

Building interactive pages with htmx

Adam Johnson



Four part talk

1. A brief history of HTML
2. How to use htmx
3. htmx versus React &c.
4. Example project: Owela

Part One



A brief history of HTML



HTML step 1



Documents

```
<!doctype html>
<html>
  <head>
    <title>My web page</title>
  </head>
  <body>
    <h1>Adam's web site</h1>
    <p>👋 <strong>Welcome</strong> to my web site</p>
  </body>
</html>
```

Look nice, but static.

HTML step 2

Hyperlinks

```
<p>  
  For more information see  
  <a href="https://na.pycon.org">the PyCon Namibia website</a>  
</p>
```

We can go places!

Contents

See also



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Tim Berners-Lee



Biography

Sir Tim Berners-Lee invented the World Wide Web in 1989.

He is the co-founder and CTO of [Inrupt.com](#), a tech start-up which uses, promotes and helps develop the open source [Solid](#) platform. Solid aims to give people control and agency over their data, questioning many assumptions about how the web has to work. Solid technically is a new level of standard at the web layer, which adds things never put into the original spec, such as global single sign-on, universal access control, and a universal data API so that any app can store data in any storage place. Socially Solid is a movement away from much of the issues with the current WWW, and toward a world in which users are in control, and empowered by large amounts of data, private, shared, and public.

Sir Tim is the Director of the World Wide Web Consortium ([W3C](#)), a Web standards organization founded in 1994 which develops interoperable technologies (specifications, guidelines, software, and tools) to lead the Web to its full potential. He is a Director of the [World Wide Web Foundation](#) which was launched in 2009 to coordinate efforts to further the potential of the Web to benefit humanity.

A graduate of Oxford University, Sir Tim invented the Web while at [CERN](#), the European Particle Physics Laboratory, in 1989. He wrote the first web client and server in 1990. His specifications of URIs, HTTP and HTML were refined as Web technology spread.

He is the 3Com Founders Professor of Engineering in the School of Engineering with a joint appointment in the Department of Electrical Engineering and Computer Science at the Laboratory for Computer Science and Artificial Intelligence ([CSAIL](#)) at the Massachusetts Institute of Technology ([MIT](#)) where he co-leads the [Decentralized Information Group \(DIG\)](#).

The [Decentralized Information Group](#), works on the [Solid Project](#) to give people control of their own data and to re-decentralize the Web. He is the co-founder and CTO of [inrupt](#), the company launched to ensure the success of the Solid platform and its open source community, and to build the ecosystem that supports it.

HTML step 3



Forms

```
<form method="get" action="search">  
  <input type="text" name="query" placeholder="Search for...">  
  <button type="submit">Go</button>  
</form>
```

We can go to more places, and change things!

HTML step 4



Frames

```
<iframe src="/article/123/content/"></iframe>  
<iframe src="/article/123/comments/"></iframe>
```

We can reload just part of the page at a time!

[Products Home](#)

[Pitcairn Honey](#)

[Honey Soap](#)

[Honey & Propolis Soap](#)

[Propolis Tincture](#)

Visit also:

[The Pitcairn Office](#)



Pitcairn Island Pure Honey

"With all the natural sweetness of tropical fruits and flowers"

Pitcairn Island Pure honey is packaged in 250g jars. The price per jar is NZ\$20.00 (minimum order 2 jars). There is a charge of NZ\$3.00 packaging per order + [postage](#) as listed below

In May 1998, the UK Government aid agency, the Department for International Development, funded an apiculture programme for Pitcairn which included training for Pitcairn's bee keepers and a detailed analysis of the disease status of Pitcairn bees and honey. As a result, Pitcairn is now able to export honey products to New Zealand and beyond.

Pitcairn has one of the most disease free bee populations of anywhere in the world and the honey produced is of an exceptionally high quality. The apicultural scientist conducting the project, also found that Pitcairn bees were a particularly placid variety and within a short time, was able to work with them wearing minimal protection. It would therefore seem that the export of live Queen bees is another potential earner for the Pitcairn Islanders. The numbers of hives on the island is now around 60, with potential for perhaps 5 times that amount.

The rich and intense fruitiness of Pitcairn's honey is attributed to the nectar from the Mango, Lata, Passion Flower, Guava and Roseapple flowers found in abundance on Pitcairn.

New! Subscribe to our free mailing list to receive the latest news about honey products, shipping from the island, latest dates for ordering etc.

Name:

Email:



Enter the code above here :

Can't read the image? click [here](#) to refresh

...but frames suck. 🥱

- Fixed size rectangles
- Extra resource consumption
- Changes restricted to individual frames

htmx: extending HTML

```
<h3>Latest tweets</h3>
<ul id="latest-tweets">
  <li>Loving PyCon Namibia 2021! - @adamchainz</li>
</ul>
<button hx-get="/latest-tweets/" hx-target="#latest-tweets">
  Update
</button>
```

We can use *any* event to load content from *any* URL
into *any* element!

History of htmx

- Started April 2020, Version 1.0.0 November
- Rewrite of intercooler.js (2013)
- Alternatives: Unpoly, Hotwire

Part Two



How to use htmx



We need:

- Web framework: Django, Flask, or similar
- htmx script tag

That's it!

htmx setup

Add to any page:

```
<script src="https://unpkg.com/htmx.org@1.4.1"></script>
```

It's JavaScript, but to use it you don't write any JavaScript.

Examples

Many at htmx.org/examples

1. Click to Load
2. Cascading Selects
3. Active Search

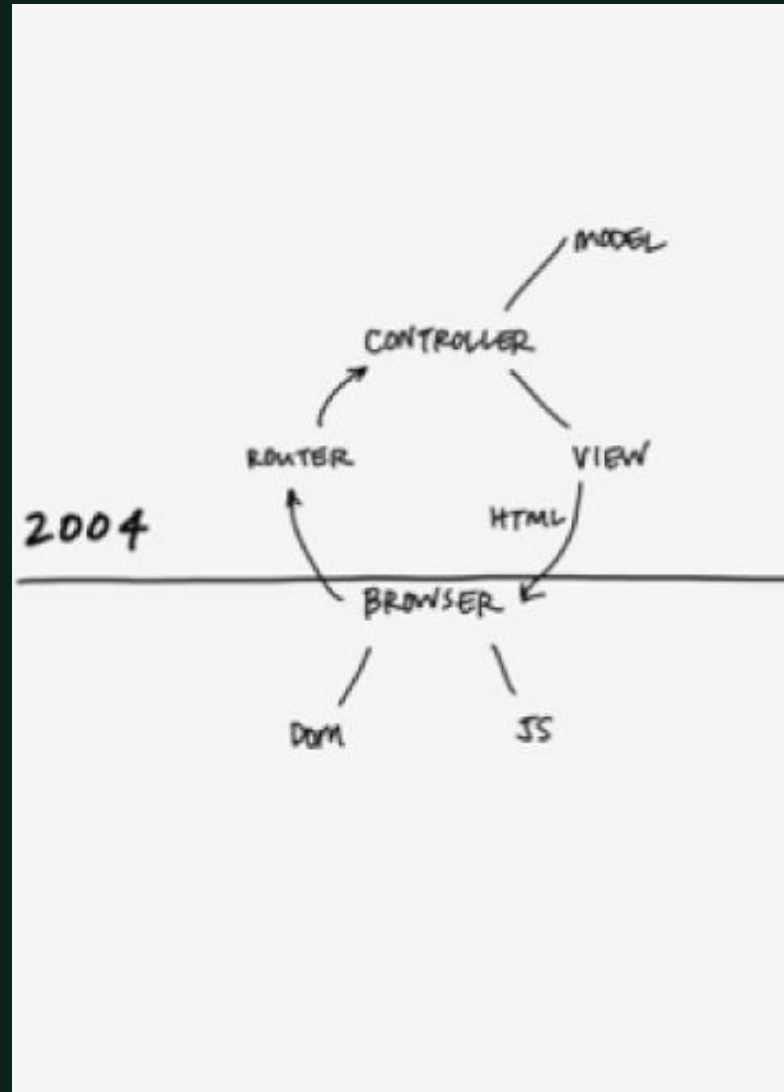
Part Three



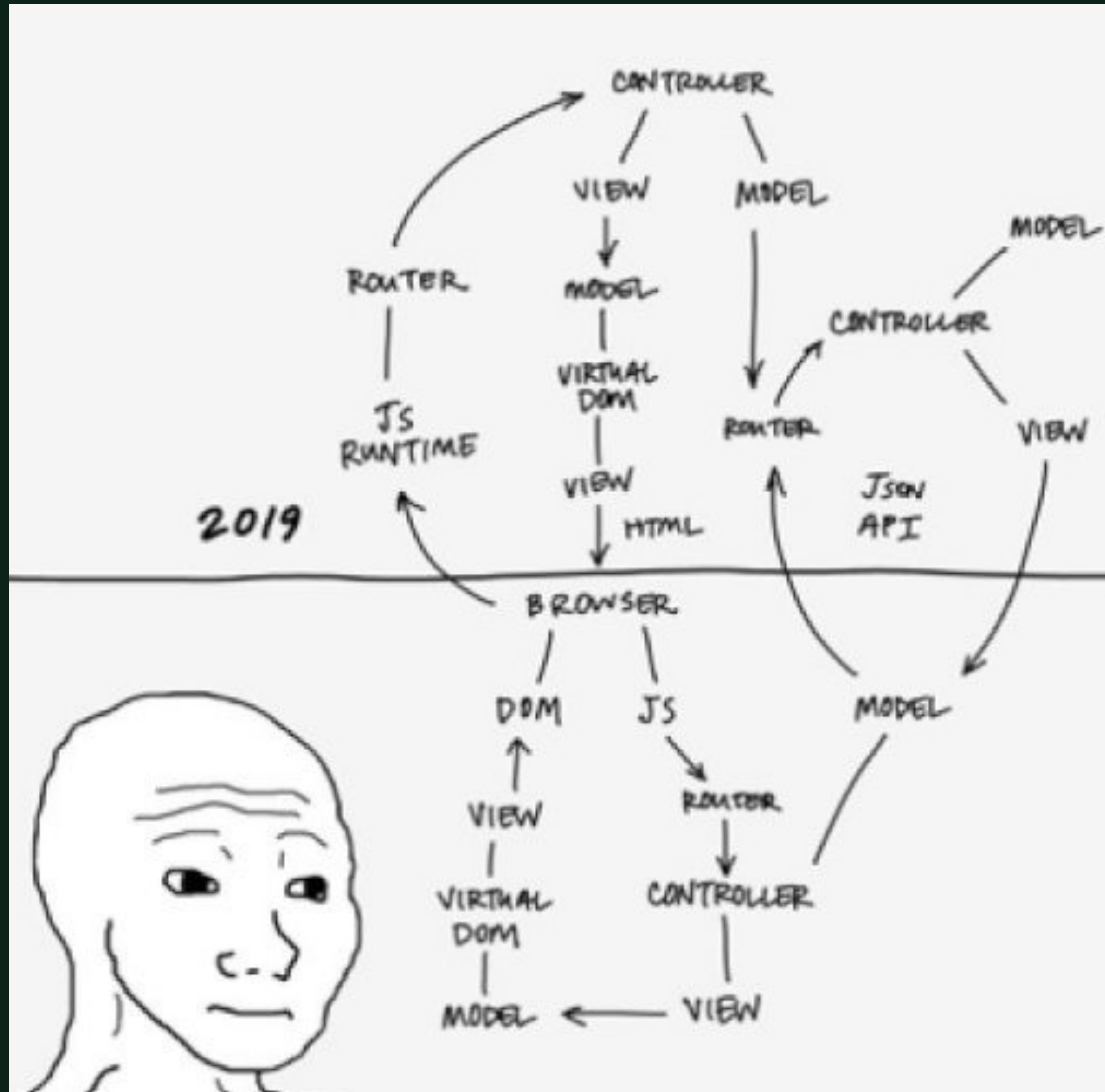
htmx versus React &c.



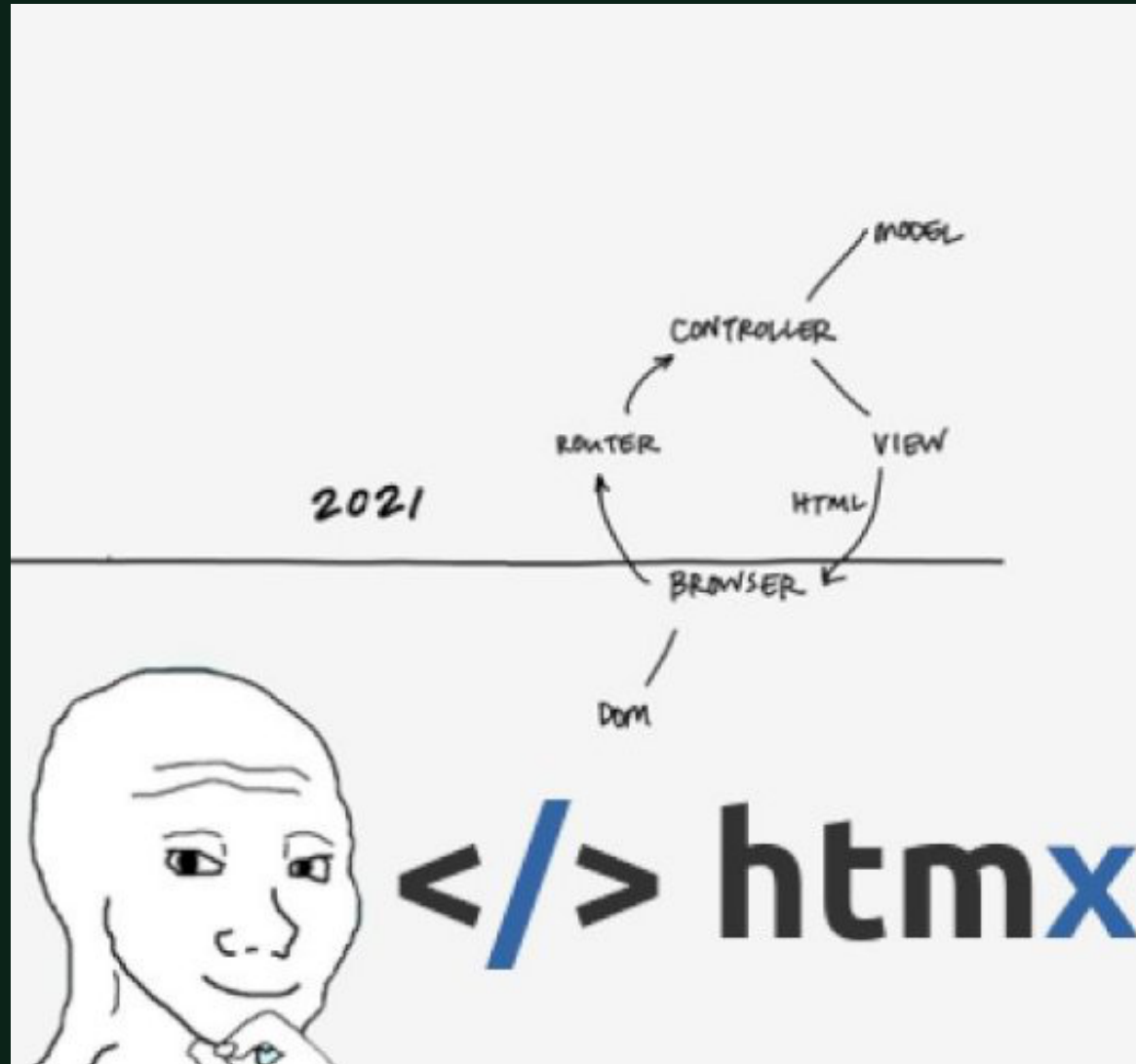
Traditional HTML model



React &c. model



htmx Model



htmx &c.

React &c.

Websites

Applications

Small teams

Big teams

Any language

JavaScript

Additive

Prescriptive

Part Four

Owela in Django

Owela



Wooden Owela Board

made by Petrus Ngeve from Kavango Region from the
wood of African teak / ughuvu (*Pterocarpus angolensis*)

Thank you! 🙌

- Adam Johnson
- @adamchainz on GitHub & Twitter
- me@adamj.eu
- github.com/adamchainz/talk-building-interactive-pages-with-htmx