



Imagine this:  
a Web without  
servers

A stylized illustration of a rainbow with two white clouds at its base, set against a light pink background with faint sun rays. The rainbow has multiple bands of color including red, orange, yellow, green, blue, and purple. The clouds are white with soft shadows. The background features faint, light pink sun rays emanating from behind the rainbow.

The background of the entire image is a repeating pattern of stylized rainbows. Each rainbow is a semi-circle with seven distinct bands of color: red, orange, yellow, green, blue, cyan, and magenta. They are arranged in a staggered grid across a light pink background.

???

# Tara Vancil

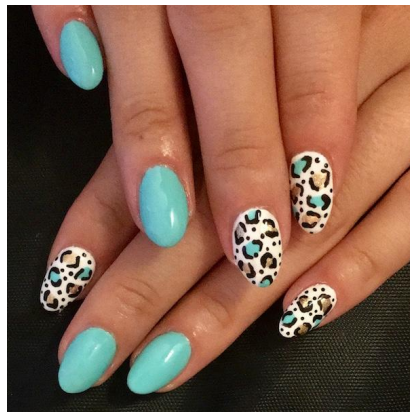
The Web, p2p protocols, nail art

- taravancil.com
- beakerbrowser.com



@taravancil

[taravancil.com/nails](http://taravancil.com/nails)





# Tara Vancil

The Web, p2p protocols, nail art

- taravancil.com
- beakerbrowser.com



@taravancil

# facebook

# SPARKNOTES®



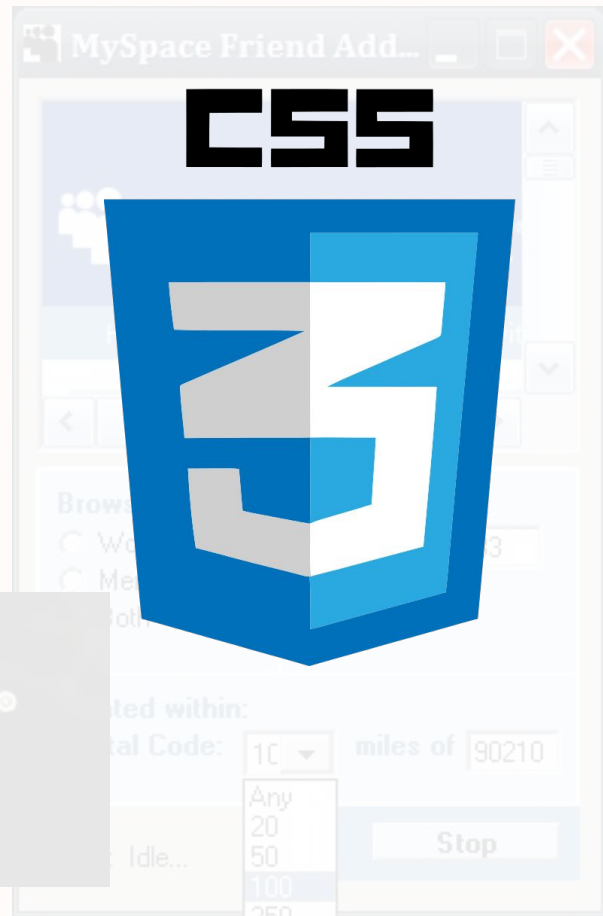
# HTML



# CSS



# JS





HTML



CSS



```
$ npm install -D webpack
```

```
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```

```
$ vim package.json
```

```
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```
$ npm run build
```

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```
$ npm run build
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```
$ ssh -i ~/.ssh/mykey me@192.168.2.1
```

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$ npm install -D webpack
```

```
$ vim package.json
```

```
$ npm run build
```

```
$ ssh -i ~/.ssh/mykey me@192.168.2.1
```

```
// ...?!
```





**Tom Dale** @tomdale · 24m



I remember the old days when our tools were Simple and Good. There were definitely not any slow, ugly and broken web sites.

Now tools are Complex and Bad and good luck getting one useful thing done on the web in a given day.



index.html

```
<h1>  
  Hello, world!  
</h1>
```

index.js

```
var app = new Vue({  
  el: '#hello',  
  data: {  
    message: 'Hello, world!'  
  }  
})
```

index.html

```
<h1 id="hello">  
  {{ message }}  
</h1>
```

index.html

index is

```
<h1>
```

```
Hello, world!
```

```
</h1>
```

mywebsite.com

# Hello, world!

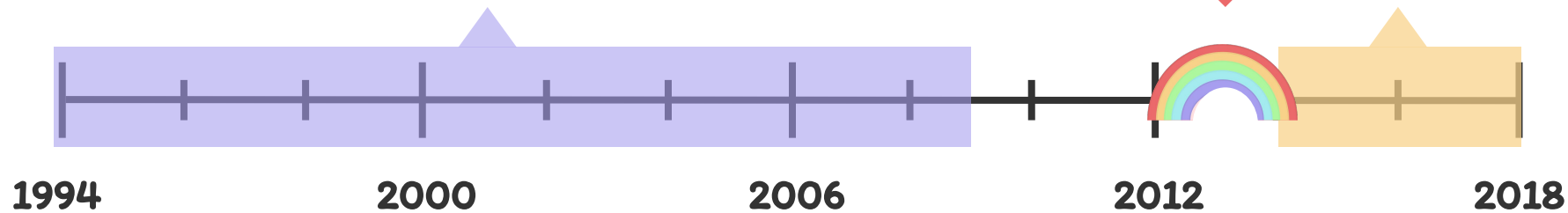
```
{
```

```
  'Hello, world!'
```

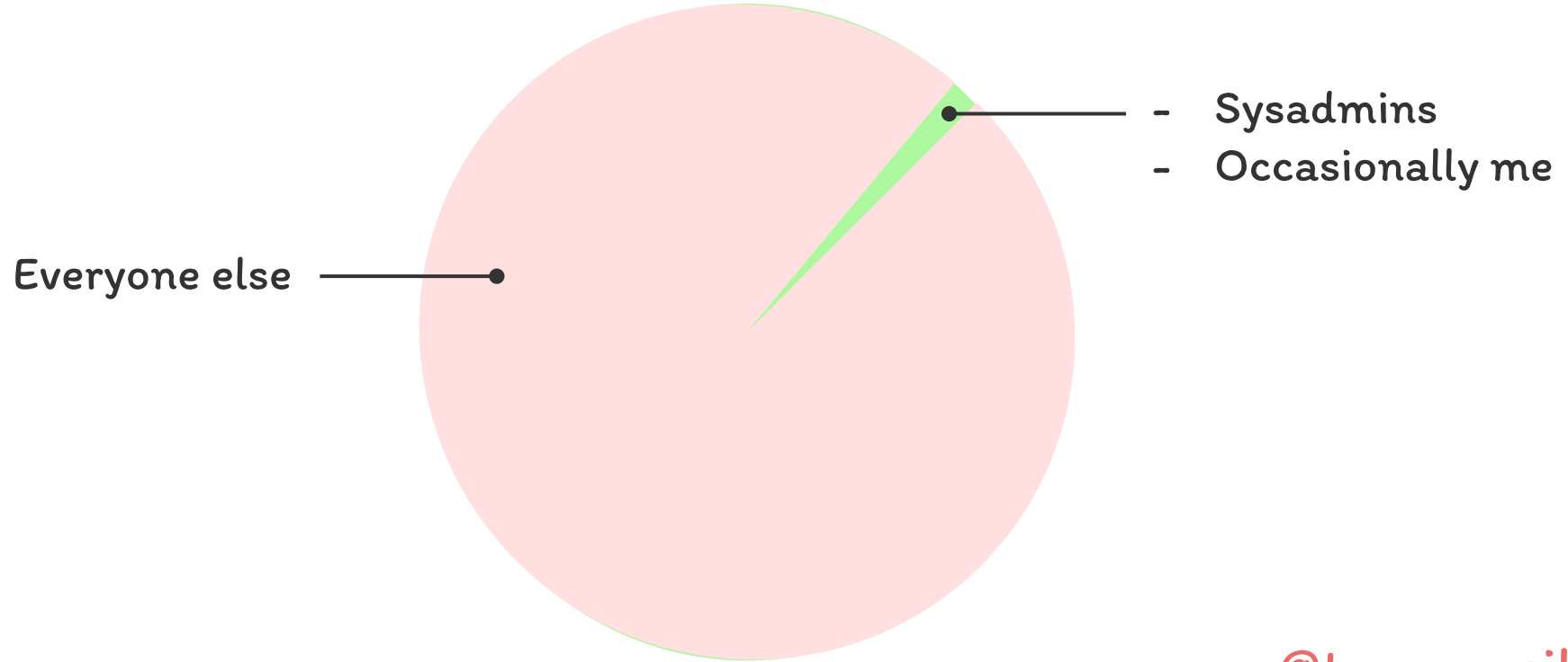
The background of the entire image is a light pink color, covered with a repeating pattern of stylized rainbow arcs. Each arc is composed of seven distinct color bands: red, orange, yellow, green, blue, indigo, and violet. The arcs are oriented diagonally, with their ends pointing towards the top-left and bottom-right corners.

Servers suck

YAHOO! GEOCITIES



# People who enjoy running servers





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3 billion

## Compose new Tweet



What's happening?



Tweet

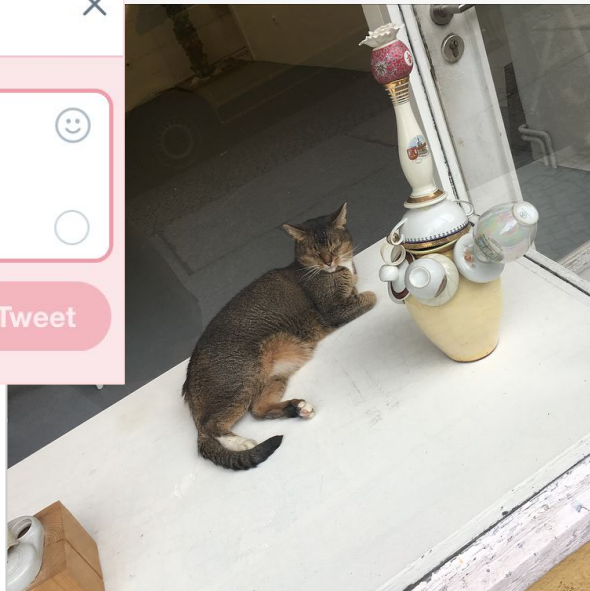
Having a great time  
at JSConfEU!



Add to your post



Next



Normal

Clarendon

Gingham

M



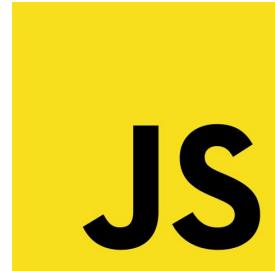




**HTML**

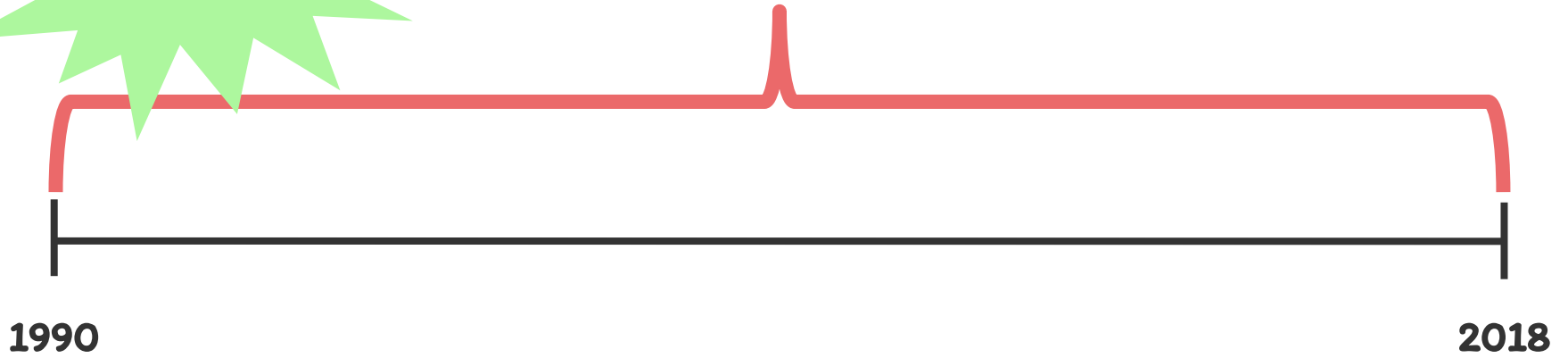


**CSS**



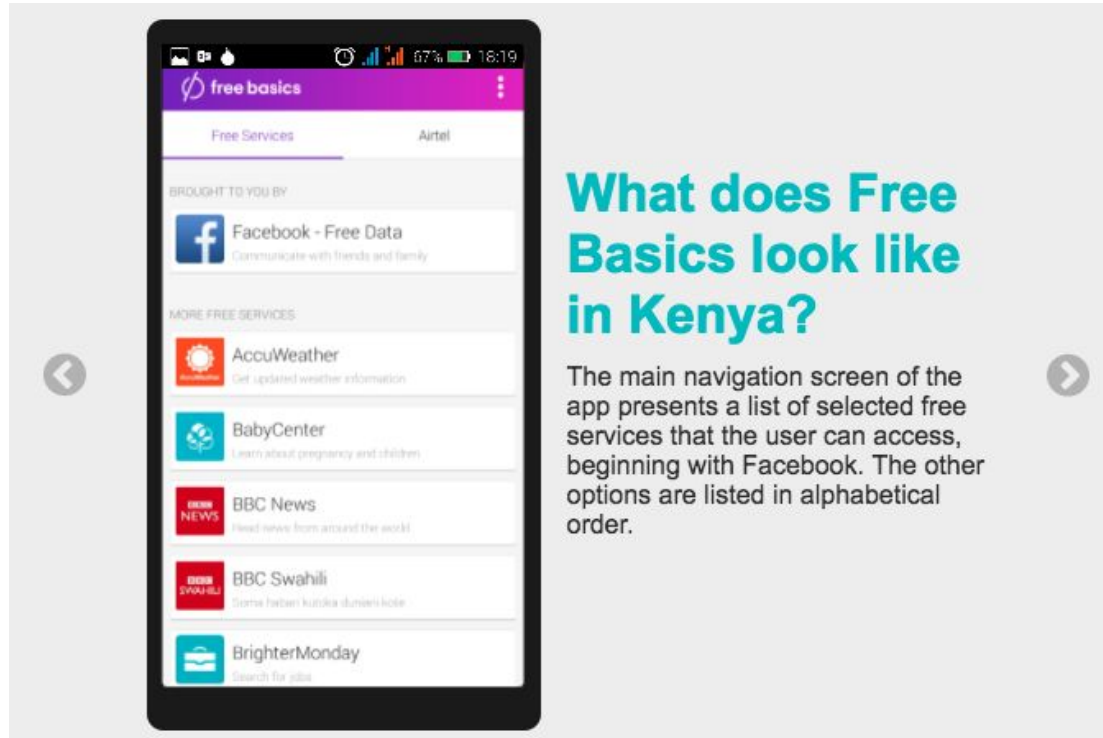


28 years



@taravancil

# Facebook Free Basics



## What does Free Basics look like in Kenya?

The main navigation screen of the app presents a list of selected free services that the user can access, beginning with Facebook. The other options are listed in alphabetical order.



## Compose new Tweet



What's happening?



Tweet

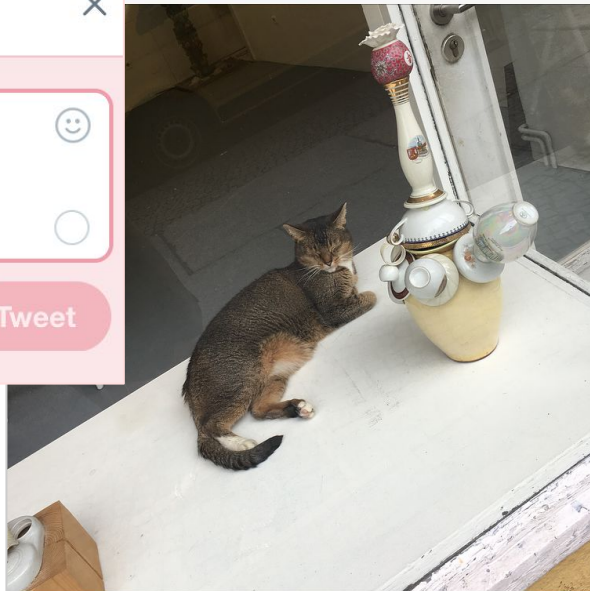
Having a great time  
at JSConfEU!



Add to your post



Next



Normal

Clarendon

Gingham

M



KEEP  
THE  
INTERNET  
WEIRD



[youtube.com/watch?v=vji\\_6ofE5Wg](https://youtube.com/watch?v=vji_6ofE5Wg)

## GeoCities Control Panel

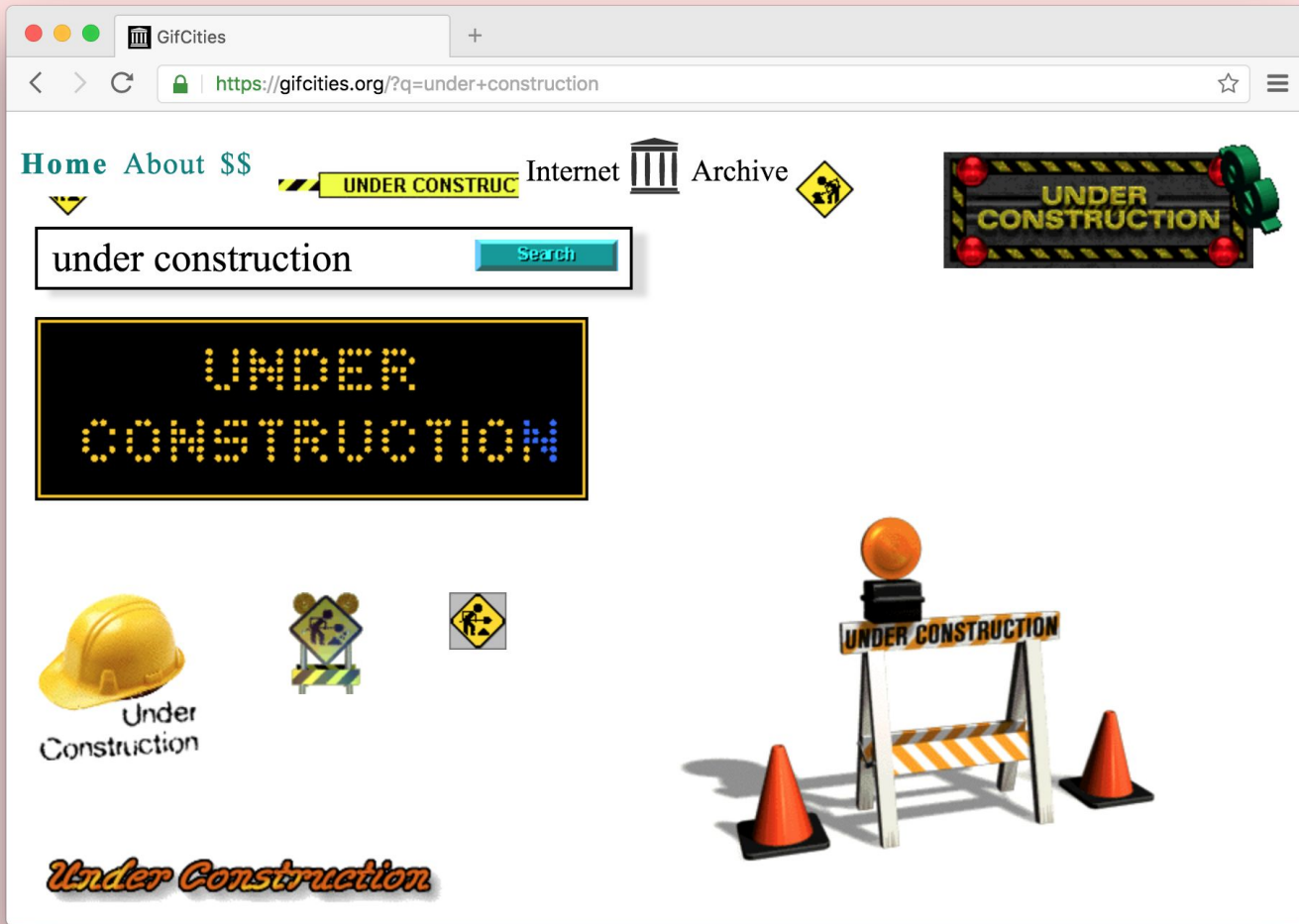
[Home](#)[Create & Update](#)[Manage](#)[Promote](#)[Help](#)

[Create & Update](#) > [File Manager](#) > **HTML Editor**

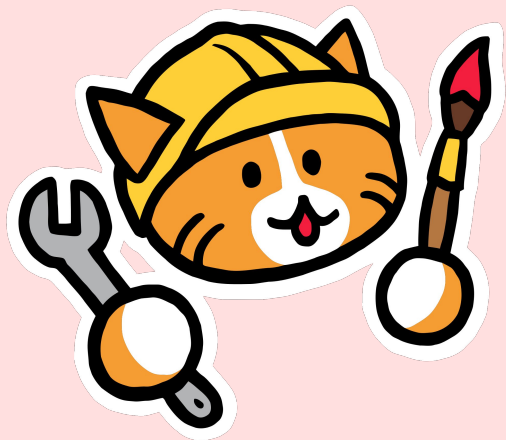
Filename:

Welcome to your HTML Editor. You can use this editor to code your HTML tips, visit the [HTML Help](#).

```
#000000; background-color: #1
middle; padding-left: 4px;" /
<tr><td colspan="2"><hr size=
<tr><td colspan="2"><input na
#CCCCC; font-family: Arial;
solid #000000; border-right:2
border-left:2px solid #000000
type="reset" style="backgroun
16px; color: #000000; border-
#000000; border-top:2px solid
value="Reset" /> <input type=
font-family: Arial; font-size
```

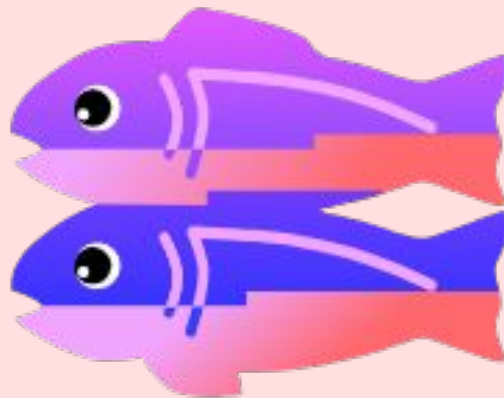


# neocities



[neocities.org](https://neocities.org)

# Glitch



[glitch.com](https://glitch.com)

The background of the entire image is a light pink color, covered with a repeating pattern of stylized rainbow arcs. Each arc is composed of five distinct color bands: red, orange, yellow, green, and blue. The arcs are oriented diagonally, with their ends pointing towards the top-left and bottom-right corners. They are scattered across the entire frame, creating a cheerful and vibrant backdrop.

We've been here before



**Publishing** is core to  
the Web's ethos. How  
can we **equalize access**  
for the **long term**?



+ New website





mywebsite.com

# Hello, world!

Let's turn our devices into servers!

Let's turn our  into servers!

# Personal devices are not servers

- Not always on (sleeping, dead battery, etc.)
- No dedicated IP address
- Can't handle traffic







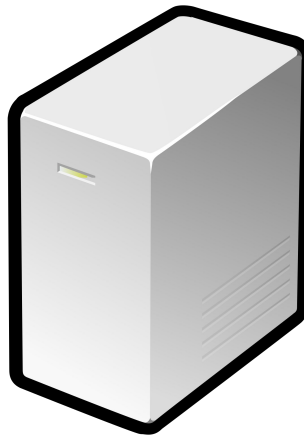
+ New website







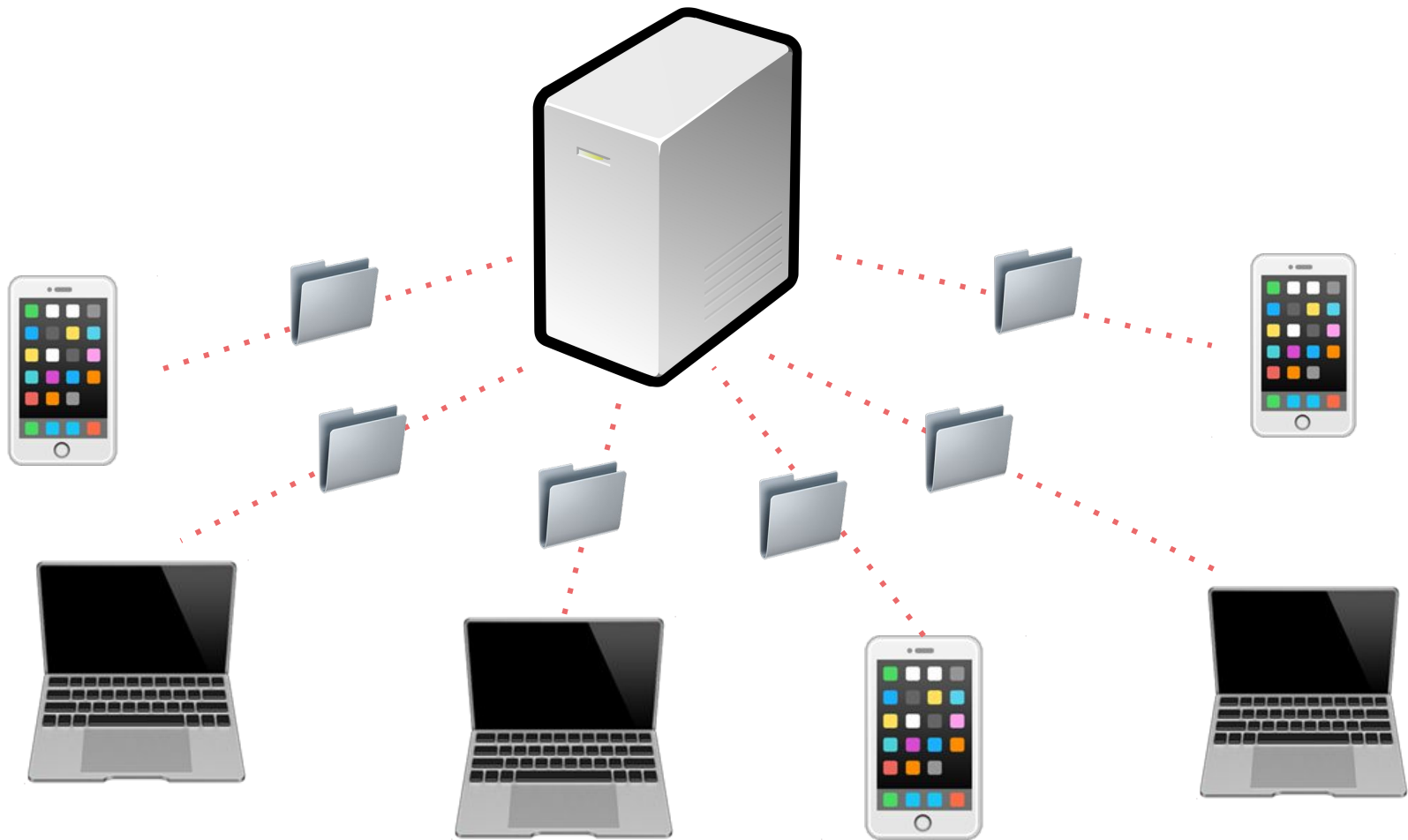
!=

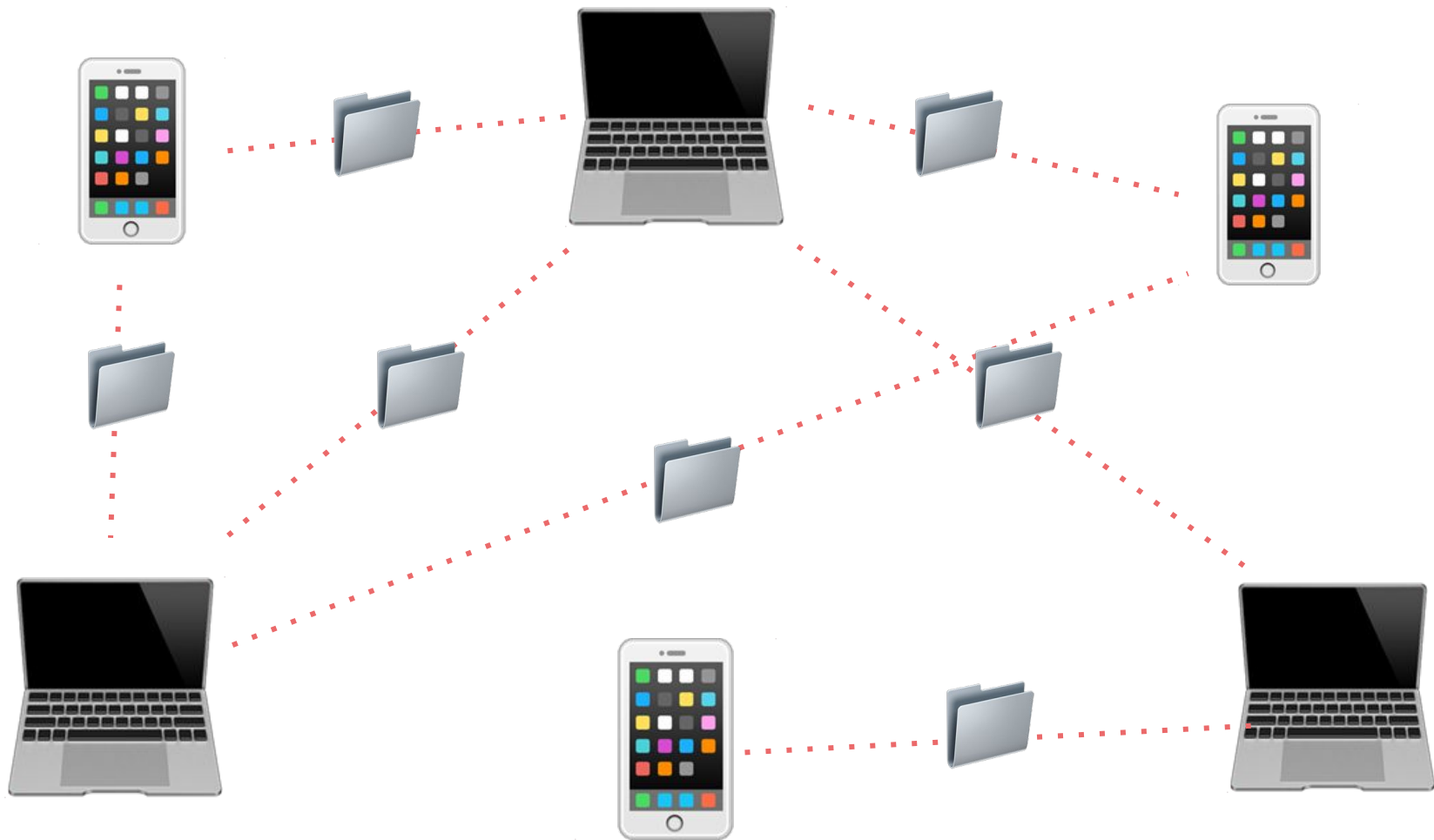


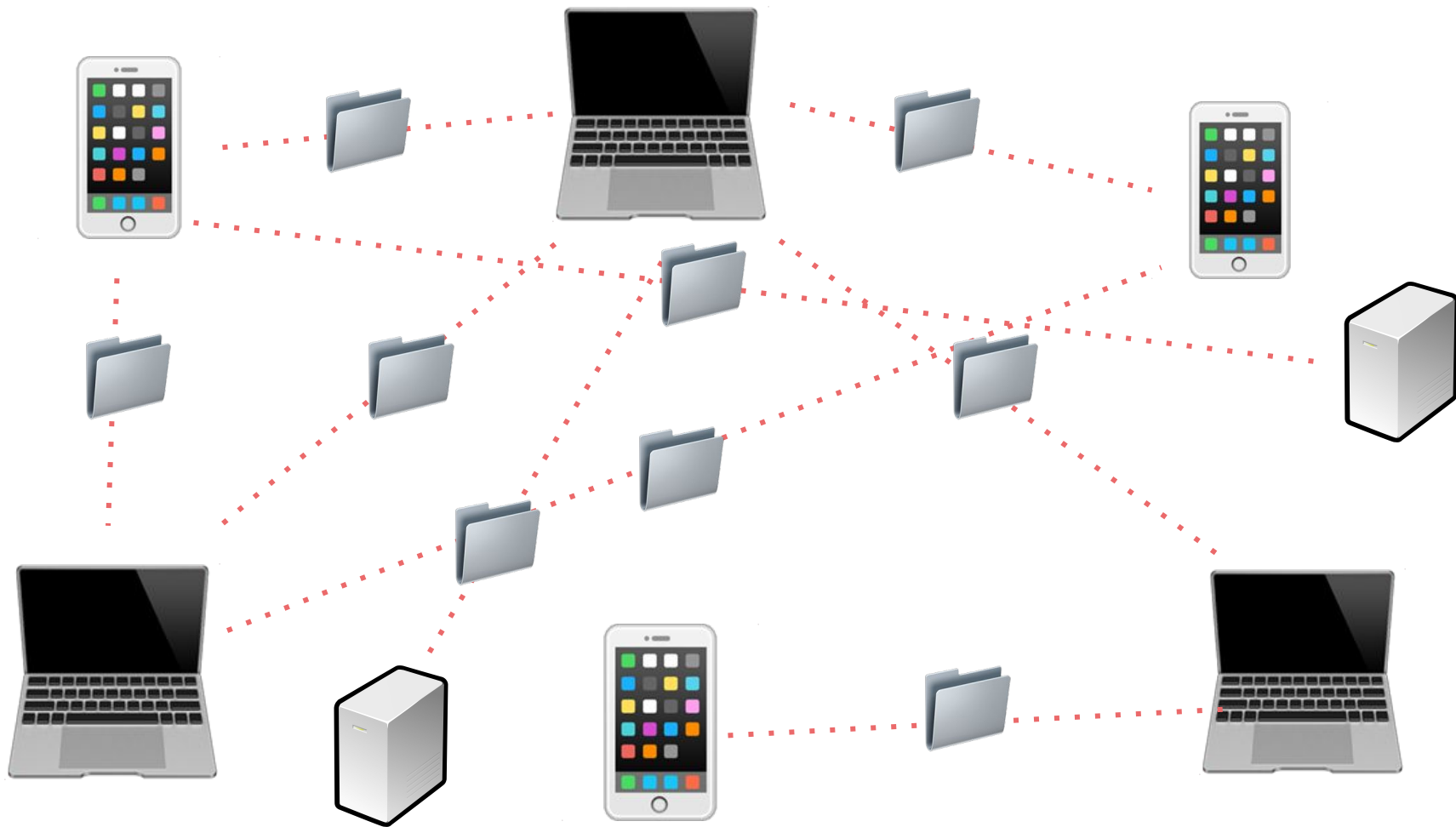
**BitTorrent**

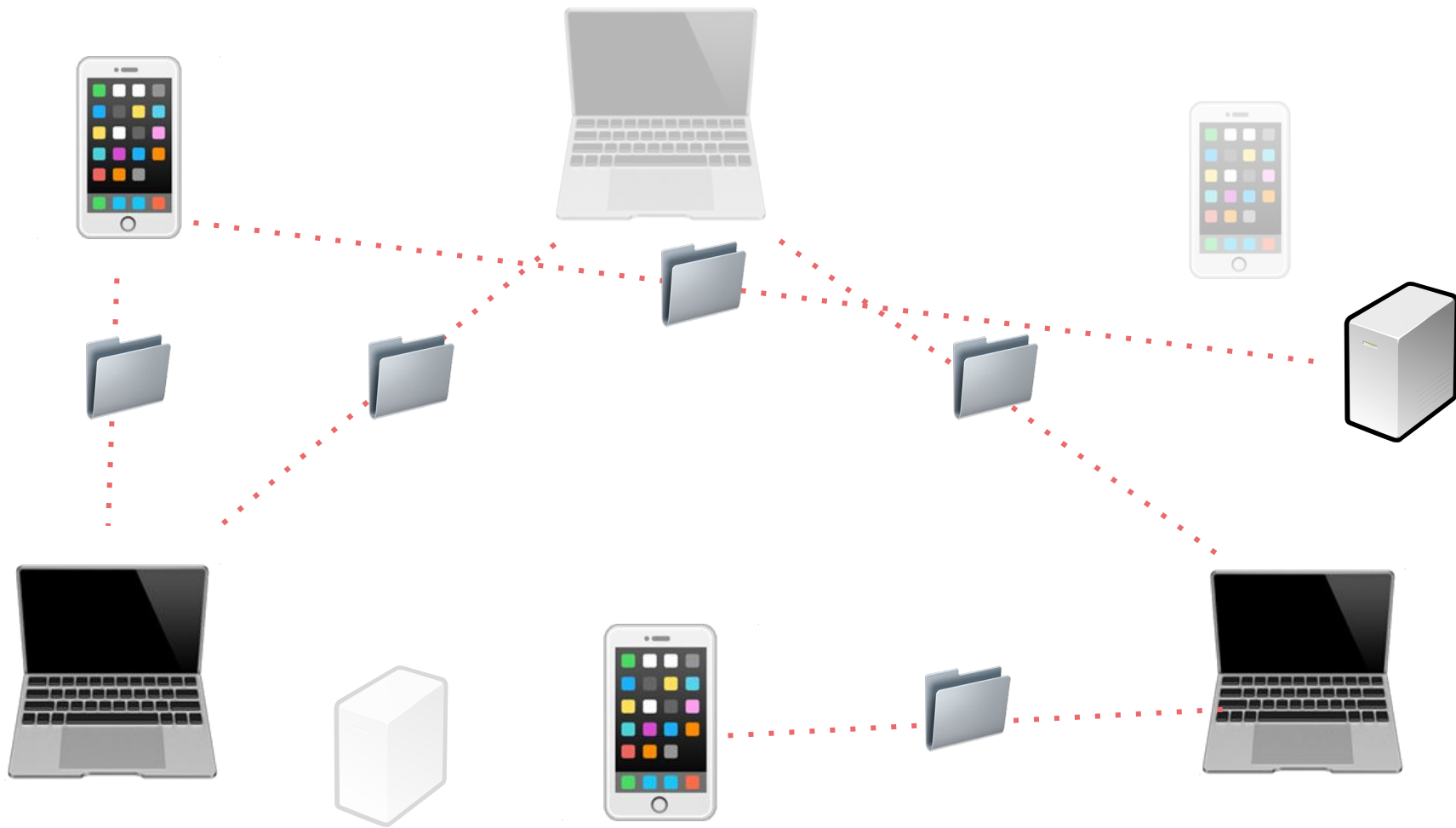
The background of the entire image is a light pink color, covered with a repeating pattern of stylized rainbow arcs. Each rainbow arc is composed of seven distinct color bands: red, orange, yellow, green, blue, indigo, and violet. The arcs are oriented diagonally, with their ends pointing towards the top-left and bottom-right corners. A white rectangular box with a dashed red border is centered on the page, containing the text 'Peer-to-peer' in a red, rounded, sans-serif font.

Peer-to-peer











The Pirate Bay



```
/
assets/
  -- images/
    - avatar.jpg
    - sunset.jpg
index.html
index.js
styles.css
```



**A website!**

A selfie of three people outdoors. On the left is a man with short reddish-brown hair wearing a red shirt. In the center is a woman with dark hair pulled back wearing a maroon shirt. On the right is a man with a beard wearing a dark cap and a green shirt. The background shows a clear blue sky, some trees, and a wooden fence. Three speech bubble-like labels with social media handles are overlaid on the image.

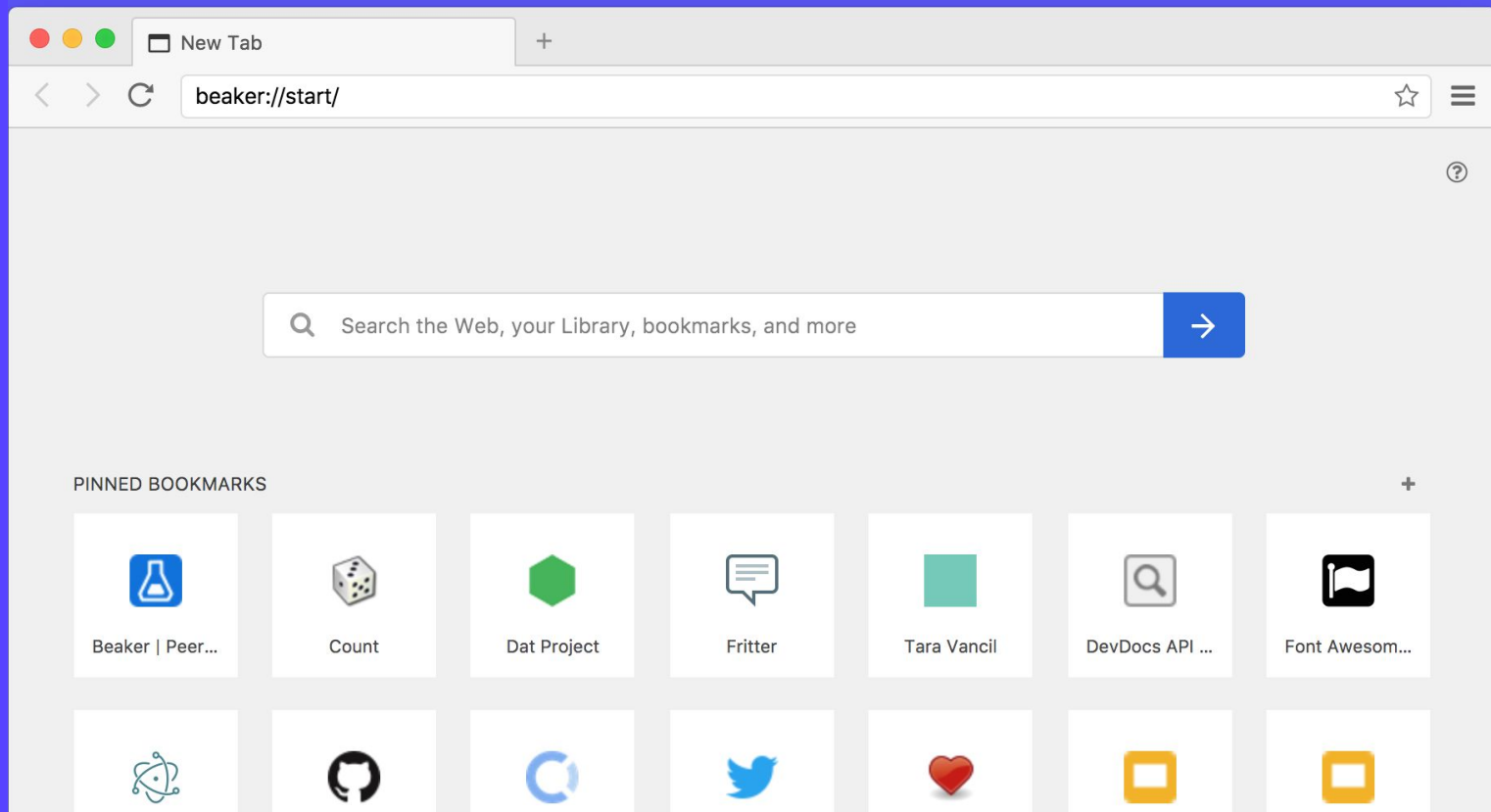
@pfraze

@taravancil

@mafintosh



beakerbrowser.com





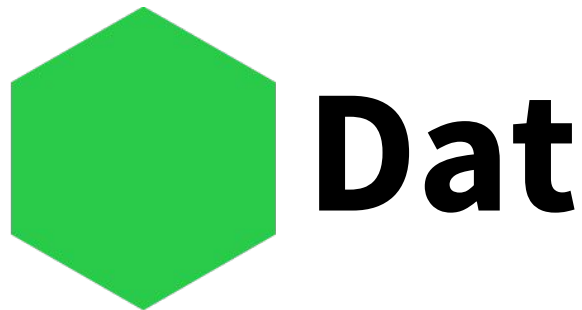
p2p://mywebsite.com

# Hello, world!

???

The Web, but make it peer-to-peer





Peer-to-peer hypermedia protocol for  
syncing and browsing files on-demand

[datprotocol.com](https://datprotocol.com) • [datproject.org](https://datproject.org)

# The peer-to-peer Web



dat://mywebsite.com

**Hello, world!**

# 1. One-click publishing



1. One-click publishing

2. Supercharged View Source

1. One-click publishing
2. Supercharged View Source
3. New Web APIs



One-click publishing



Supercharged View Source

3. New Web APIs

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It's files all the  
way down

profile.json

```
{  
  "name": "Tara Vancil",  
  "bio": "Peer-to-peer Web nerd.",  
  "avatar": "avatar.png"  
}
```

# Beaker Web APIs

```
var website = new
DatArchive('dat://jsconfeu.taravancil.com')

website.readFile('index.html')
// <html>...</html>

website.writeFile(
  api.html',
  '<h1>Hello from the console</h1>'
)
```



One-click publishing



Supercharged View Source



Cool Web APIs



Talk to me!



[github.com/beakerbrowser](https://github.com/beakerbrowser)



[beakerbrowser.com/install](https://beakerbrowser.com/install)



[opencollective.com/beaker](https://opencollective.com/beaker)



# Thank you!

@taravancil

- [jsconfeu.taravancil.com](https://jsconfeu.taravancil.com)
- [beakerbrowser.com](https://beakerbrowser.com)

^ Try these over dat://

