

JAMming with GraphCMS, GatsbyJS and GraphQL

GraphQL Vienna February Meetup

February 5th, 2018

Agenda

1. **Content management and presentation/distribution on the web**
2. The Shape of Things to Come... many are already here
3. Why am I here?
 1. We need a "website"
 2. JAMstack, GraphCMS and GatsbyJS
 3. GatsbyJS GraphCMS Plugin

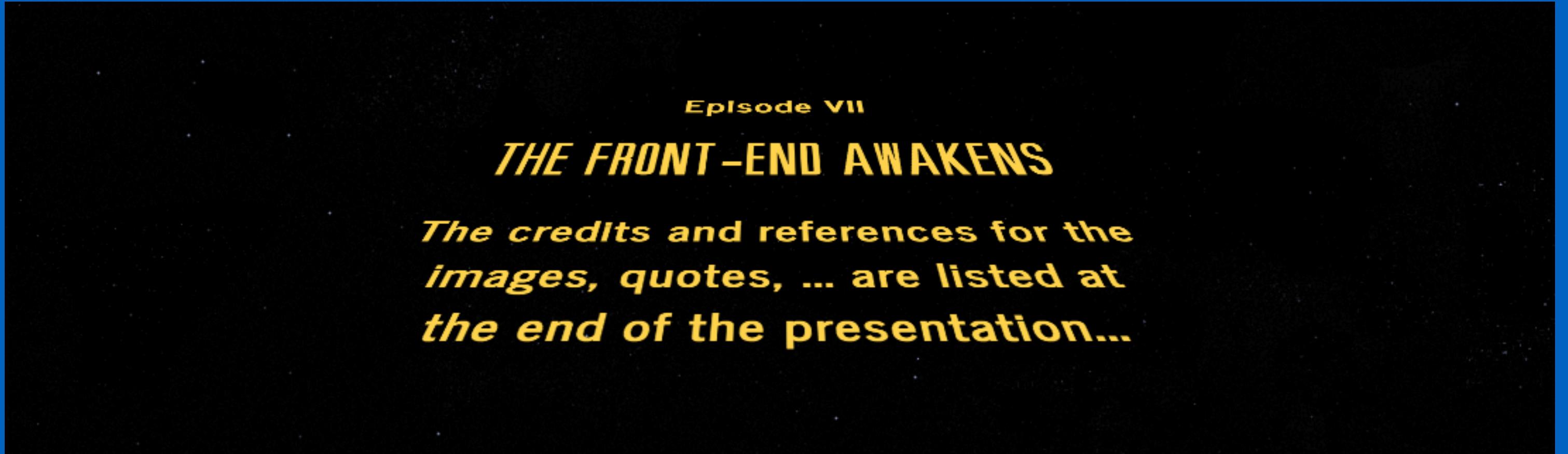
WARNING

Meetup in progress...

We can talk face to face about
ideas!!!

About this talk
Constructive and deconstructive
criticism welcome!

Credits



Fasten your seatbelts...



Who are you?



Website Meta Language





FIVE CRIMINALS. ONE LINE UP.

NO COINCIDENCE.

the Usual
Suspects

rafael amado | @rafacm | Learning with GraphQL, React, Gatsby, Next.js, Gatsby CMS, GatsbyJS and GraphQL | GraphQL Vienna Meetup

Hosted CMSS

Spectrum of choices:

1. Blogs, websites, communities, ...
2. Full-stack = back-end + front-end
3. Many offer REST APIs
4. ...
5. They are actually **development platforms**



The Anatomy of a CMS

1. Content modeling, versioning, ...
2. Content editing, versioning, ...
3. Querying / search
4. ACLs: who can do what
5. Audit: who did what when
6. Content rendering (frameworks, libraries, ...)
7. Content analytics, personalization, SEO, ...



We need a "website"

"Software is never finished, just abandoned"

– *Leonardo Dev Vinci*

The website initial
successful website turns
into ...

... a **web app.**



The Neutron Dance

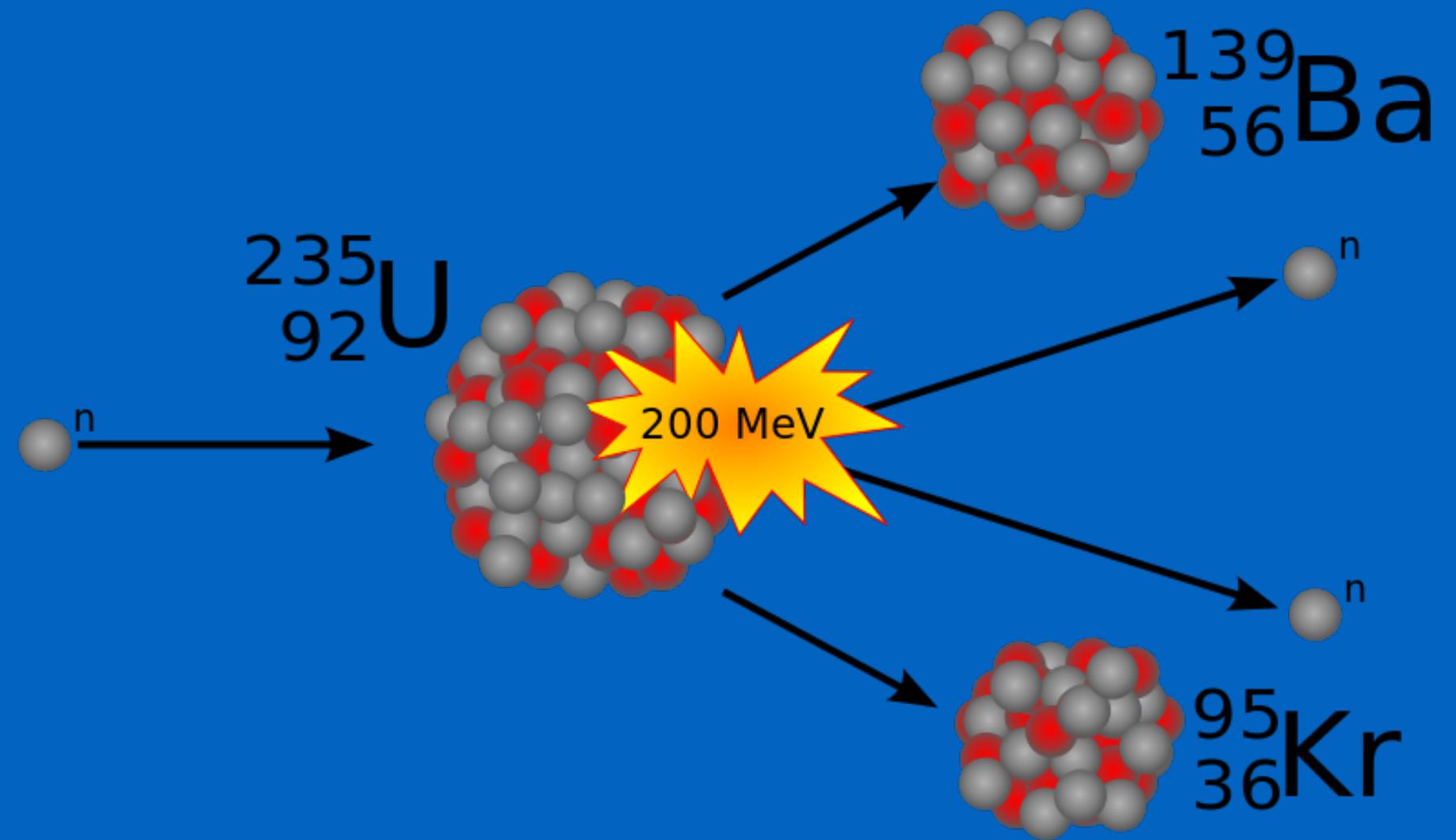
And it's hard to say
Just **how some [content] never changes**
And it's hard to find
Any **strength to draw the line**
Oh I'm just burning doin' the neutron
dance
I'm just burning doin' the neutron dance

– "Neutron Dance" *The Pointer Sisters*



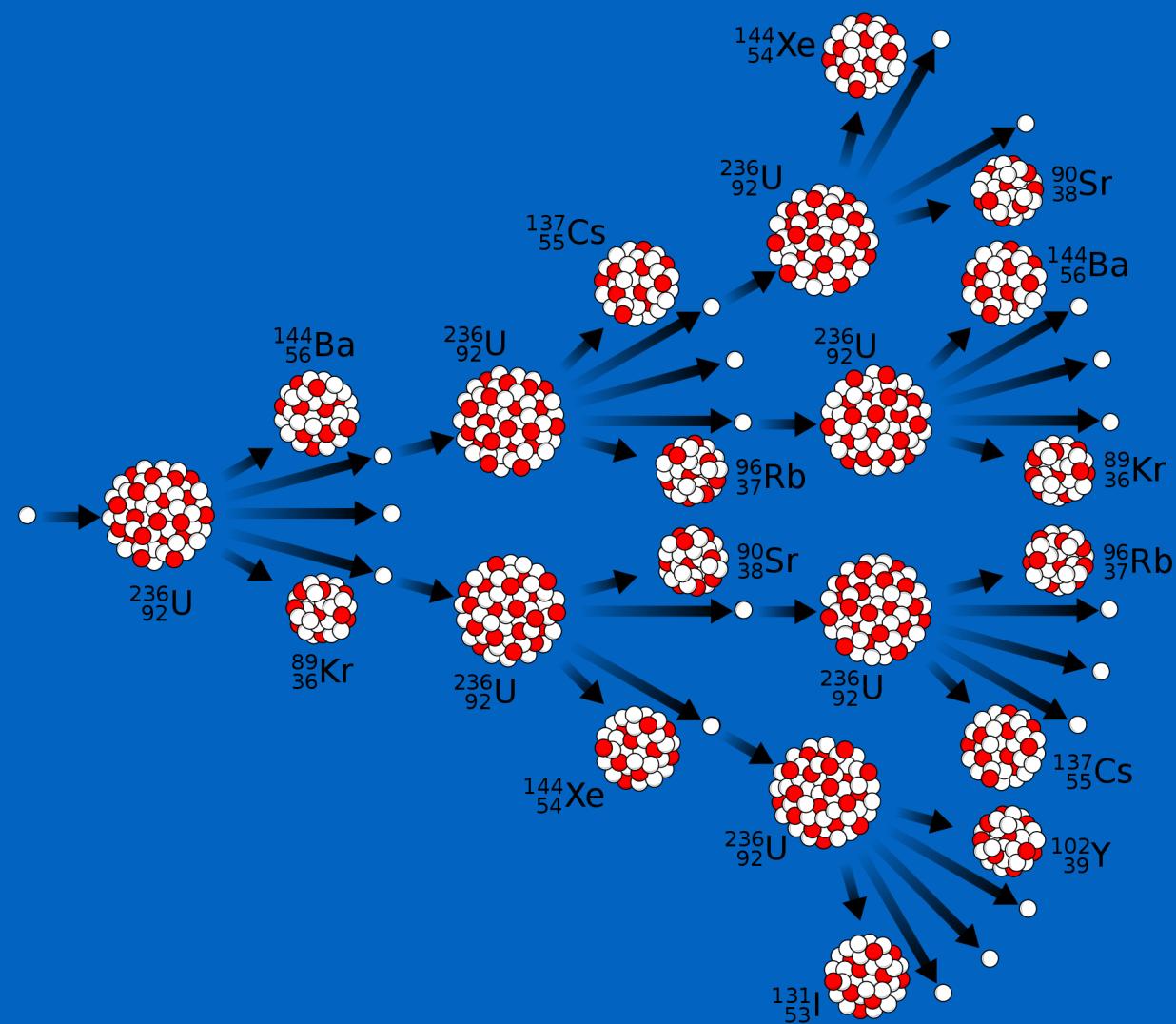
The Neutron Dance

1. The half-life of content is considerable higher than that of its presentation.
2. Content **editing** and content **presentation** are different concerns
3. Developers need to learn *each CMS APIs and framework*
4. Editors need to *learn* the specific CMS administration interface
5. Customers need to find developers for the implementation... every 2 years

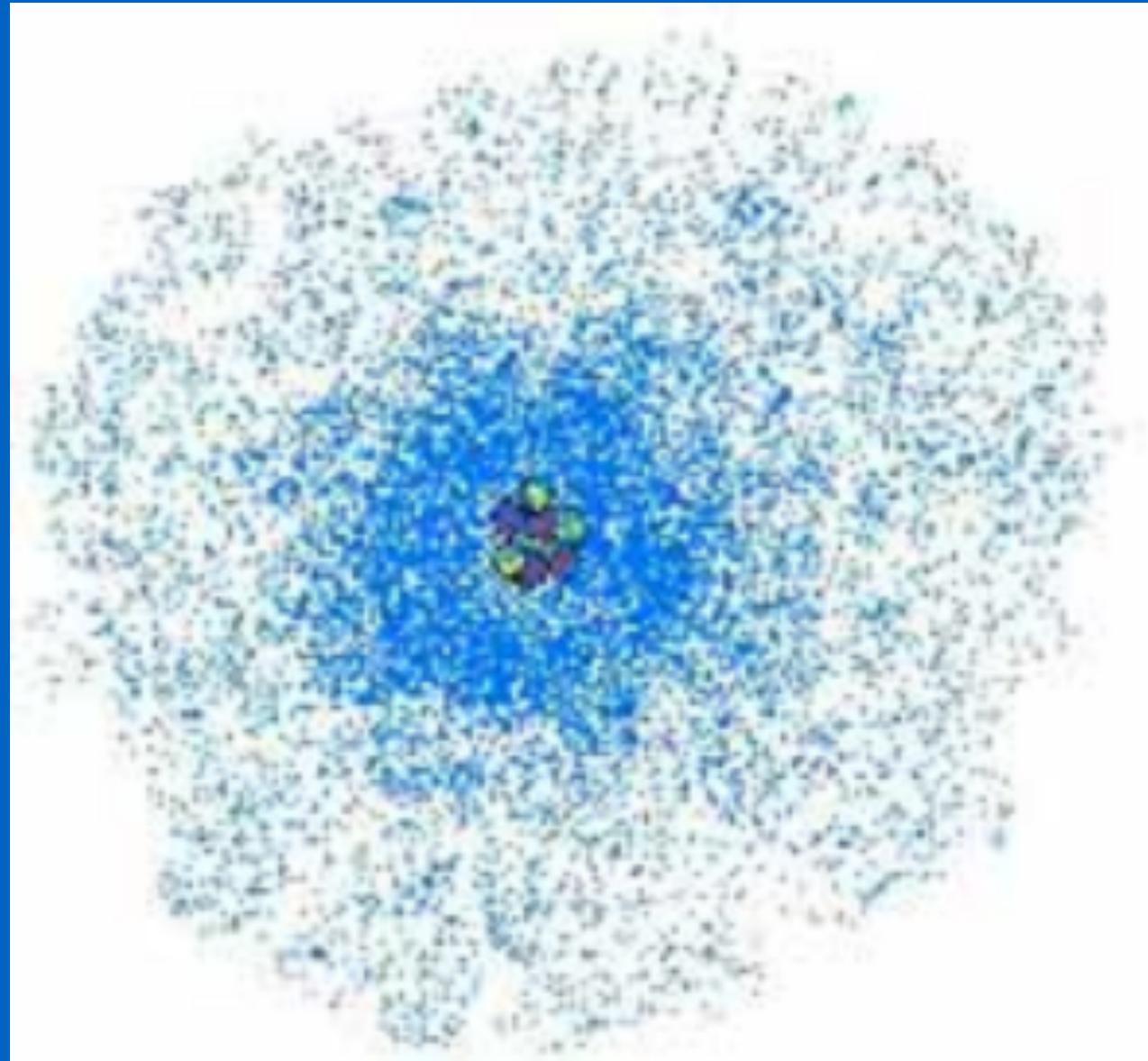


CMS -> Back-end + Front-end

Back-end?



Back-end?



Back-end?





The CMS (Content Management System) is dead!



Long Live the CMS
(Content Micro-
Service)!

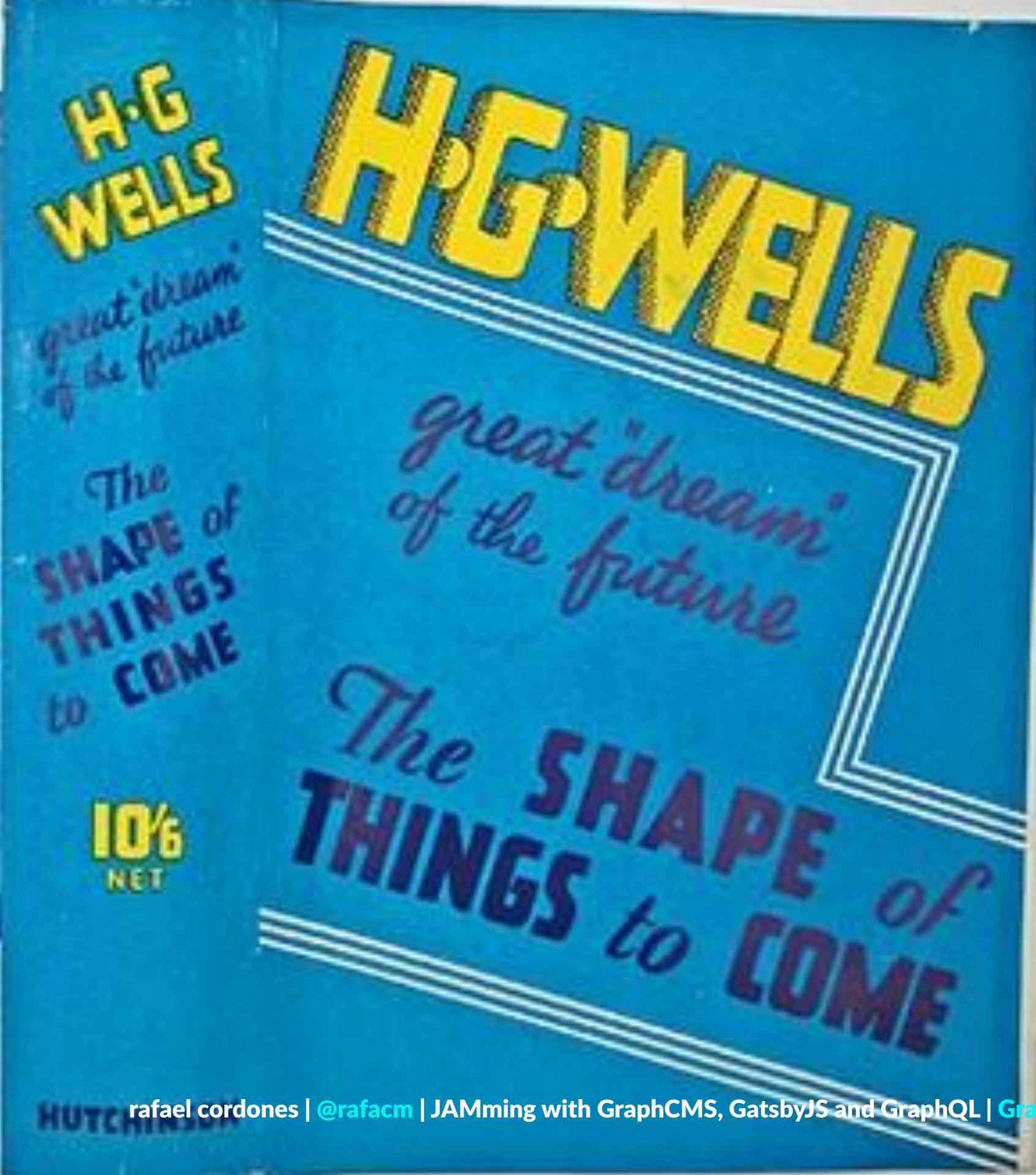
a.k.a. Headless
CMS

Headless CMS



JAMstack





The Shape of Things to Come

API-driven CMSs:

1. Contentful
2. prismic.io
3. GENTICS Mesh (Made in Vienna!)
4. GraphCMS
5. ...

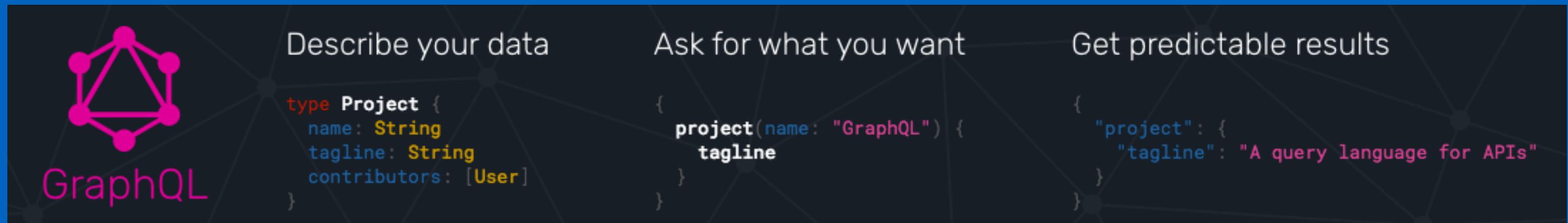
O Content, where art thou?



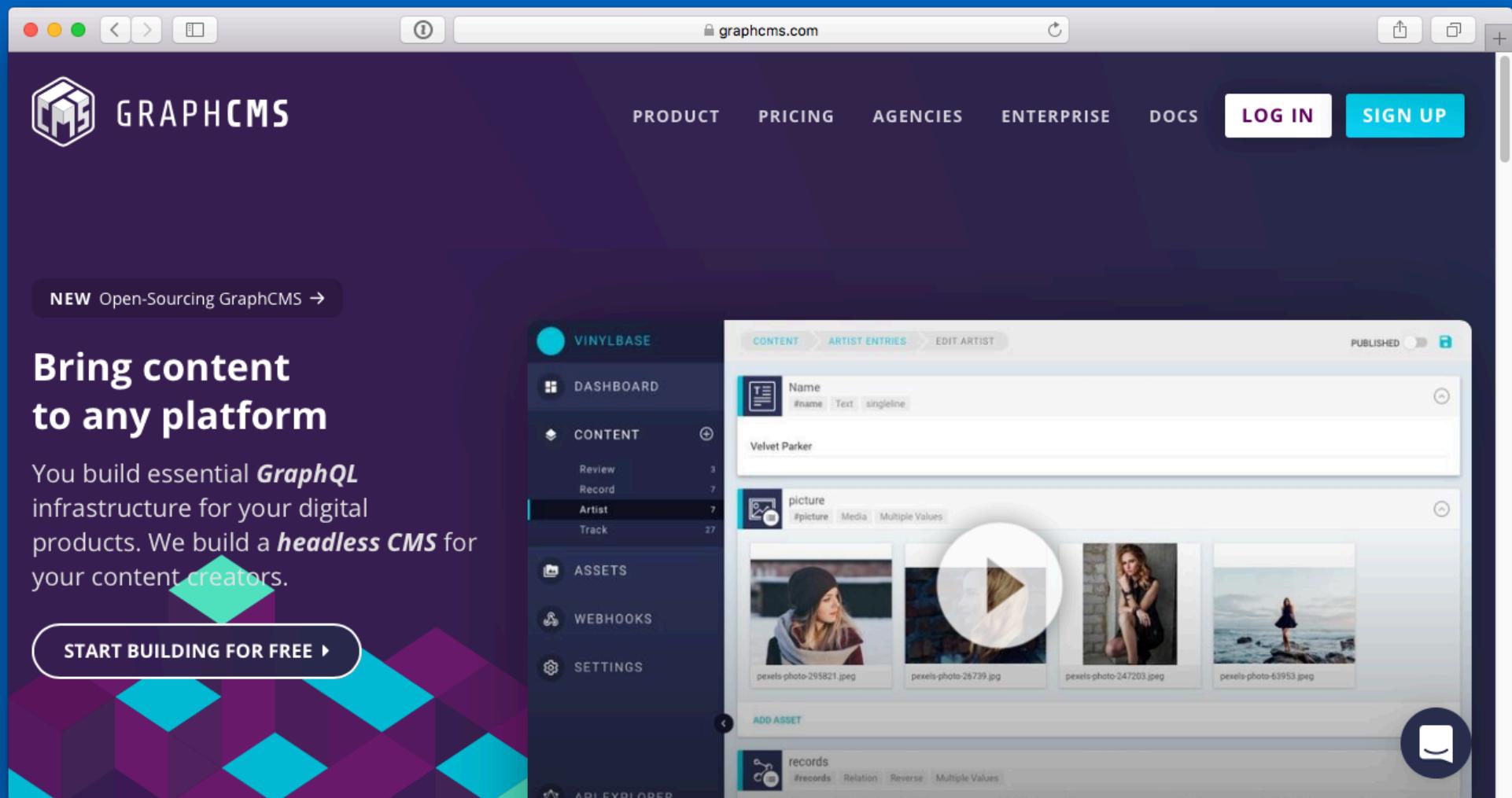
O Content, where art thou?

"I Am A [Dev] of Constant Sorrow" --- Soggy Bottom [Devs]

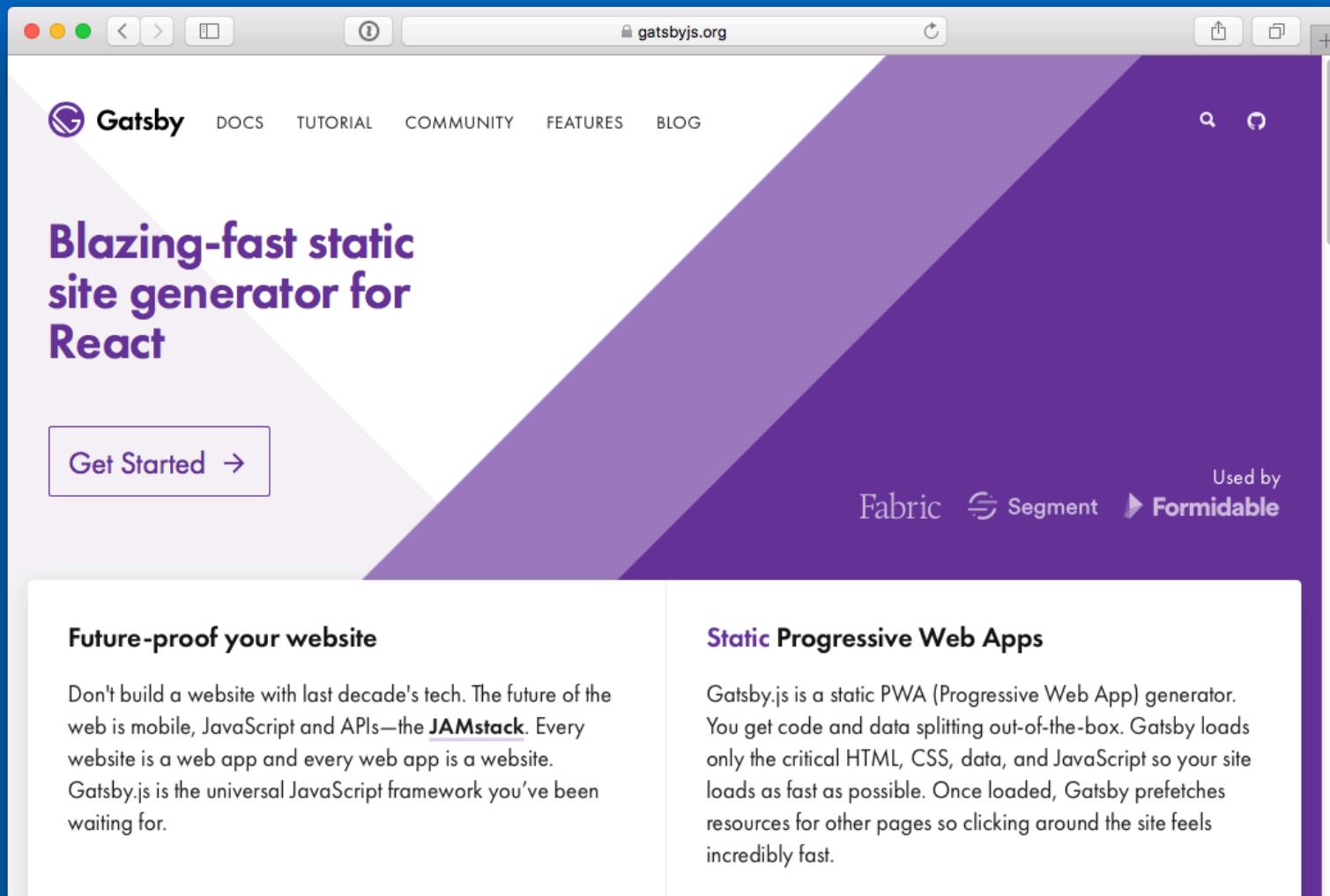
1. Proliferation of content repository APIs adds overhead for developers to learn about the **semantics** of the API
2. One API to rule them all?



GraphCMS



GatsbyJS



"It's like déjà vu all over again"

— *Yogi Berra*

Why GatsbyJS? JavaScript?! NodeJS?!



**“Keep your friends close,
but your enemies even closer.”**

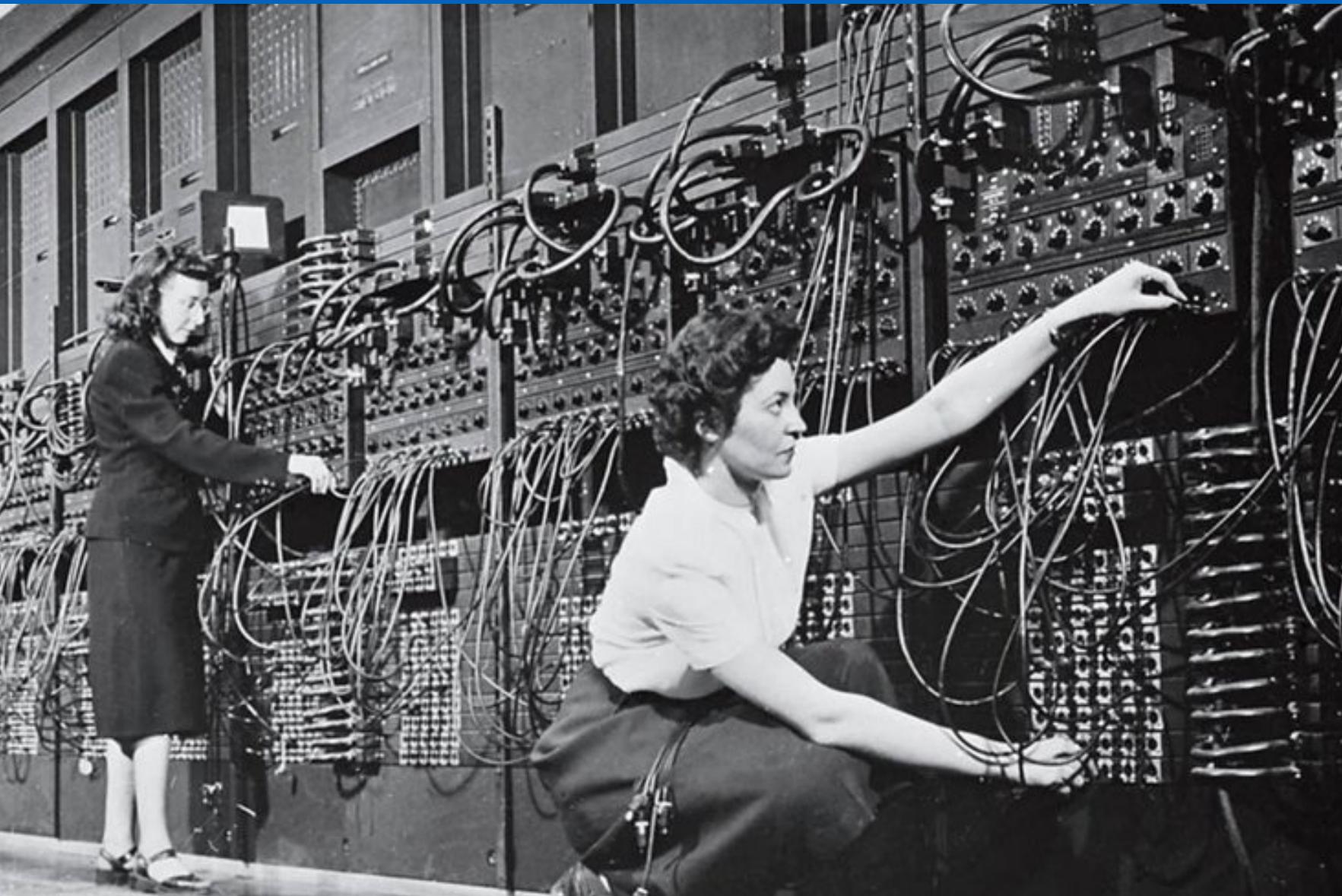
Computers



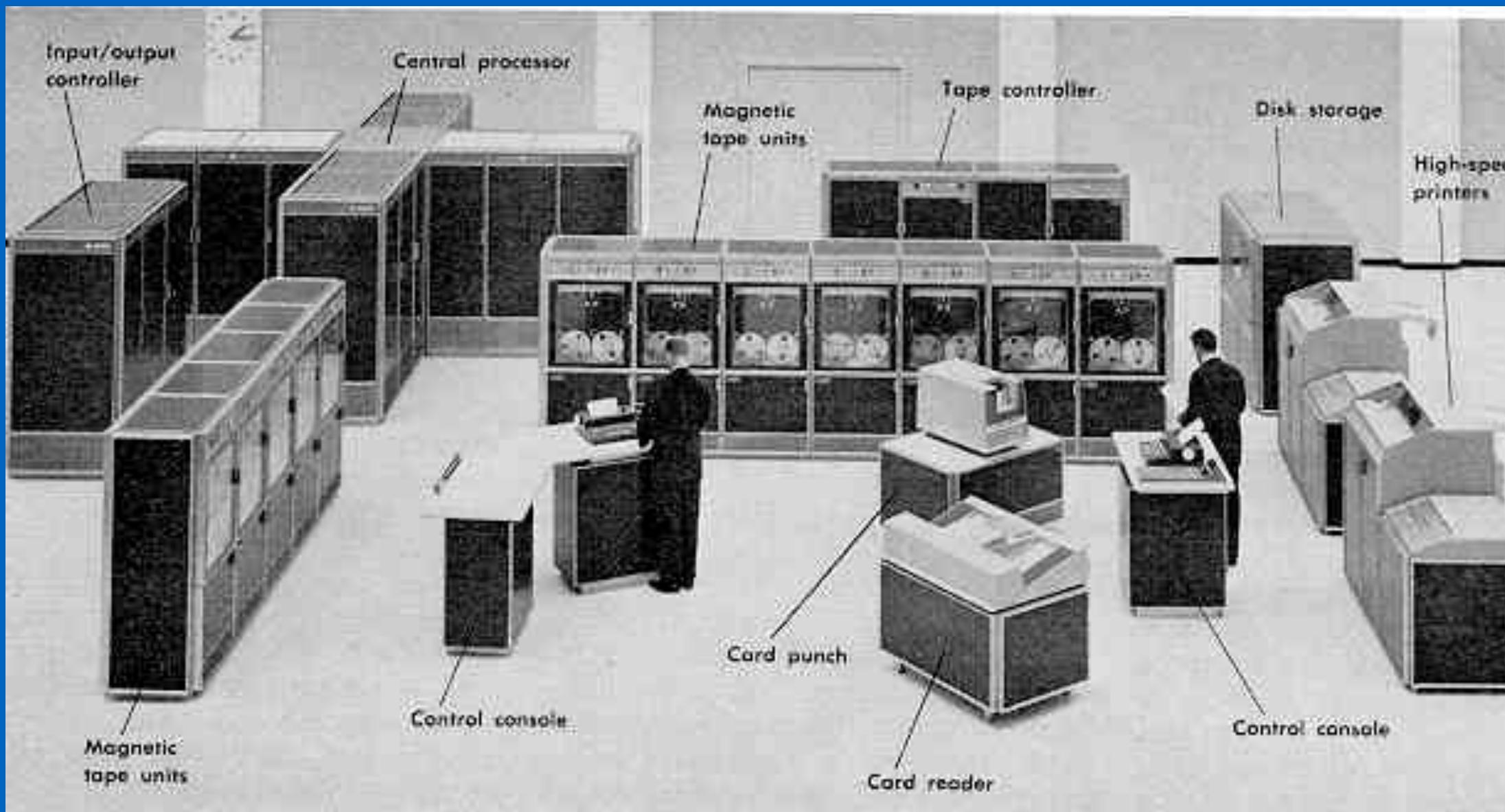
"I think there is a world market for maybe five computers."

– Thomas J. Watson, president of IBM, 1943

Computers?



Computers?



Computers?



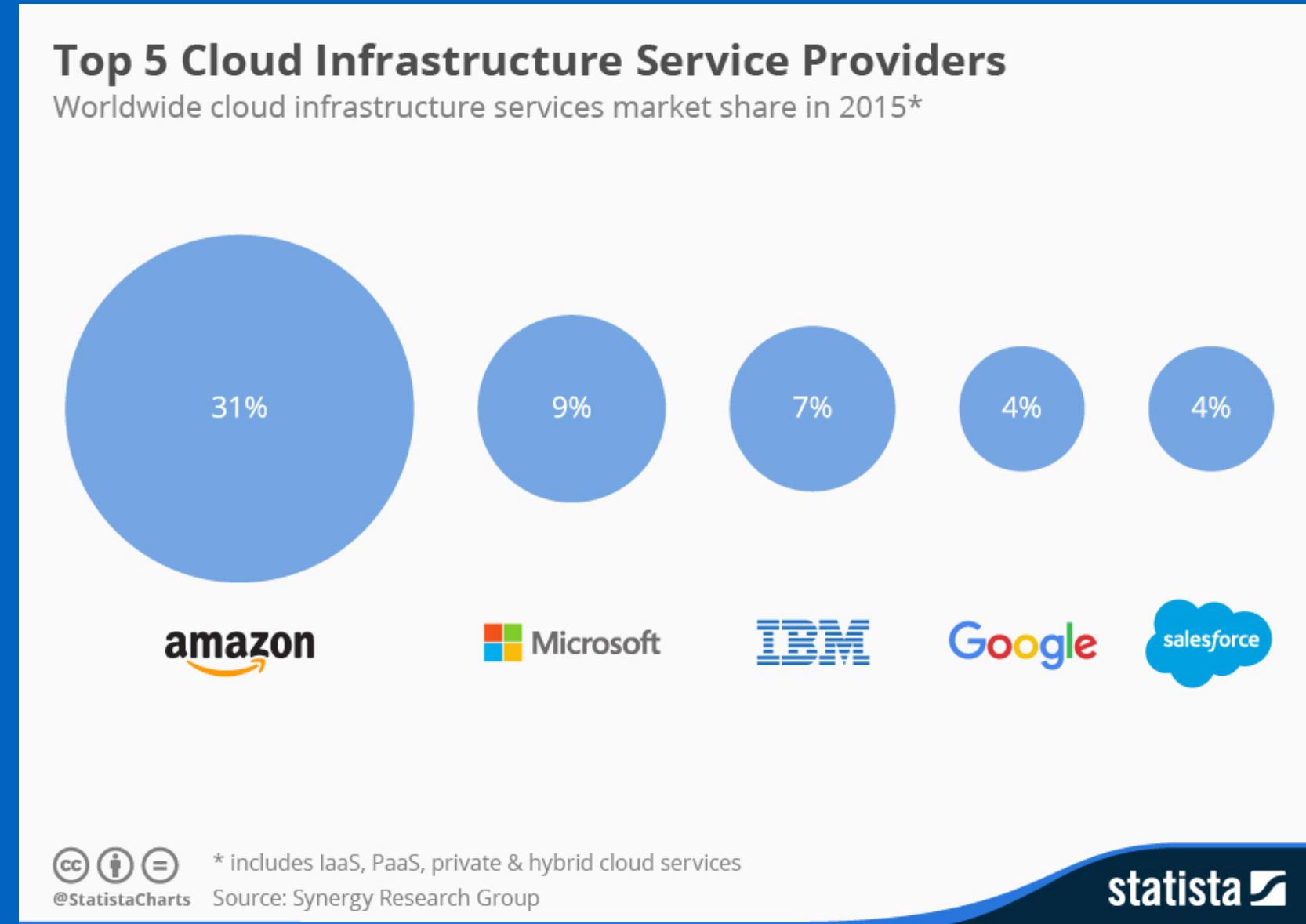
Computers?



Computers?



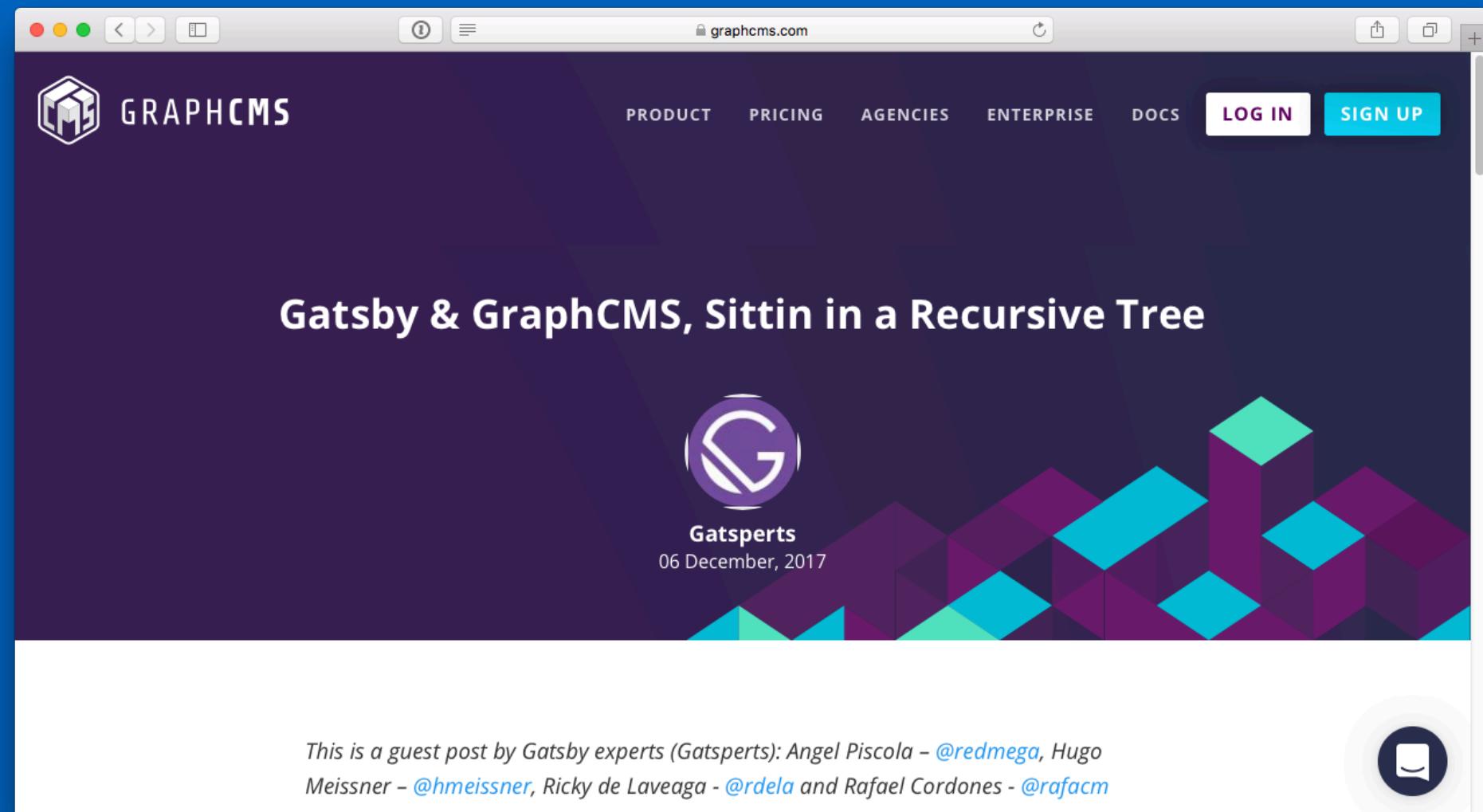
Computers?



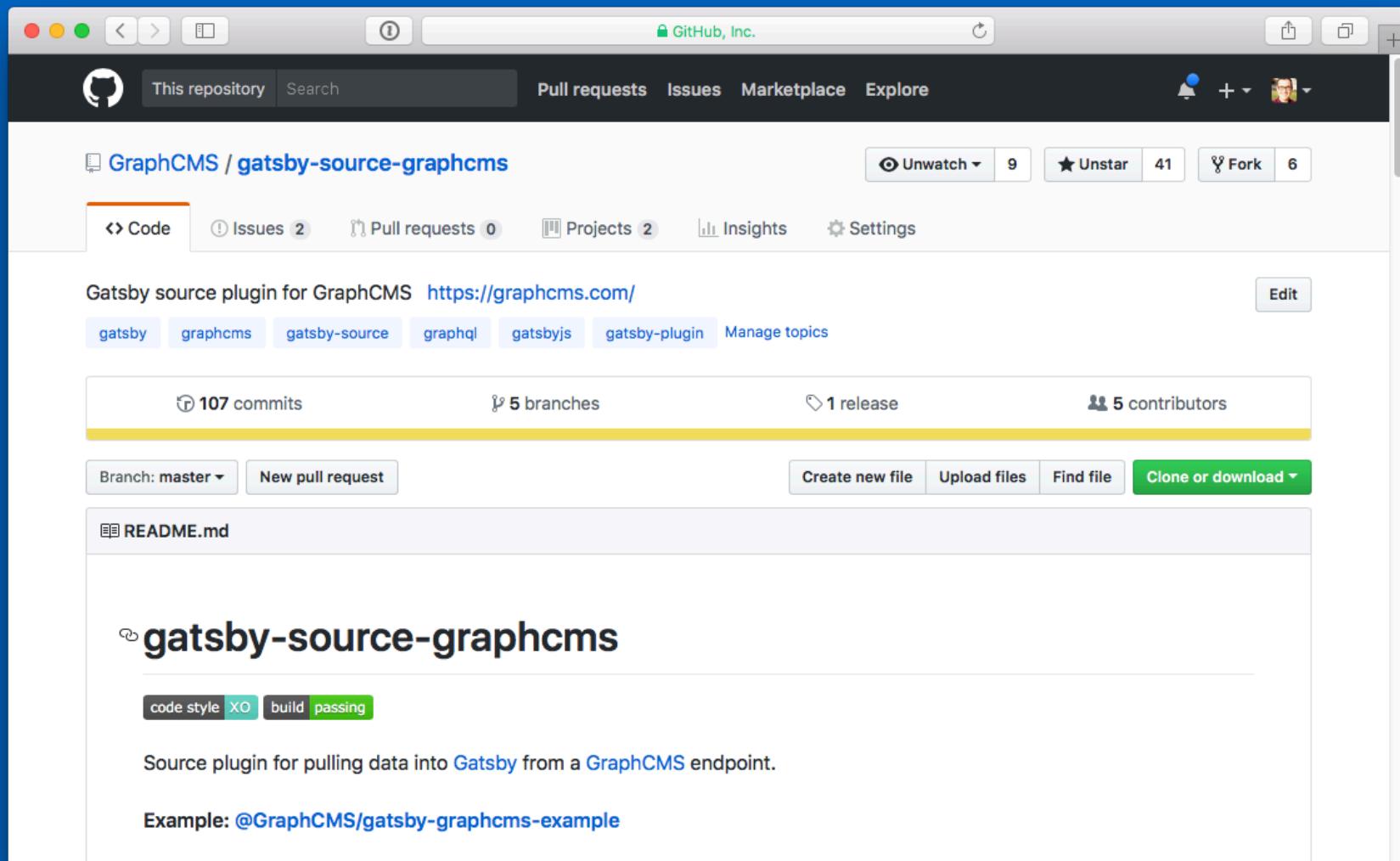
5 Computers!



GatsbyJS GraphCMS Plugin



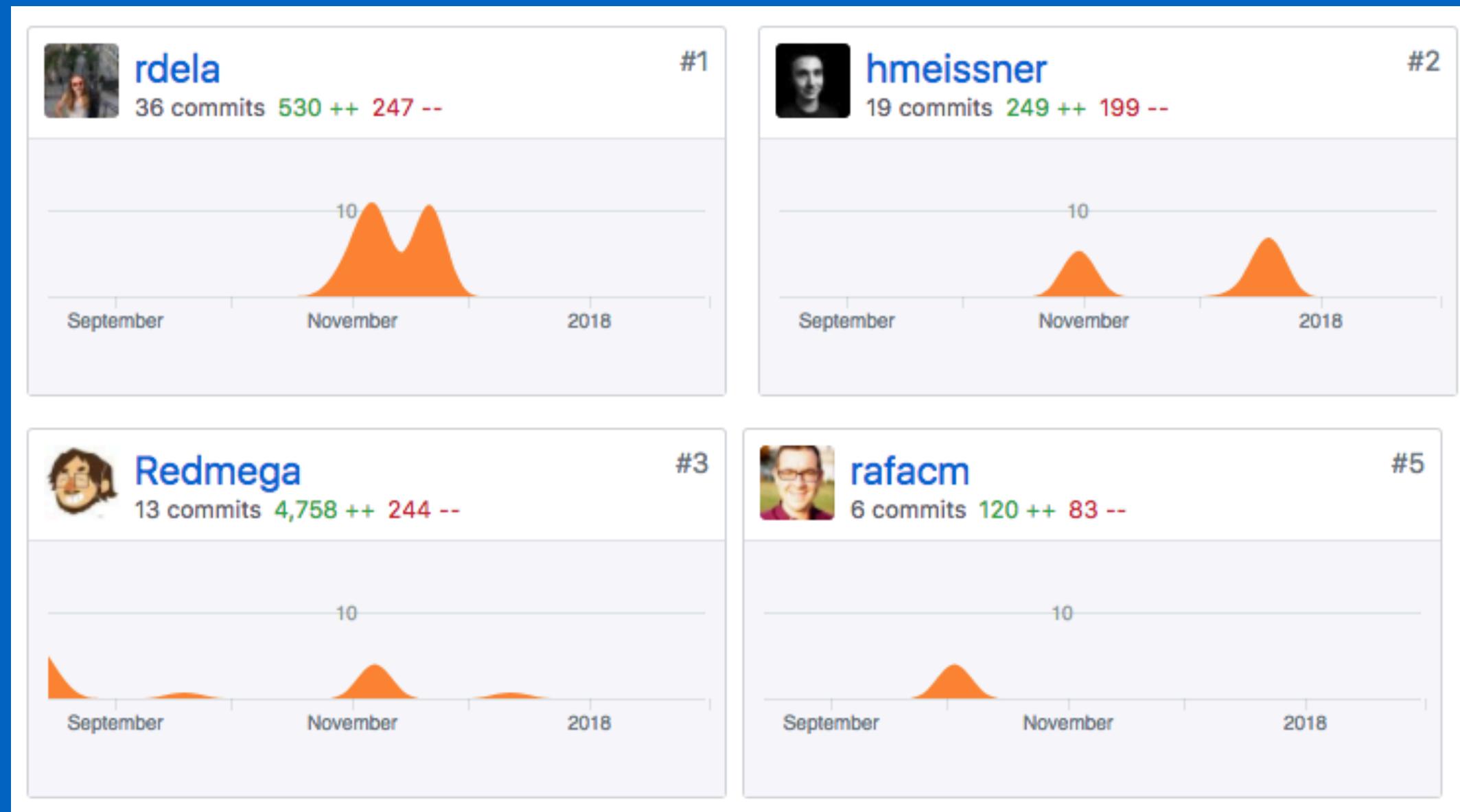
GatsbyJS GraphCMS Plugin

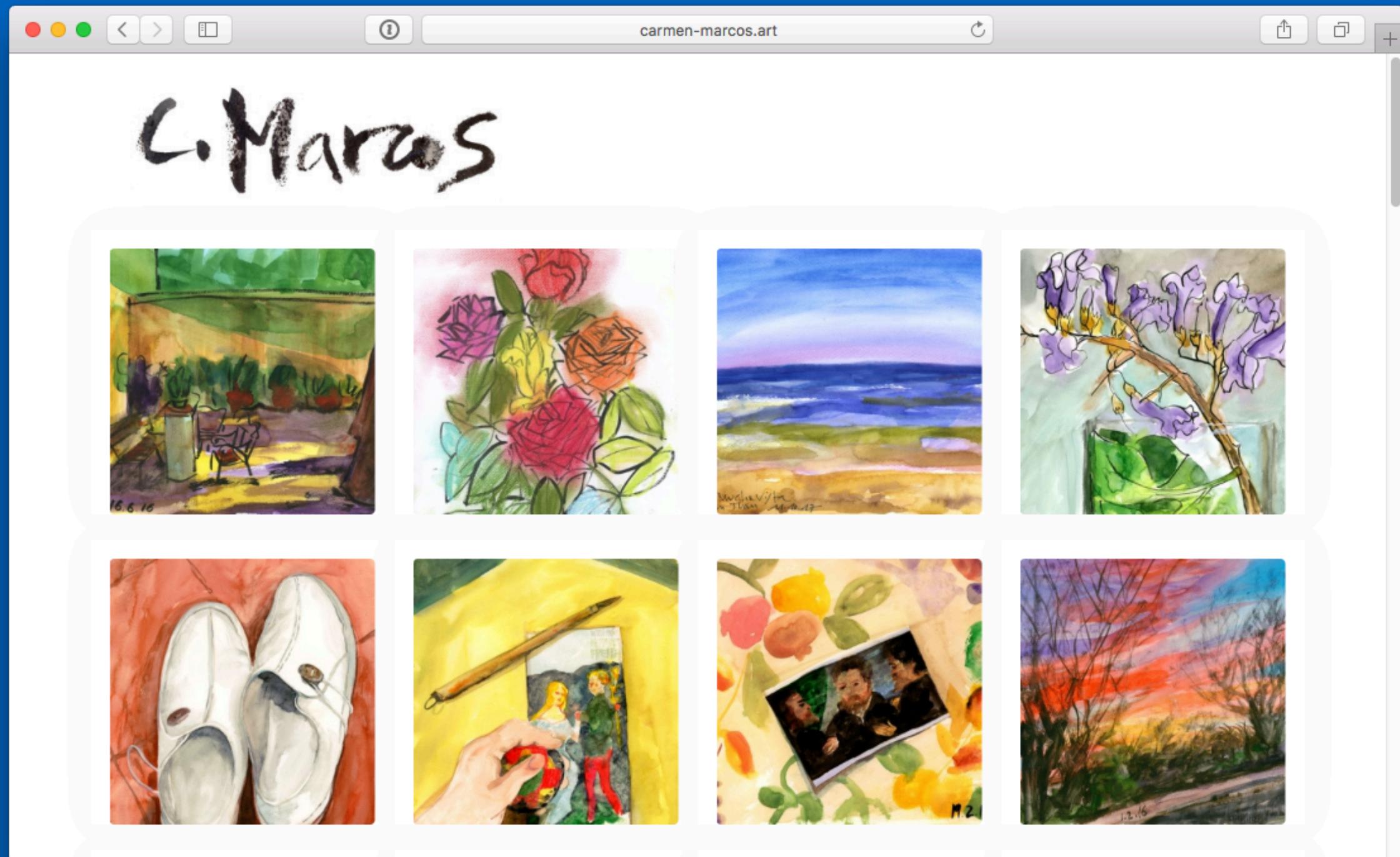


GatsbyJS GraphCMS Plugin

Tour de code

GatsbyJS GraphCMS Plugin Credits





The screenshot shows a GitHub repository page for the user rafacm with the repository name Carmen Marcos Website powered by GatsbyJS. The page includes a summary bar with 23 commits, 1 branch, 0 releases, 1 contributor, and an MIT license. Below this is a list of commits:

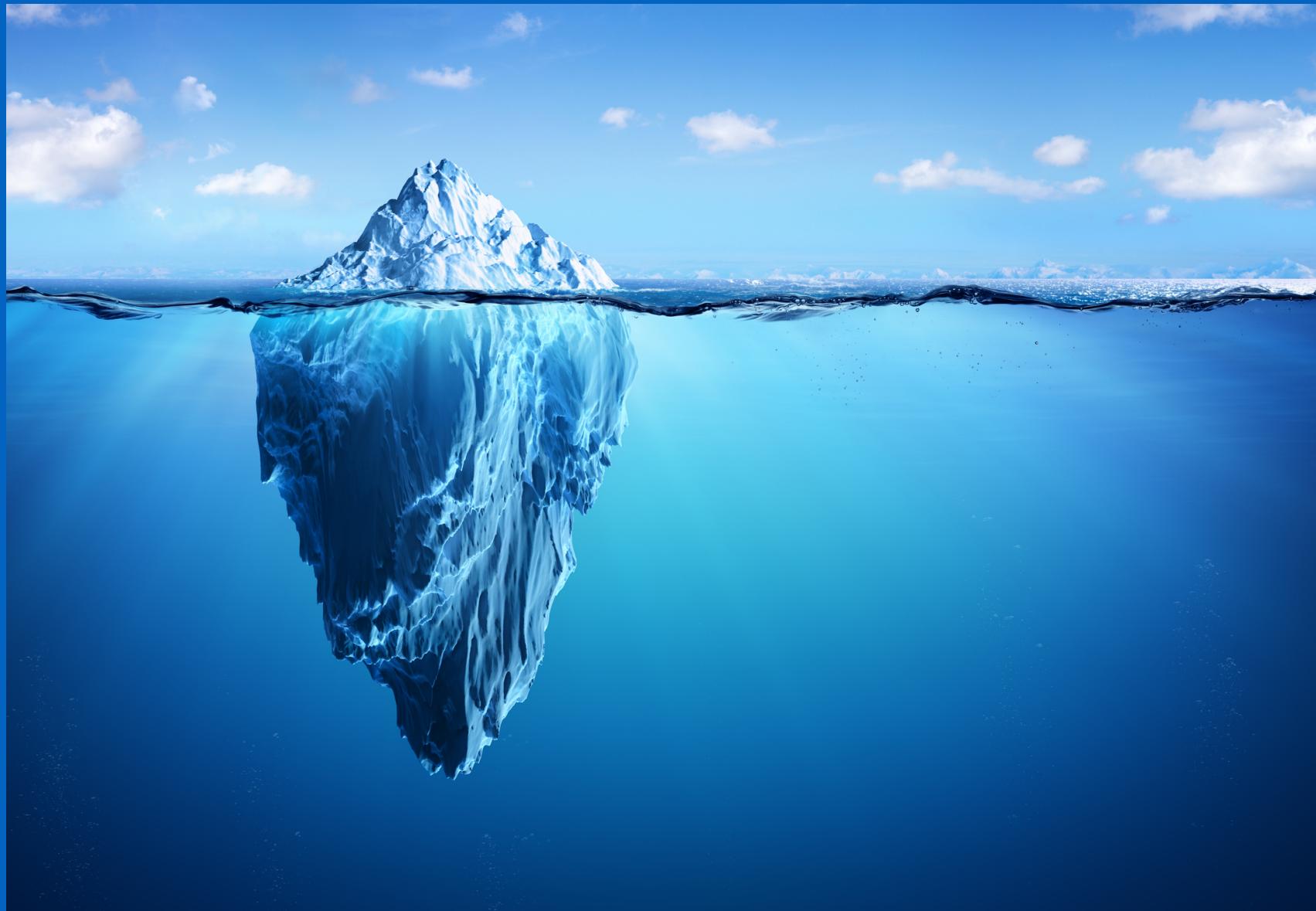
Commit	Message	Date
rafacm Resize work detail page images	Latest commit 0054dd3 4 days ago	4 days ago
src	Resize work detail page images	4 days ago
.babelrc	Spike: front-page showing featured works	2 months ago
.gitignore	Init: gatsby new carmen-marcos.art	4 months ago
.travis.yml	Remove npm test build phase	2 months ago
LICENSE	Init: gatsby new carmen-marcos.art	4 months ago
README.md	Init: gatsby new carmen-marcos.art	4 months ago
carmenmarcosart-schema.json	Spike: front-page showing featured works	2 months ago
gatsby-config.js	Work detail page implemented	2 months ago
gatsby-node.js	Work detail page implemented	2 months ago

GatsbyJS GraphCMS Plugin

Lessons learned?

1. O Brother! Where art thou TYPES?!
2. At the end of the day, ship the f* thing
3. Introspecting (metadata) GraphQL query **results**
4. Content **hierarchy** is fundamental

A CMS just does CRUD, or?



If all you have is a hammer...



Yeah, well, that's just like, your opinion, man



What's yours?!





makeameme.org

Credits

- Slide 5: Star Wars Opening Crawl generator
- Slide 6: Forklift Safety Signs - Stop Fasten Your Seat Belts With Seat Belt Symbol
- Slide 7: WALL-E
- Slide 8: Website Meta Language
- Slide 9: The Usual Suspects

Credits

- Slide 10: [The Anatomy Lesson of Dr. Nicolaes Tulp](#)
- Slide 11: [Leonardo Da Vinci](#)
- Slide 12: "The Neutron Dance" ([video](#)) by [The Pointer Sisters](#)
- Slide 13: "The Neutron Dance" ([video](#)) by [The Pointer Sisters](#)

Credits

- Slide 14: Kernspaltung
- Slide 15: Kernspaltung
- Slide 1: Man of constant sorrow: <https://www.youtube.com/watch?v=meCZ5hWNRFU>
- Slide 1: Thomas J. Watson picture: https://en.wikipedia.org/wiki/Thomas_J._Watson#/media/File:ThomasJWatson_Sr.jpg
- Slide 1: Alice in Wonderland: <https://medium.com/alice-s->

Credits

- Slide 1: "The Death of Louis XVI King of France": https://en.wikipedia.org/wiki/Execution_of_Louis_XVI#/media/File:LouisXVI-_Execution.jpg
- Slide 1: Neutron Dance: <https://www.youtube.com/watch?v=i-jdhorGtQI>
- Slide 1: Fission: <https://upload.wikimedia.org/wikipedia/commons/thumb/2/2c/Kernspaltung.svg/800px-Kernspaltung.svg.png>

Credits

- Slide 1: Cloud providers: http://infographic.statista.com/normal/chartoftheday4546cloudinfrastructuremarketshare2015_n.jpg
- Slide 1: Computers ENIAC: <http://www.phillyvoice.com/70-years-ago-six-philly-women-eniac-digital-computer-programmers/>
- Slide 1: Mainframe computer: <https://alness.gnomio.com/pluginfile.php/209/modresource/content/1/On-line%20Resources/C%20Systems%20Int2/page25.htm>