# Dynamic Static Sites

July 5th 2020





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# Static Websites

A brief history



#### The first website was a static site

#### **World Wide Web** The WorldWideWeb (W3) is a wide-area hypermedia information retrieval initiative aiming to give universal access to a large universe of documents. Everything there is online about W3 is linked directly or indirectly to this document, including an executive summary of the project, Mailing lists, Policy, November's W3 news, Frequently Asked Questions. What's out there? Pointers to the world's online information, subjects, W3 servers, etc. on the browser you are using A list of W3 project components and their current state. (e.g. Line Mode ,X11 Viola , NeXTStep , Servers , Tools , Mail robot ,Library ) Details of protocols, formats, program internals etc Bibliography Paper documentation on W3 and references. A list of some people involved in the project. A summary of the history of the project. How can I help? If you would like to support the web.. Getting code Getting the code by anonymous FTP, etc.



# Let's Develop like it's 1991

- Every website was static
- Layout wasn't a thing
  - Vertical flow for everything
- Link management was manual
- 1991: 1.2 KB/s





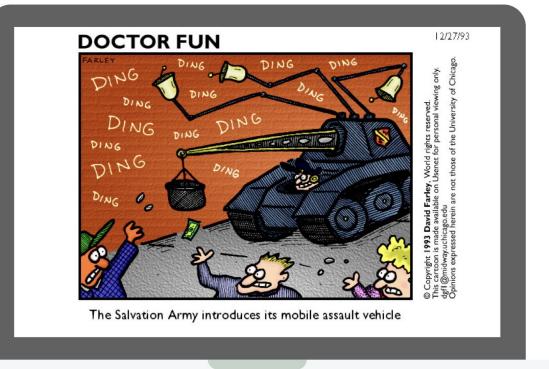


#### First Web Search

#### AliLinks - Links to the web's best sites all on one easy to navigate page! The Web9000 Network makes it easy and affordable. OP Computing Entertainment Living Money Newstand Recreation Research Shopping BOTTOM Amaya | Arachne(dos) | Chrome | Microsoft IE | Firefox & Thunderbird | Flashplayer | Maxthon | Netscape (old) | Opera | PDF Reader | Pegasus Mail | QuickTime | RealPlayer | Sa CGI Resource | Extropia | Gamelan | Java Boutique | JavaScript | Matt's | Webscripts | AMD | Apple | Compag | Cyrix | Dell | Digital | Electro Service | Gateway | HP | Intel | Winchip Announce: Addurt | ATC | Freepromote | Shotgun Banners: Link Exchange | Smartclicks Chat: ActiveWorlds | Chatlist | Globe | Talk City | WBS | Yack! Email: Hotmail | Juno | Mail Angelfire | Fortune City | Geocities | Trailerpark | Tripod | Web9000 | Xoom A. Vault | Gamecenter | Game Finder | GamePen | GamePower | G. Domain | Games.net | GameSpot | Happy Puppy | OGR Absolute | Builder.com | DJ Quad | developer.com | Dev. Zone | HOME | HTMLgoodies | HTML Guide | WebDeveloper | reallybig.com | Webmonkey | Webreference | Web Review Color Chart | Cool Tool | Dr. HTML | FreeForm | GIF Wizard | NetMechanic | SBN Gallery | Site Garage Dave Central | Download | Extreme Mac | Filemine | FilePile | Filez | Freewareplus | Freewareweb | Jumbo | Nonags | Softseek | Stroud's | Tucows | Windrivers | Winfiles | Winsite Newbie-U | Microsoft | PC-Help | Support Help | Whatis P Computing Entertainment Living Money Newstand Recreation Research Shopping BOTTOM Boxoffice | Cinemachine | Film.com | Film Scouts | In Theaters | IMDb | Moviefinder | MovieLink | Mr. Cranky | Reel Buena Vista | Disney | Dimension | Fox | Fox Searchlight | Hollywood | MGM/UA | Miramax | New Line | October | Paramount | Sony | Universal | Warner Bros Allstar | Classical | CMJ Online | Ear 1 | MTV | RollingStone | SonicNet | VibeOnline LiveConcerts | Live Online | Pollstar | Ticketmaster | WILMA Billboard | HitsWorld | imusic | Newswire IUMA | JazzCentral | LyricServer | MusicCentral | MusicSearch | UBL | UnfURLed | WallofSound Cybersleaze | eDrive | E! Online | Ent. Asylum | E. Weekly | Enquirer | Hollywood | Mr Showbiz | People | Variety click TV | GIST | Prevue | Rock on TV | Total TV | TV Guide | UltimateTV ABC | CBS | Disney | FOX | ESPN | HBO | NBC | PBS | WB | UPN | SciFi OP Computing Entertainment Living Money Newstand Recreation Research Shopping BOTTOM A Resource | CultureFinder | Fine Site | The Guide | Playbill Buy/Sell: Doubletake .edu | A.S.D. | AskERIC | CollegeNet | Petersons | University | Web 66 Family.com | Parenthood | Parent Soup | Parents.com | ParentTime | WholeFamily BettyCrocker | Digital Chef | DineNet | Epicurious | Food TV | I. Kitchen | Kitchen Link | Meals 4U | PHYS | Star Chefs | Zagat



#### First Web Comic

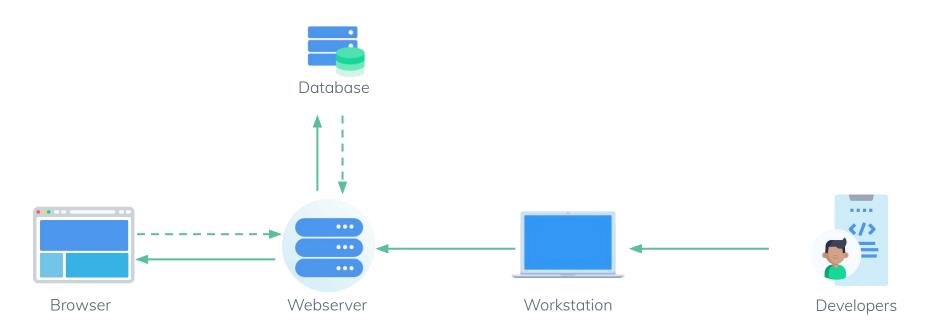




# Things get Dynamic

- CGI was introduced in 1994
- Rasmus Lerdorf releases his "Personal Home Page Tools" in 1995
- Brendan Eich writes the prototype for JavaScript in 1995
- 1994: 28 KB/s







#### E-Commerce becomes possible



#### Welcome to Amazon.com Books!

One million titles, consistently low prices.

(If you explore just one thing, make it our personal notification service. We think it's very cool!)

#### SPOTLIGHT! -- AUGUST 16TH

These are the books we love, offered at Amazon.com low prices. The spotlight moves EVERY day so please come often.

#### ONE MILLION TITLES

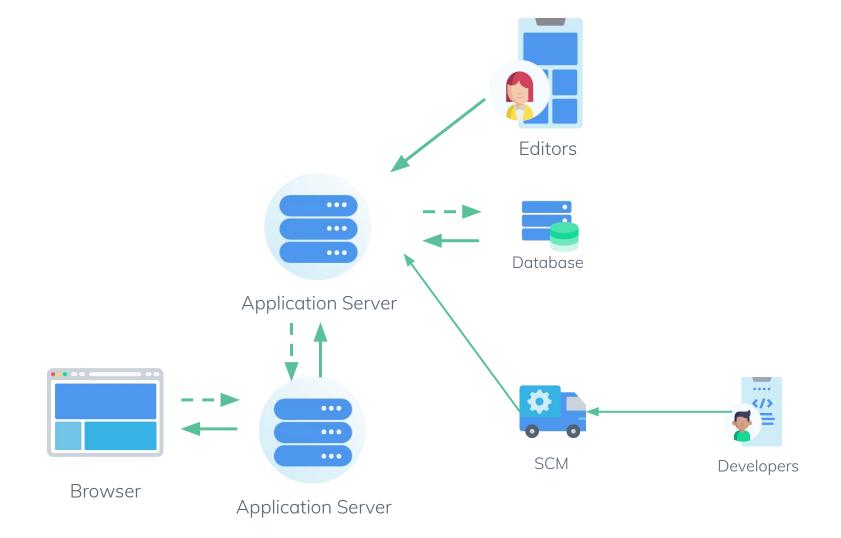
Search Amazon.com's <u>million title catalog</u> by author, subject, title, keyword, and more... Or take a look at the <u>books we recommend</u> in over 20 categories... Check out our <u>customer reviews</u> and the <u>award winners</u> from the Hugo and Nebula to the Pulitzer and Nobel... and <u>bestsellers</u> are 30% off the publishers list...



### lt's a business

- Microsoft ASP was releases in 1996, Sun JSP in 1999
- Hosting a dynamic, CMS, based website became easy
- Microsoft FrontPage and Marcomedia Dreamweaver released in 1996 and 1997
- 1996: 56 KB/s







#### Your own space

#### WordPress

HOME ABOUT DOCS DEV BLOG UTILITIES SUPPORT DOWNLOAD

**WordPress is** a semantic personal publishing platform with a focus on aesthetics, web standards, and usability.

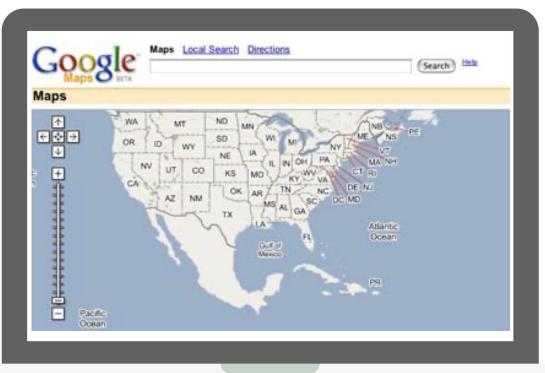
For information about the WordPress project—its philosophy, current features, developers, and future direction—see the About section. For updates on development and announcements, see the <u>WordBlog</u>. If you'd like help with WordPress or have questions, the <u>support forums</u> are the place for you. If you just want to skip all the formalities and get the product, <u>download away</u>. For major announcements via email, use the signup form at the bottom of every page.

WordPress has also been named the new official branch of <u>b2</u>. We're looking forward to being a part of the community.

WordPress Announcements:



### Apps on the Web





# I got the power

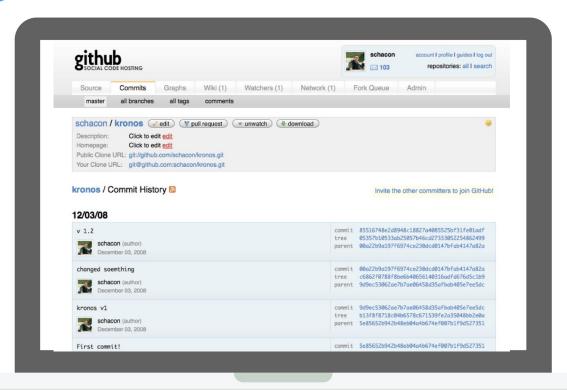
- XMLHttpRequest was part of IE5 in 1999
- SPA have been discussed since 2003
- jQuery was published in 2006, AngularJS in 2009
- 2006: 8 MB/s



# Modern static site builders

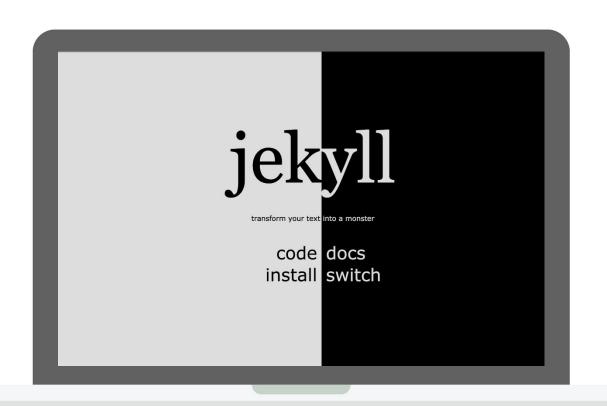


#### GitHub

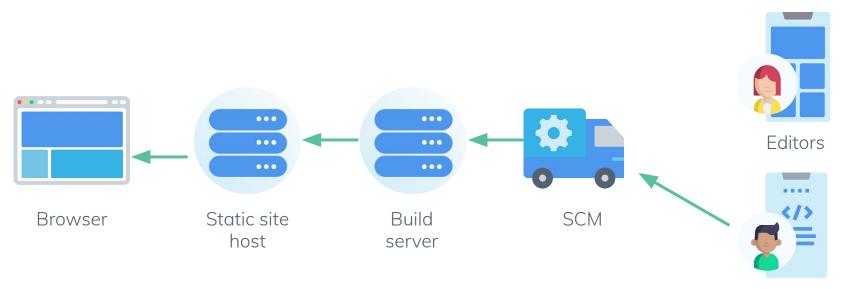




# Jekyll











#### Static just makes things easier



#### **No Security issues**

Without a server-side application or database the attack surface is minimal.



#### **Trivial caching**

CDNs are trivial to set up. Since every file gets delivered to every user as-is, no complex logic is necessary.



#### **Great performance**

Shuffling bytes from storage to the network is what servers are great at.



#### **Easy maintenance**

No random 500 errors, no dropped database connections.



### Static site generators











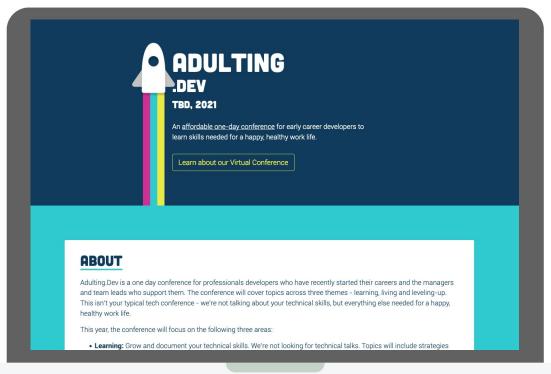








### Github.com/adulting-dev/adulting.dev





# This project is way too complex.

Static sites just won't cut it.



# Common Requirements

- 1. "Our editors don't know git, they need a GUI."
- 2. "We have a lot of content, we need full-text search."
- 3. "Our contact forms needs to send an email."
- 4. "We're running an online shop. You can't do that with a static site."



# A cloud and an API walk into a bar

AWS got started in 2002,Lambda added in 2014
Roy Fielding defines REST in his 2000
PhD dissertation
Twilio was founded in 2007; Stripe in 2011

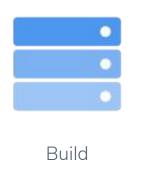


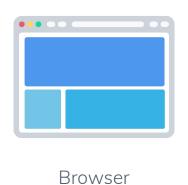
# How does that solve anything?

With great services comes great responsibility



#### 3 ways to access a service



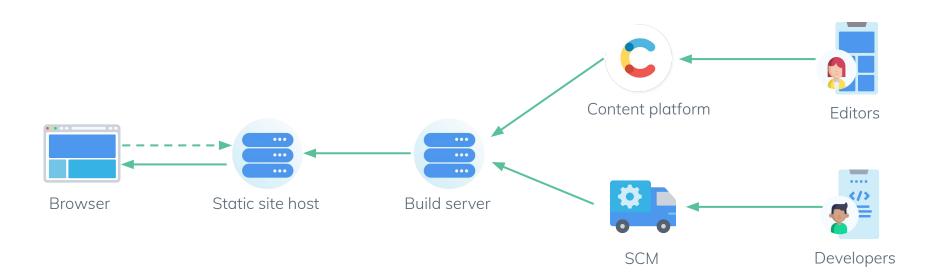




Function

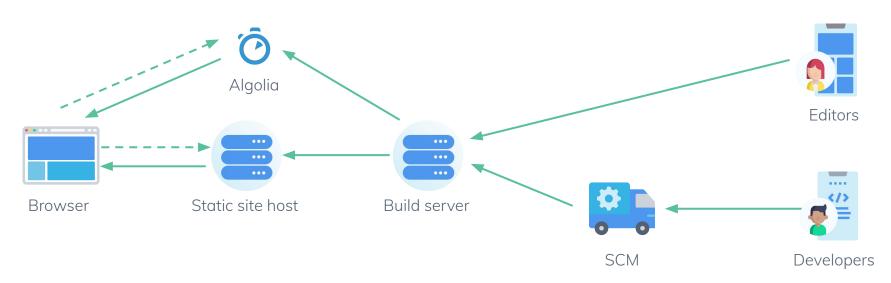


#### Our editors don't know git, they need a GUI.



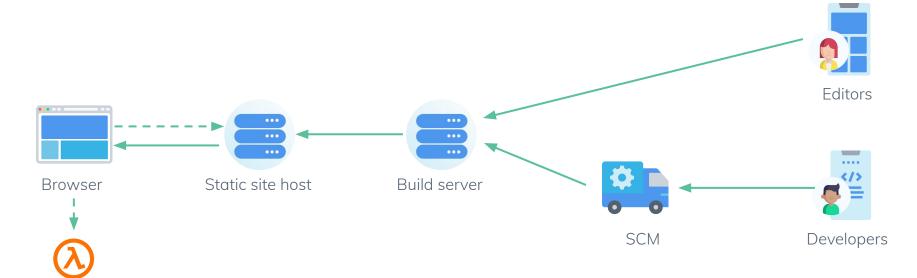


# We have a lot of content, we need full-text search.





#### Our contact forms needs to send an email.

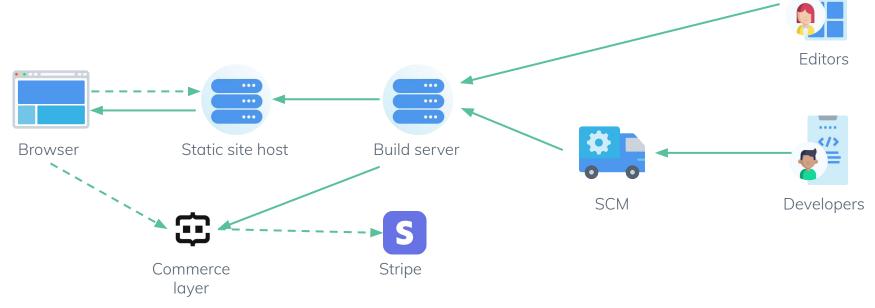






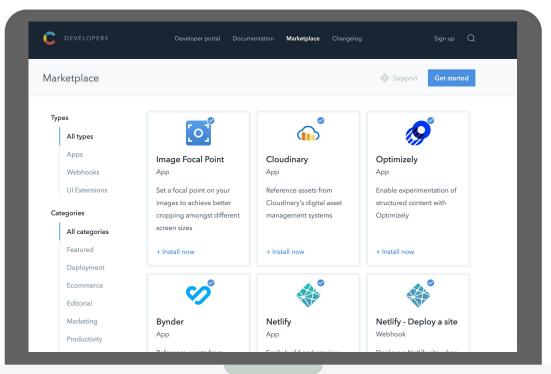
AWS Lambda

We're running an online shop. You can't do that with a static site.





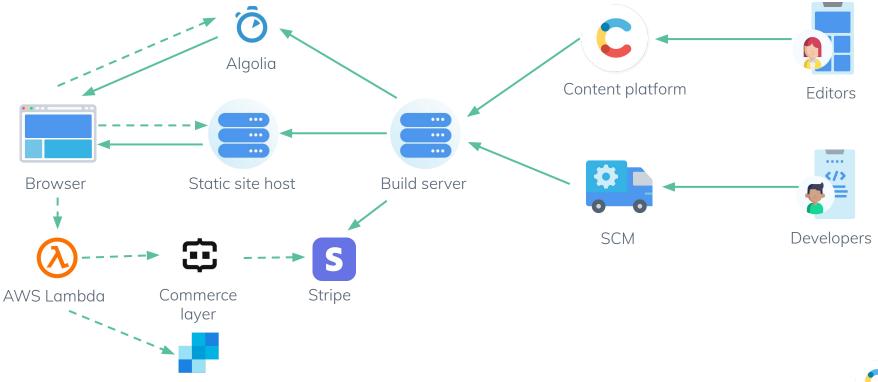
### Contentful + API = 💚 🚀





# Bringing it all together

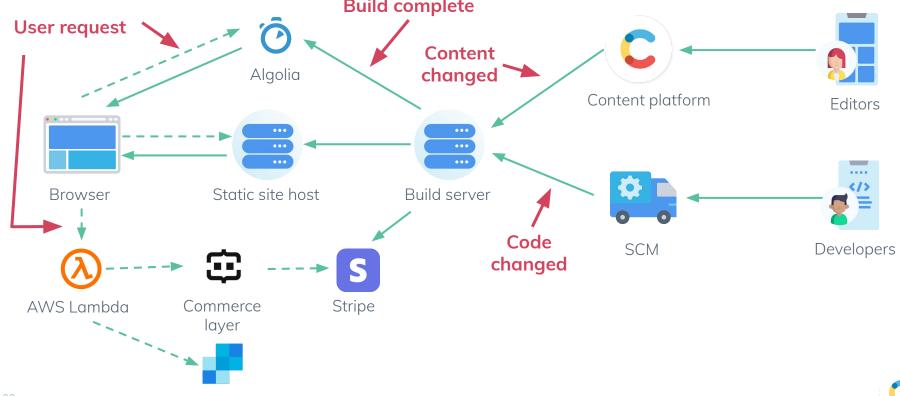
SendGrid





Events in a static site generator Build complete

SendGrid





# Thanks

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