if the file is missing it navigates the entire page to a 404 page  
– [Hugheth](#) Jul 10, 2018 at 7:48

- 
- 1 It works perfectly in 2020 (for every file), and it is the simplest solution of all. Amazing! – [NDi](#) Jan 7, 2021 at 21:23
- 1 This doesn't necessarily trigger a download. It simply causes the browser to navigate to `file.doc`. Whether that results in `file.doc` being downloaded or being shown as a page in the browser depends upon the headers returned by the server when it serves `file.doc` and on what file types the browser is capable of rendering. – [Mark Amery](#) Apr 5, 2021 at 19:44
-



In my testing the following works for all file types and browsers as long as you use a relative link:

5

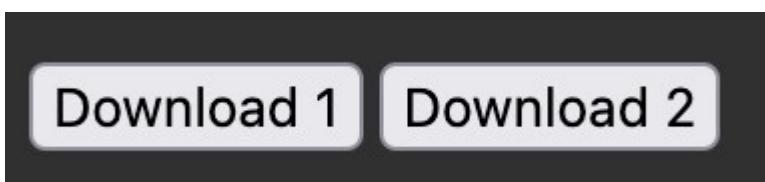
```
<a href="/assets/hello.txt" download="my_file.txt"><button>Download 2</button></a>
```

- /assets/hello.txt is just a relative path on my site. Change it to your own relative path.
- my\_file.txt is the name you want the file to be called when it is downloaded.

## Explanation

I noticed there were comments under a lot of the answers that said the browser would just try to open the file itself rather than downloading it depending on the file type. I discovered this to be true.

I made two buttons to test it out using two different methods:



```
<button onclick="window.location.href='/assets/hello.txt';">Download 1</button>  
<a href="/assets/hello.txt" download="my_file.txt"><button>Download 2</button></a>
```

### Notes:

- Button 1 opened the text file in a new browser tab. However, Button 1 *would* download the file for file types that it couldn't open itself (for example, .apk files).
- Button 2 downloaded the text file. However, Button 2 only downloaded the file if the path was relative. When I changed the path to an absolute path, then the browser opened it in a new tab.

I tested this on Firefox, Safari, and Chrome.

Share Follow

edited Jul 3, 2021 at 7:38

answered Jul 3, 2021 at 7:17



Suragch

482k 311 1364  
1391

Hello I just include the word 'download' and works well.

4 [`<a href="file.pdf" download>Download</a>`](#)

So in javascript you can use the follow:

```
function onStartDownload(id) {  
    console.log(`Started downloading: ${id}`);  
}  
  
function onFailed(error) {  
    console.log(`Download failed: ${error}`);  
}  
  
var downloadUrl = "https://example.org/image.png";  
  
var downloading = browser.downloads.download({  
    url : downloadUrl,  
    filename : 'my-image-again.png',  
    conflictAction : 'uniquify'  
});  
  
downloading.then(onStartDownload, onFailed);
```

Share Follow

edited Jul 29, 2021 at 17:57

answered Jul 29, 2021 at 17:51



thunderJam

105 1 6

4 Uncaught ReferenceError: browser is not defined – [FreeStyler](#) May 17, 2022 at 12:43

all you need to do is add Download after the file name which you have entered:

4 **Before:**

```
<a href="file.doc">Download!</a>
```

After

```
<a href="" Download="file.doc" >Download!</a>
```

Make sure the download is written with a capital letter otherwise it's not gonna work.

Share Follow

edited May 19 at 23:05



Shyam Rajput

3 3

answered Jan 23, 2022 at 0:13



Mostafa Ghorbani

397 1 3 15



If you're looking for a vanilla JavaScript (no jQuery) solution and without using the `HTML5` attribute you could try this.

3

```
const download = document.getElementById("fileRequest");

download.addEventListener('click', request);

function request() {
    window.location = 'document.docx';
}

.dwnld-cta {
    border-radius: 15px 15px;
    width: 100px;
    line-height: 22px
}

<h1>Download File</h1>
<button id="fileRequest" class="dwnld-cta">Download</button>
```

[Run code snippet](#)[Expand snippet](#)[Share](#) [Follow](#)

answered Feb 5, 2018 at 21:38



David Willhite

115 1 4

This doesn't necessarily trigger a download. It simply causes the browser to navigate to `file.doc`. Whether that results in `file.doc` being downloaded or being shown as a page in the browser depends upon the headers returned by the server when it serves `file.doc` and on what file types the browser is capable of rendering. – [Mark Amery](#) Apr 5, 2021 at 19:45



`<a href="file.doc"><button>Download!</button></a>`  
**This will download the file as `.doc` file extension is not supported to be opened in browser.**

3

One of the simplest ways for button and the `text-decoration` will help to alter or to remove the text decoration of the link.

[Share](#) [Follow](#)

edited Oct 26, 2021 at 6:38

answered Apr 23, 2021 at 9:48



m24197

1,028 1 4 12

Simplest solution ever. – [Tarik](#) Oct 26, 2021 at 4:57

- 1 The simplest yet wrong. According to HTML Living Standard [html.spec.whatwg.org/multipage/...](https://html.spec.whatwg.org/multipage/) a element can't have interactive elements as descendants and `button` element is an interactive one. – [Eduardo](#) May 15 at 8:46

@Eduardo Indeed you are correct, but I believe that the answer satisfies the requirements of the main question. – [m24197](#) Jul 9 at 9:24

Anywhere between your `<body>` and `</body>` tags, put in a button using the below code:

2

```
<button>
  <a href="file.doc" download>Click to Download!</a>
</button>
```

This is sure to work!

Share Follow

edited Jun 27, 2017 at 21:29

answered May 25, 2016 at 17:12



John Weisz

29.9k 12 88 131



Ronaldo

89 2

- 1 For Chrome it is a great solution – [Hayk Aramyan](#) Jun 15, 2016 at 8:13
- 1 Doesn't work in Safari either: [W3 Schools](#) – [Alex](#) Aug 8, 2016 at 9:33
- 2 Not working in the MS browsers is a rather big problem and Chrome is not always going to be the answer. – [SudoKid](#) Jan 8, 2017 at 20:11
- 1 You can't put a link inside a button in HTML – [Quentin](#) Jul 1, 2019 at 13:14
- 1 Not legal HTML; [validator.w3.org/nu](#) complains that "The element `a` must not appear as a descendant of the `button` element." Seems to render nonetheless in the browsers I've tried, but all the same, I wouldn't risk it. – [Mark Amery](#) Apr 5, 2021 at 19:50



If you want

2

```
<a href="path_to_file" download="proposed_file_name">Download</a>
```



for the ability to download files that would be rendered by the browser otherwise, But still want a neat javascript function to use in a button; you can have an invisible link in html and click it in javascript.



```
function download_file() {  
    document.getElementById("my_download").click()  
}
```

```
<a id="my_download" href="path_to_file" download="file_name" style="display:none;"></a>  
<button onClick="download_file()">Download!!!</button>
```

[Run code snippet](#)[Expand snippet](#)[Share](#) [Follow](#)

answered Jan 10, 2022 at 15:44





This is what finally worked for me since the file to be downloaded was determined when the page is loaded.

1

JS to update the form's action attribute:

```
function setFormAction() {  
    document.getElementById("myDownloadButtonForm").action = //some code to get the  
    filename;  
}
```

Calling JS to update the form's action attribute:

```
<body onLoad="setFormAction();">
```

Form tag with the submit button:

```
<form method="get" id="myDownloadButtonForm" action="">  
    Click to open document:  
    <button type="submit">Open Document</button>  
</form>
```

The following did **NOT** work:

```
<form method="get" id="myDownloadButtonForm"  
action="javascript:someFunctionToReturnFileName();">
```

Share Follow

answered Nov 19, 2015 at 23:01



slayernoah

4,382 11 42 72

---

probably because if you have the file at load time, can't you just render the action on the server using a templating engine? why the need for js code? – [Andrei Epure is hiring](#) Feb 23, 2017 at 9:48

Like other solutions here that use a default form action, this doesn't necessarily trigger a download. It simply causes the browser to navigate to the target URL. Whether that results in the file at that URL being downloaded or being shown as a page in the browser depends upon the headers returned by the server when it serves the file and on what file types the browser is capable of rendering. – [Mark Amery](#) Apr 5, 2021 at 19:48

---



If you can't use form, another approach with [downloadjs](#) fit nice. Downloadjs use blob and html 5 file API under the hood:

1

```
<div onClick={()=>{downloadjs(url, filename)}}/>
```



\*it's jsx/react syntax, but can be used in pure html



Share Follow

edited Apr 5, 2021 at 19:54



Mark Amery

142k 80 405 459

answered Aug 7, 2017 at 12:55



Gleb Dolzikov

766 7 13

---

To avoid CORS problems for images on other domains, put crossorigin="anonymous" into the img tag, like this:  – [Jonathan Harris](#) Jan 11, 2019 at 16:43

I had a button that would download an in-memory string as a file. This worked, no problems.  
Thanks. – [chichilatte](#) Sep 23, 2020 at 15:01

---



Not really an answer to the original question but it may help others which face similar situations as myself.

1

If the file you want to download is not hosted on the same origin but you want to be able to download it, you can do that with the Content-Disposition [header](#). Make sure the server includes the header when responding to requests of the file.



Setting a value like Content-Disposition: attachment will ensure that the file will be downloaded instead of viewed in the browser.

A simple <a href="http://www.notMyOrigin.com/file.txt">Download</a> pointing to your file should download it in this case.

Share Follow

answered Dec 2, 2021 at 14:46



Sebi Nechita

21 4



Another way of doing in case you have a complex URL such as `file.doc?foo=bar&jon=doe` is to add hidden field inside the form

-1

```
<form method="get" action="file.doc">
  <input type="hidden" name="foo" value="bar" />
  <input type="hidden" name="john" value="doe" />
  <button type="submit">Download Now</button>
</form>
```



inspired on @Cfreak answer which is not complete

Share Follow

edited Aug 18, 2019 at 15:45



BananaAcid

3,186 34 38

answered Jun 22, 2017 at 10:21



Bellash

7,530 6 53 86



The solution I have come up with is that you can use download attribute in anchor tag but it will only work if your html file is on the server. but you may have a question like while designing a simple html page how can we check that for that you can use VS code live server or bracket live server and you will see your download attribute will work but if you will try to open it simply by just double clicking html page it open the file instead of downloading it. conclusion: attribute download in anchor tag only works if your html file is no server.

-1



Share Follow

answered Oct 27, 2020 at 5:58



sourabh sharma

11 3



For me ading button instead of anchor text works really well.

-9

```
<a href="file.doc"><button>Download!</button></a>
```



It might not be ok by most rules, but it looks pretty good.



Share Follow

answered Aug 27, 2017 at 6:08



Brana

1,197 3 17 38

- 7 This only works because your browser doesn't support .doc files. – [Design by Adrian](#) Nov 17, 2017 at 10:48
- 2 Your HTML is invalid. `<a>` elements may not contain `<button>` elements. – [Quentin](#) Jul 1, 2019 at 13:13
- 1 was it always that way though? This answer was two years old when you commented that. – [John Lord](#) Feb 4, 2020 at 17:14



If you use the `<a>` tag, do not forget to use the entire url which leads to the file -- i.e.:

-10

[Download](http://www.example.com/folder1/file.doc)



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edited Jun 27, 2017 at 21:36

answered Jul 23, 2012 at 21:27



John Weisz

29.9k 12 88 131



Mark

11



I don't think that's the problem here. Also the "absolute" path isn't needed if the link is in the same path as the file. – [gen\\_Eric](#) Jul 23, 2012 at 21:28

@Rocket - you are, of course, correct about the absolute path, however, it is the best way to make certain to get it right. I will leave it to the OP to decide if it was helpful – [Mark](#) Jul 23, 2012 at 21:33



The question is explicitly asking how to do this with a button instead of a link. – [Quentin](#) Jul 1, 2019 at 13:14

the download attribute is missing in this solution. Even after adding download attributes it will not work for cross-domain. – [s sharif](#) Nov 7, 2019 at 7:44



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