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# The Drupal front end in 2024

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Preston So • 24 November 2018 • DrupalCamp Belgium 2018 keynote

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# Heerlijk welkom!

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Preston So is een innovatieleider, onderzoeker, speaker en auteur van *Decoupled Drupal in de Praktijk* (Apress, 2018).

Als een wereldwijd bekend figuur in decoupled Drupal en onderwerp expert in decentralized web en conversational design, is Preston Directeur van Onderzoek en Innovatie bij Acquia, waar hij Acquia Labs leidt, een innovatielab dat baanbrekende projecten voor klanten als de staat Georgia en Nestlé Purina bouwt.

Met twee keren op het podium op SXSW Interactive is Preston een gewilde speaker met keynotes op vijf continenten en in drie talen.

[preston.so@acquia.com](mailto:preston.so@acquia.com) • [@prestonso](https://twitter.com/prestonso) • [#drupalfrontend2024](https://twitter.com/#drupalfrontend2024)



# Acquia Labs

We zijn het innovatielab van Acquia: een klein team van ingenieurs dat projecten bouwt die de grenzen van opkomende technologieën verleggen.

Hebt u futuristische ideeën maar geen expertise?  
Acquia Labs is uw innovatiepartner.



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# Welcome!

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Preston is an innovation lead, researcher, speaker, and author of *Decoupled Drupal in Practice* (Apress, 2018).

A globally recognized voice on decoupled Drupal and subject matter expert in the decentralized web and conversational design, Preston is Director of Research and Innovation at Acquia, where he helms Acquia Labs, an innovation center architecting projects for clients like the State of Georgia and Nestlé Purina.

Having spoken twice at SXSW Interactive, Preston is a sought-after presenter with keynotes on five continents and in three languages.

[preston.so@acquia.com](mailto:preston.so@acquia.com) • [@prestonso](https://twitter.com/prestonso) • [#drupalfrontend2024](https://twitter.com/hashtag/drupalfrontend2024)



# Acquia Labs

We're Acquia's innovation lab — a small team of generalist engineers building pioneering projects that push the envelope in emerging technologies.

Have forward-looking ideas but need expertise?  
Acquia Labs is your innovation partner.

## ***Decoupled Drupal in Practice***

Pre-order now:

**[tiny.cc/decoupled-in-practice](https://tiny.cc/decoupled-in-practice)**

In the first and only comprehensive guide to decoupled Drupal across the stack, with a foreword by Drupal project lead Dries Buytaert, learn everything you need to know about decoupled Drupal—from building the back end and designing APIs to integrating with front-end technologies.



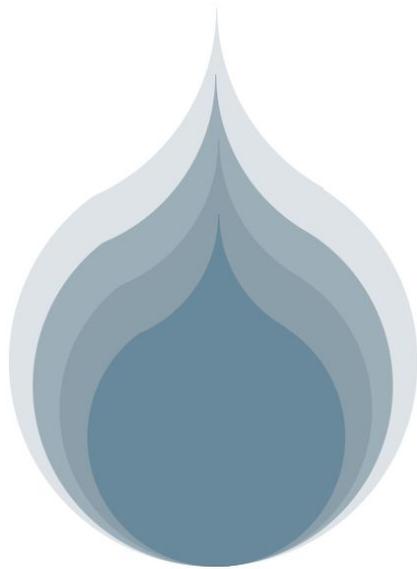
# **Decoupled Drupal in Practice**

Architect and Implement Decoupled  
Drupal Architectures Across the Stack

—  
Preston So

*Foreword by Dries Buytaert*

**Apress®**



# DECOUPLED DRUPAL DAYS

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**Decoupled Days will be back in New York City in June 2019!**

More announcements coming soon.

Follow [@decoupleddays](https://twitter.com/decoupleddays) on Twitter to stay updated on everything about next year.

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# What we'll cover

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- A brief history of the Drupal front end
- 2012: jQuery, Ajax, and responsive design
- 2018: The channel explosion and JavaScript renaissance
- 2024: New channels and new front-end workflows
- Drupal's editorial incongruity: A difficult choice
- Universal editing: Channel-designated content
- Contextless editing: Channel-agnostic content
- Drupal's front-end future and developer enablement
- Epilogue: The Drupal front ends in 2024

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# 1 A brief history of the **Drupal front end**

Websites

## Drop.org

- Large swaths of primarily narrative text
- Images interspersed throughout and sometimes span viewport
- Multimedia scoped tightly to areas of page; videos are largely synonymous with images
- Interactions via keyboard and mouse

# 2000

[home](#) | [faq](#) | [diary](#) | [search](#) | [submit news](#) | [user account](#)

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🔥 **American democracy is taking a step forward.**

Submitted by [Dibbit](#) on Sunday, December 03rd, 2000 - 16:47 [Politics & Freedom](#)

In the light of America's failure to elect a President, The Queen of England has given notice to the revocation of their independence. The revocation containing this notice also included some rules that are to be introduced in America.

[ [read more](#) | 3493 bytes | [10 comments](#) ]

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🔥 **Hack for the community!**

Submitted by [Refrag](#) on Saturday, December 02nd, 2000 - 14:37 [Coding & Webdesign](#)

Hackers have a great sense of community, I just wish that more of their time was spent benefitting the community.

[ [read more](#) | 2043 bytes | [2 comments](#) ]

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**Older headlines**

**Wednesday, Nov 15th**

- [kuro5hin.org starts to 'diarize'](#)
- [Cloning around](#)

**Monday, Nov 13th**

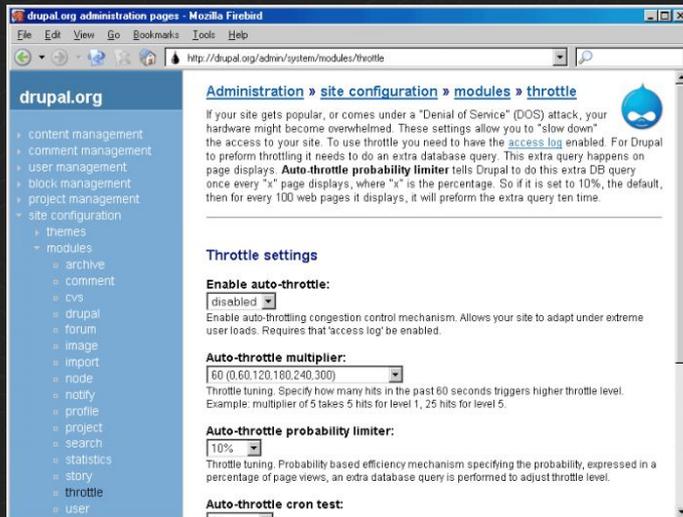
- [What features would you add to your AIBO?](#)
- [What makes a good website?](#)

**Friday, Nov 10th**

- [Halucenogenic Psychotherapists](#)

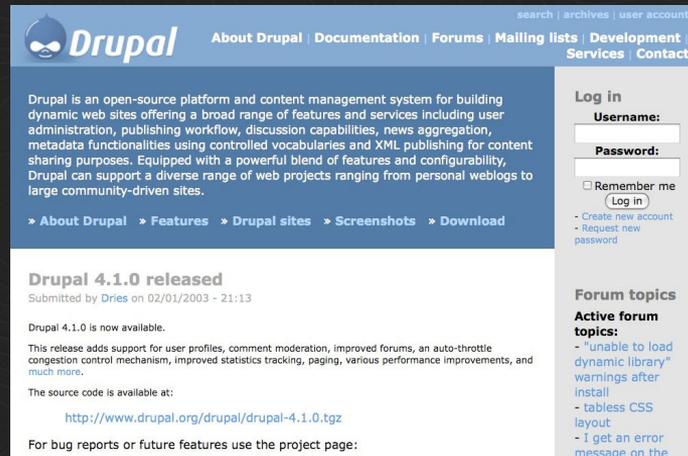
**Thursday, Nov 9th**

## Drupal 4.0 released



The screenshot shows the Drupal administration interface in Mozilla Firefox. The browser address bar displays `http://drupal.org/admin/system/modules/throttle`. The page title is "drupal.org administration pages - Mozilla Firefox". The left sidebar contains a navigation menu with categories like "content management", "comment management", "user management", "block management", "project management", "site configuration", "themes", and "modules". The "modules" section is expanded, showing sub-items like "archive", "comment", "cvs", "drupal", "forum", "image", "import", "node", "notify", "profile", "project", "search", "statistics", "story", "throttle", and "user". The main content area is titled "Administration » site configuration » modules » throttle" and includes a blue Drupal logo. The text explains that the throttle module is used to prevent Denial of Service (DOS) attacks by limiting the number of hits to a page. It describes the "Auto-throttle probability limiter" and "Auto-throttle multiplier" settings. The "Auto-throttle multiplier" is set to 60, and the "Auto-throttle probability limiter" is set to 10%. The "Auto-throttle cron test" section is partially visible at the bottom.

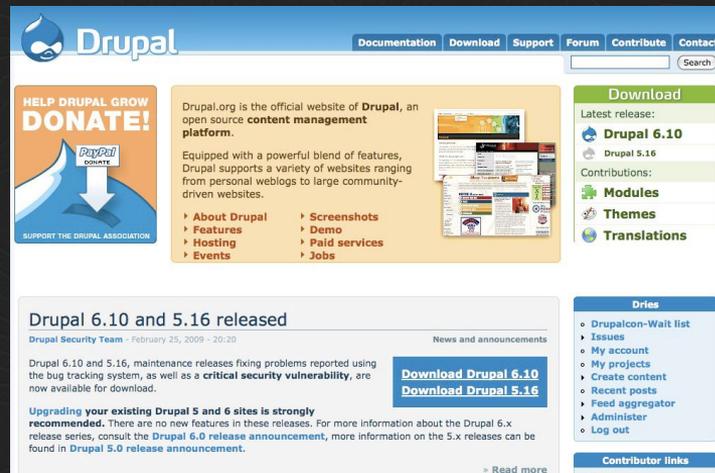
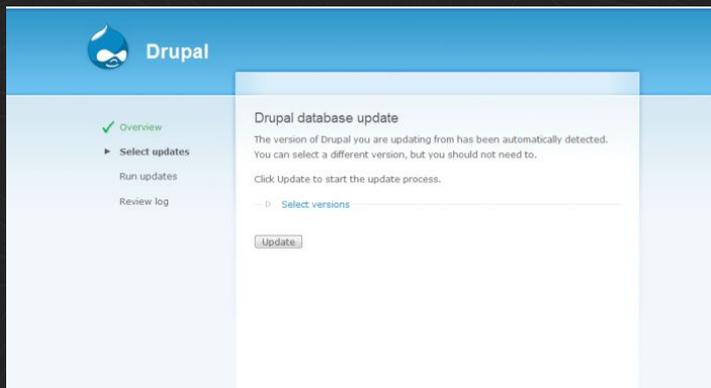
# 2002



The screenshot shows the Drupal 4.1.0 release announcement page. The page header features the Drupal logo and navigation links: "About Drupal", "Documentation", "Forums", "Mailing lists", "Development Services", and "Contact". The main content area is titled "Drupal 4.1.0 released" and includes the submission date: "Submitted by Dries on 02/01/2003 - 21:13". The text describes the release as an open-source platform for building dynamic web sites, highlighting features like user administration, publishing workflow, discussion capabilities, news aggregation, metadata functionalities, and content sharing. It also mentions that the release adds support for user profiles, comment moderation, improved forums, an auto-throttle congestion control mechanism, improved statistics tracking, paging, and various performance improvements. The source code is available at <http://www.drupal.org/drupal/drupal-4.1.0.tgz>. For bug reports or future features, users are directed to the project page. The right sidebar contains a "Log in" section with fields for "Username:" and "Password:", a "Remember me" checkbox, and a "Log in" button. Below this is a "Forum topics" section with "Active forum topics:" and a list of topics, including "unable to load dynamic library" warnings after install, "tableless CSS layout", and "I get an error message on the".

# Drupal 6.0 released

# 2008



Websites

Mobile

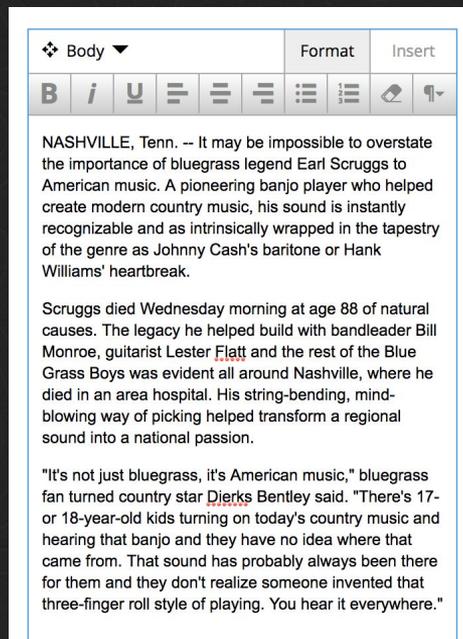
Responsive

## Spark

- Large swaths of text span viewport
- Images span viewport
- Multimedia spans viewport
- Interactions via gestures

*At right: Mobile-first editing*

# 2012



The screenshot shows a mobile web editor interface. At the top, there is a toolbar with various icons for text formatting (bold, italic, underline, list, link, unlink) and a 'Body' dropdown menu. Below the toolbar, there is a text block containing a paragraph about Earl Scruggs. The text is wrapped to fit the mobile viewport. The text reads: "NASHVILLE, Tenn. -- It may be impossible to overstate the importance of bluegrass legend Earl Scruggs to American music. A pioneering banjo player who helped create modern country music, his sound is instantly recognizable and as intrinsically wrapped in the tapestry of the genre as Johnny Cash's baritone or Hank Williams' heartbreak. Scruggs died Wednesday morning at age 88 of natural causes. The legacy he helped build with bandleader Bill Monroe, guitarist Lester Flatt and the rest of the Blue Grass Boys was evident all around Nashville, where he died in an area hospital. His string-bending, mind-blowing way of picking helped transform a regional sound into a national passion. "It's not just bluegrass, it's American music," bluegrass fan turned country star Dierks Bentley said. "There's 17- or 18-year-old kids turning on today's country music and hearing that banjo and they have no idea where that came from. That sound has probably always been there for them and they don't realize someone invented that three-finger roll style of playing. You hear it everywhere."

Mobile

## **Drupal iOS SDK first released**

*Now known as Waterwheel.swift*

2012



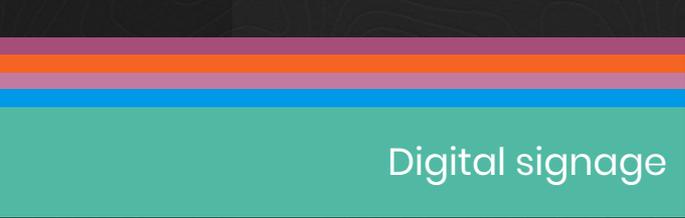
Wearables

## Apple Watch

- Limited real estate means limited coexistence
- Limited text spans viewport
- Images span viewport
- Multimedia spans viewport
- Interactions via gestures

# 2015





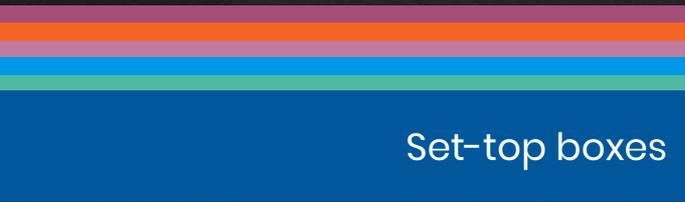
Digital signage

## University of Iowa campus signage

- Need for legibility means limited coexistence
- Limited text spans viewport
- Images span viewport
- Multimedia spans viewport
- No direct interaction except some gestures



# 2016



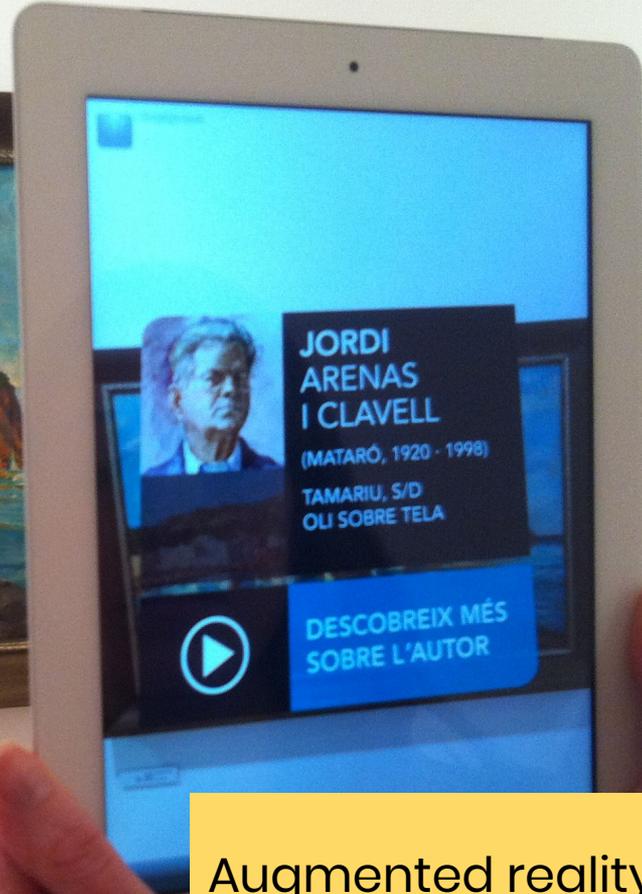
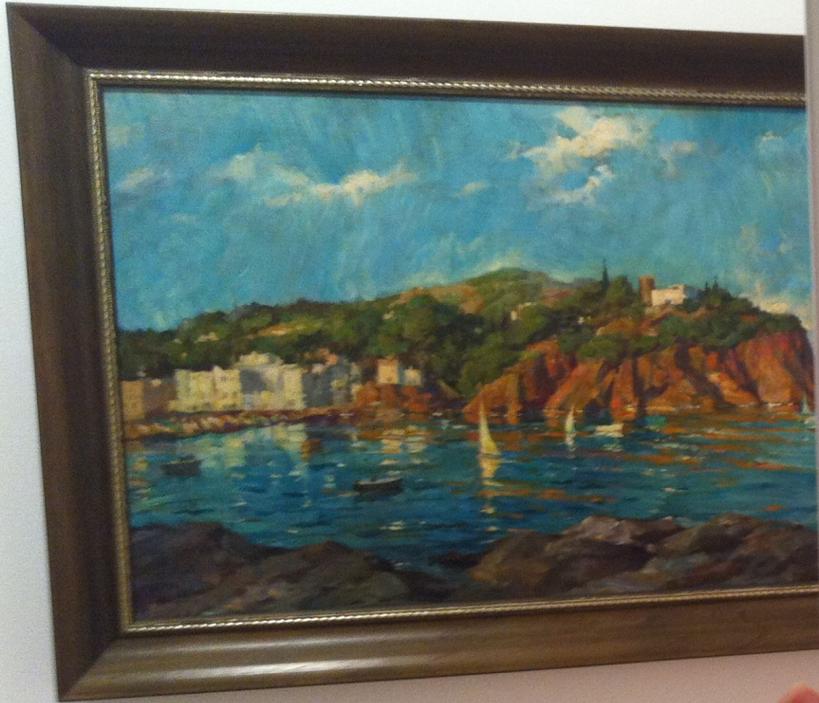
Set-top boxes

## Drupal serves Roku

- Content display is locked down; limited design
- Limited text according to template
- Images according to template
- Multimedia according to template
- Interactions via remote



# 2017



tant en essència com per la immensitat de la natura com un violent onatge que trenca

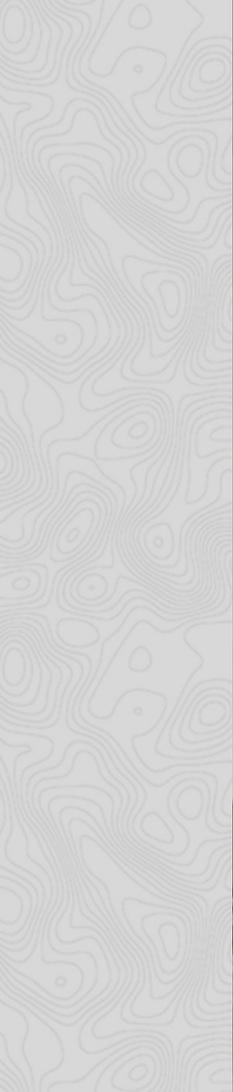
nificència es tradueix en un na, on també hi té presència persones accentua aquesta el qual ens n'allunyem quan de color, llum i moviment.

Augmented reality

## Shopping with augmented reality

- More flexible design, but content is situational
- Limited text superimposed situationally
- Images superimposed situationally
- Multimedia superimposed situationally
- Interactions via gestures and motion (content proprioception)

2017



Conversational interfaces



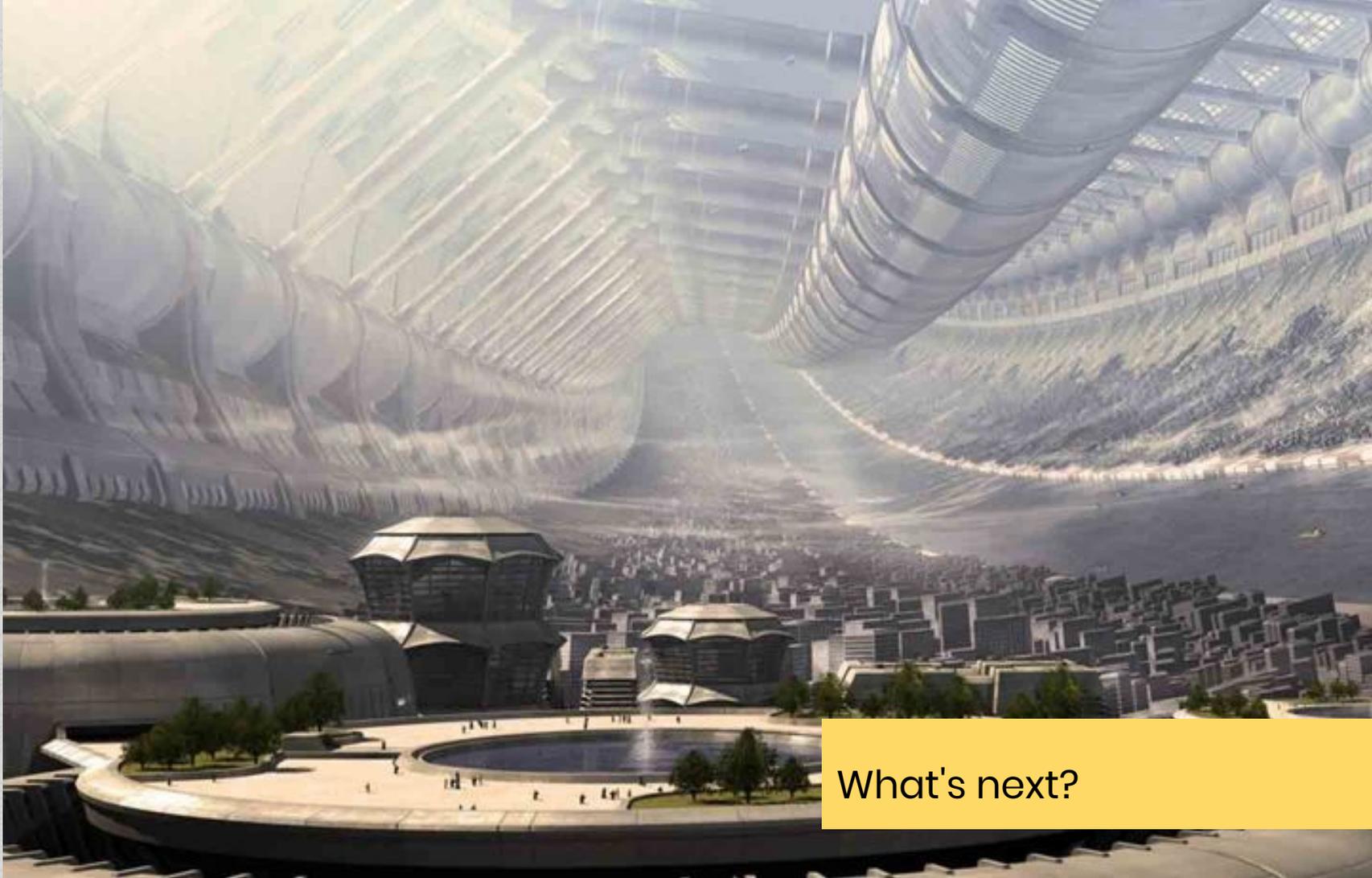
Conversational

## Ask GeorgiaGov

- Content is inaccessible without particular track
- Limited text as self-contained utterances
- No images
- No multimedia except audio
- Interactions via dialogue (zero user interface)



# 2017



What's next?

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**How do we prepare for a future  
where the front end is uncertain?**

---

# 2

**2012: jQuery, Ajax,  
and responsive design**

---

**In 2012 ...**

**the world didn't end**

---

**In 2012 ...**

**we had few channels**

2012



2012 (film)

Websites

Responsive

2012

The state of channels in 2012

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# PHPTemplate, jQuery, and Ajax

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- **Themer experience.** PHPTemplate and Smarty, the foregoing engines available for Drupal, focused on deemphasizing custom front-end development.
- **However,** as solutions like jQuery and Ajax became more popular for small-scale interactions on web pages, these solutions' inflexibility began to show.



"Content is like water"

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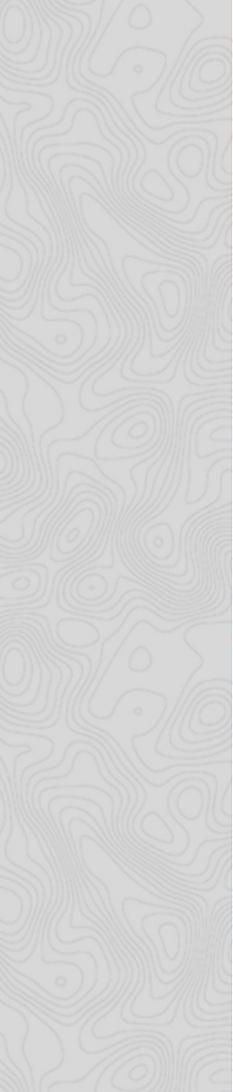
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**Content should adapt to its context  
rather than being context-specific**

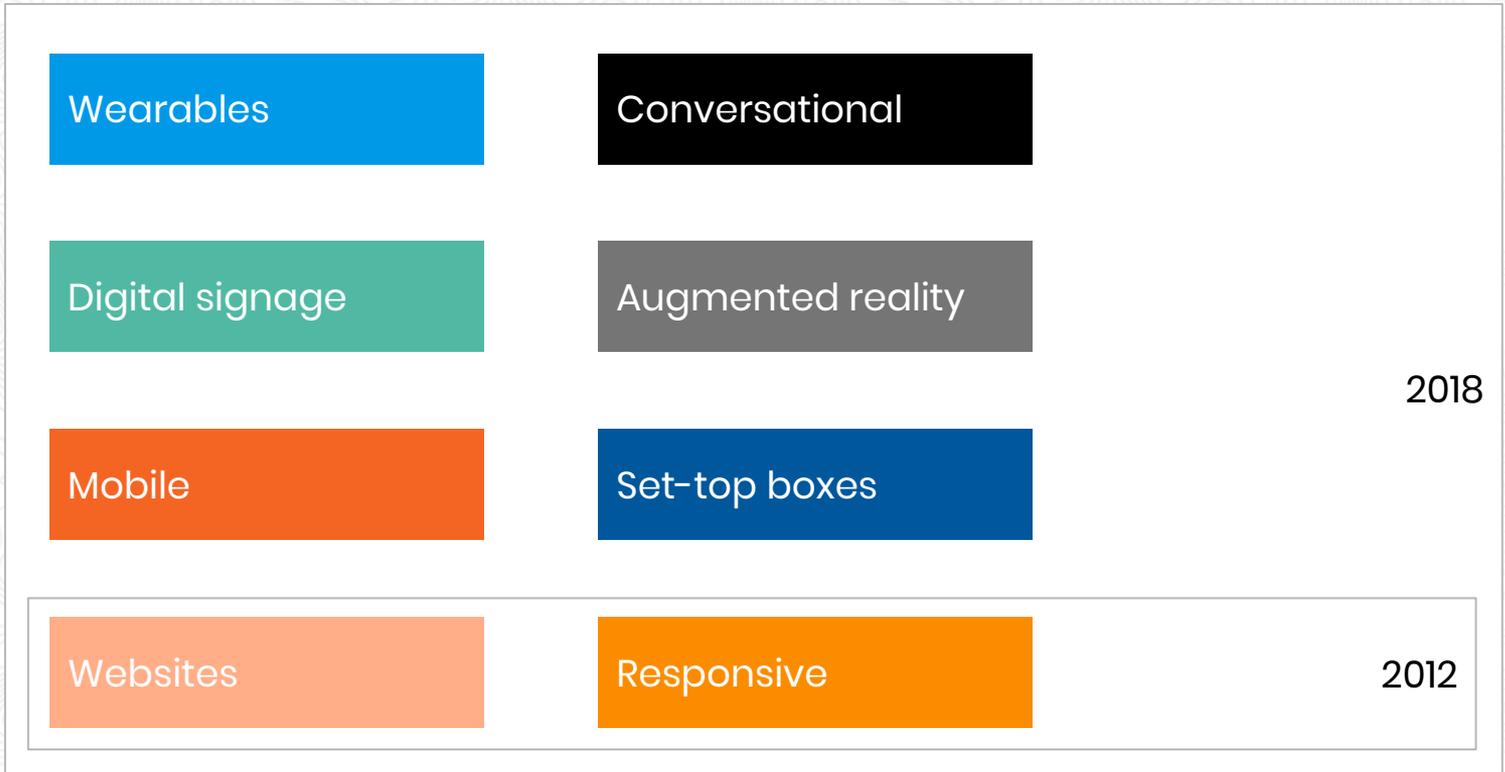
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# 3

**2018: The channel explosion  
and JavaScript renaissance**



Cambrian explosion



2018: Where we are now

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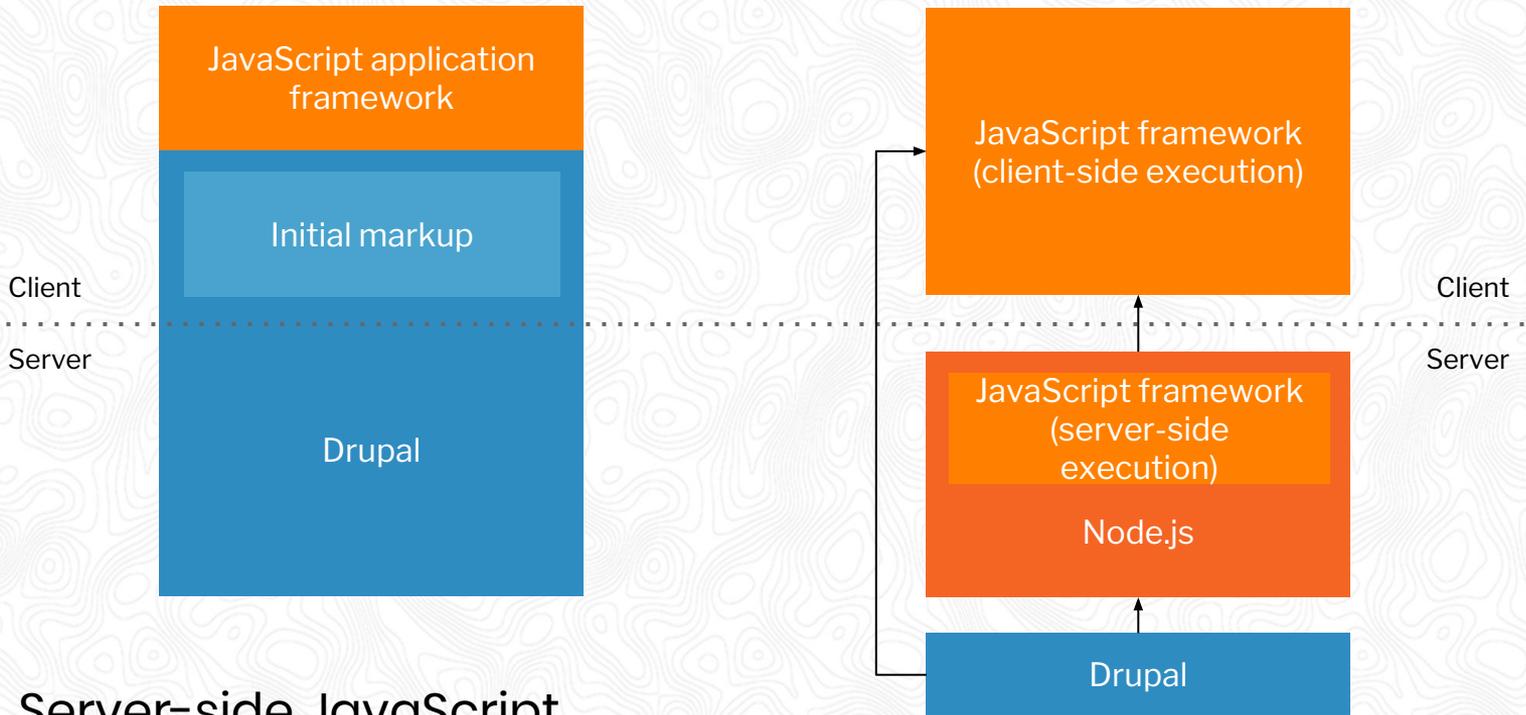
**Developers challenge Drupal  
by pushing limits of what exists**

---

**Six years later, front-end tooling  
looks completely different**

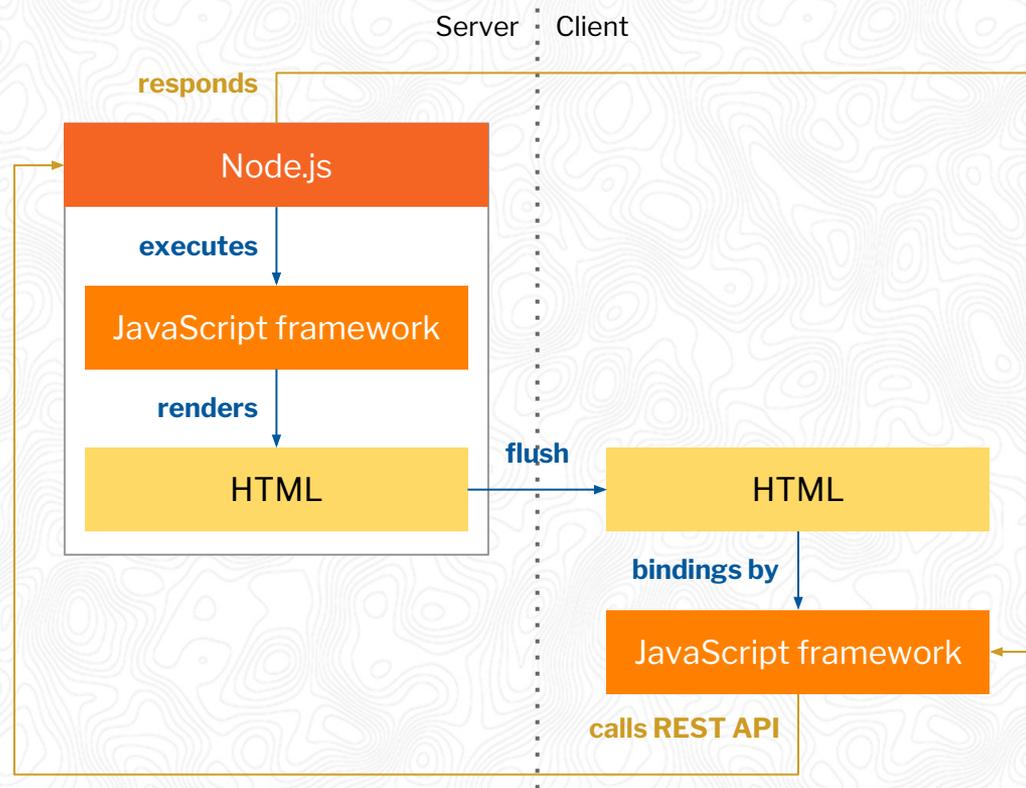
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**Node.js and universal JavaScript  
have  
elevated JavaScript to a global reach**



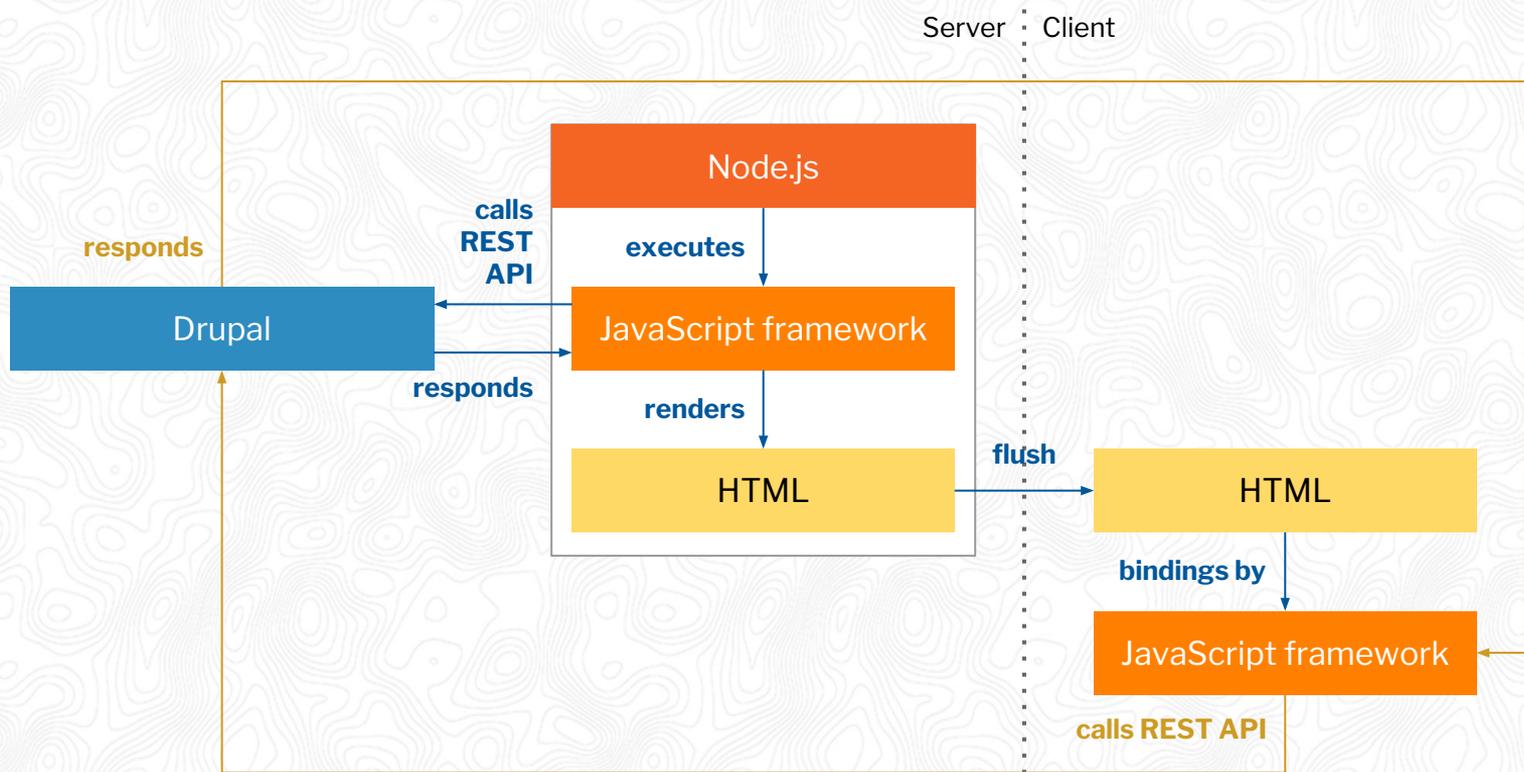
## Server-side JavaScript

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→ Synchronous  
→ Asynchronous

## Universal (isomorphic) JavaScript

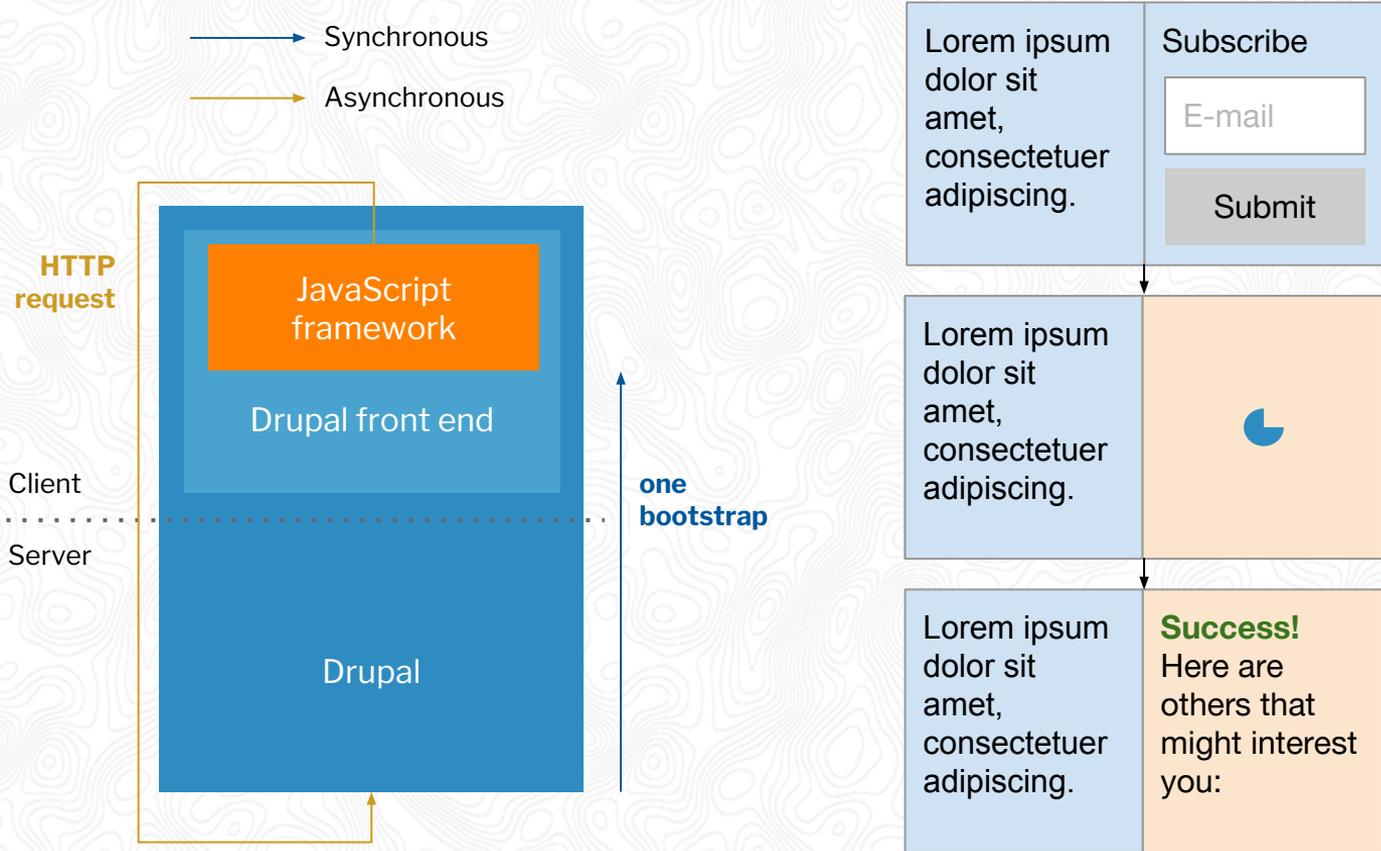


 Synchronous  
 Asynchronous

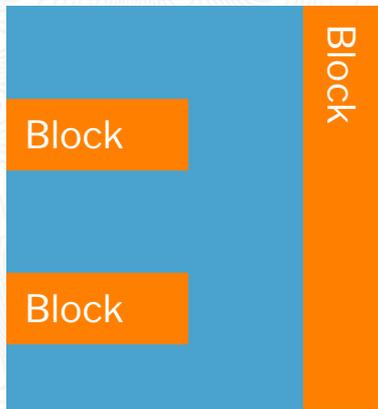
## Universal JavaScript consuming Drupal

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**JavaScript is just another channel,  
and we should treat it as such**



## Progressively decoupled Drupal



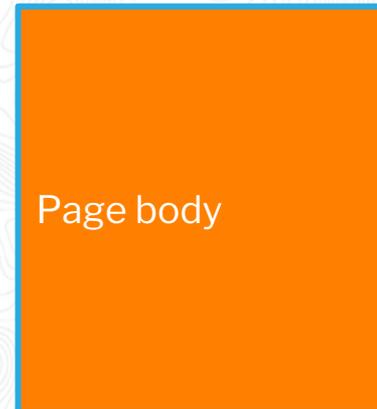
### **Decoupled blocks**

Interactivity scoped to blocks; Drupal controls layout



### **Decoupled main area**

Main content handed over to JS; Drupal provides static routes and initial output



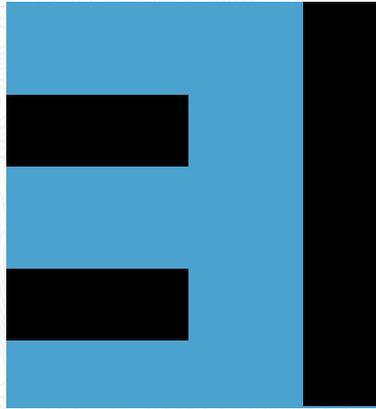
### **Decoupled page body**

Entire page body handed over to JS; Drupal provides initial state on page load



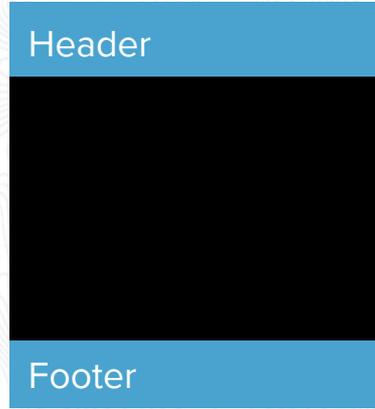
The spectrum of progressive decoupling approaches

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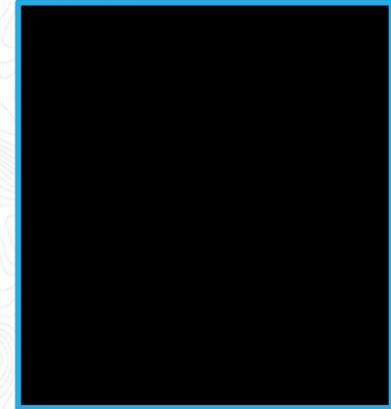
### Decoupled blocks

Interactivity scoped to blocks; Drupal controls layout



### Decoupled main area

Main content handed over to JS; Drupal provides static routes and initial output



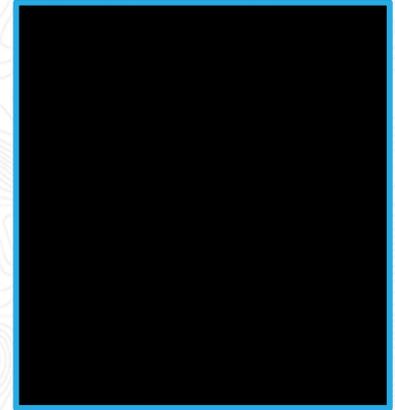
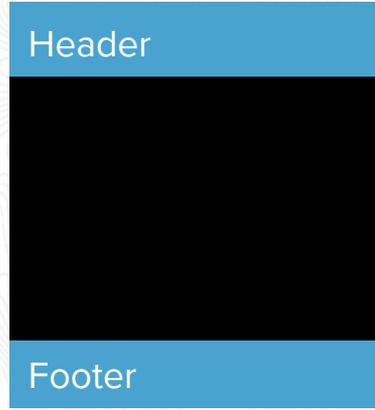
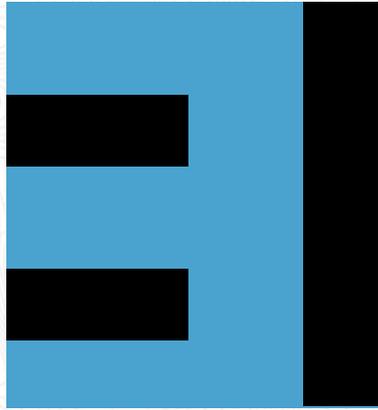
### Decoupled page body

Entire page body handed over to JS; Drupal provides initial state on page load



Progressive decoupling "black boxes"

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Progressive decoupling "black boxes"

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**This developer-focused mindset  
has expanded to other channels**

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4

**2024: New channels and  
new front-end workflows**



*Minority Report* (2002)

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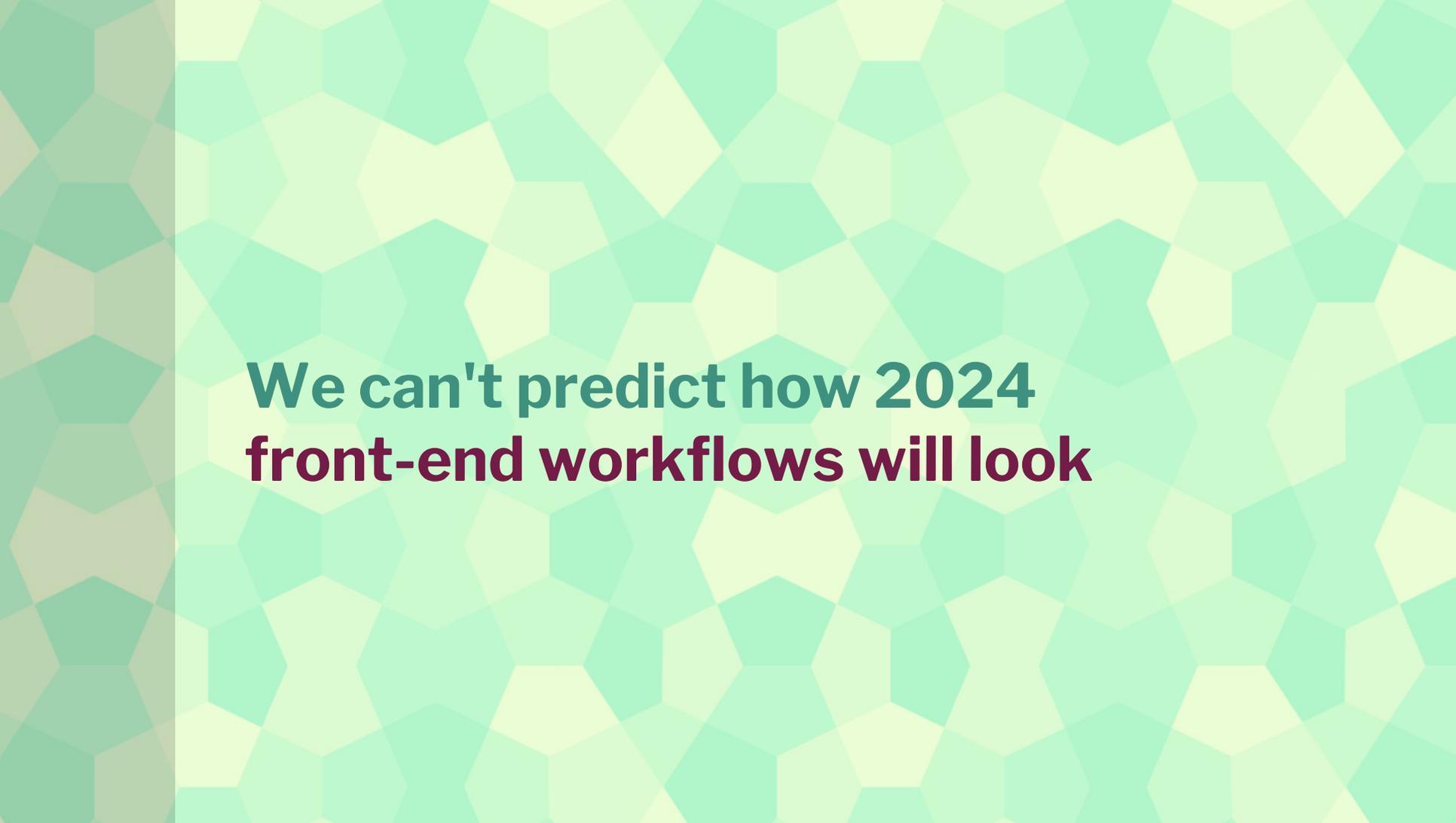
**What will Drupal  
look like in 2024?**

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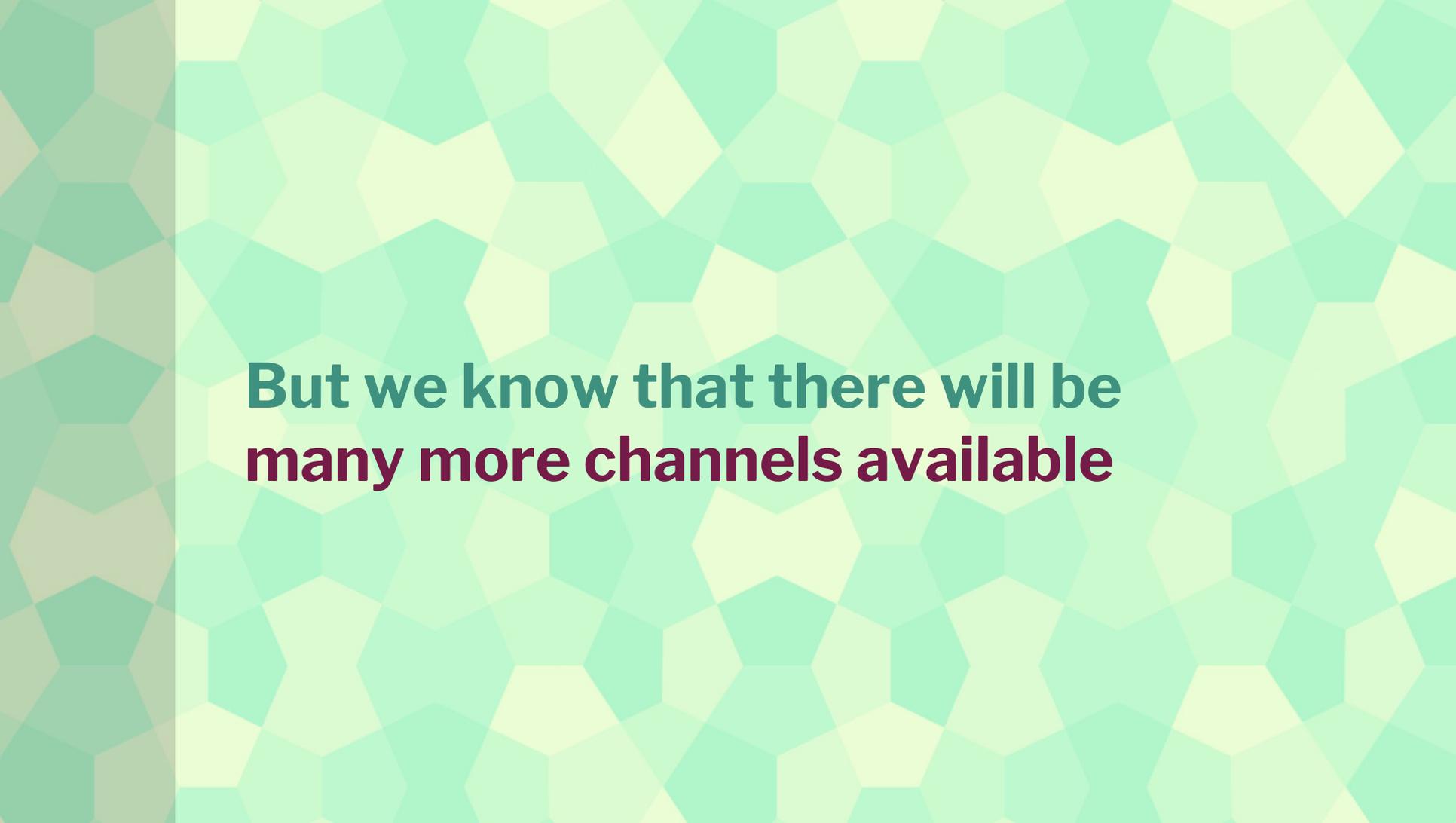
**Drupal will have a more modern and  
interactive administrative interface**

---

**Our clients will want better flexibility:  
better control and better interfaces**



**We can't predict how 2024  
front-end workflows will look**



**But we know that there will be  
many more channels available**

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# 5

## **Drupal's editorial incongruity: A difficult choice**

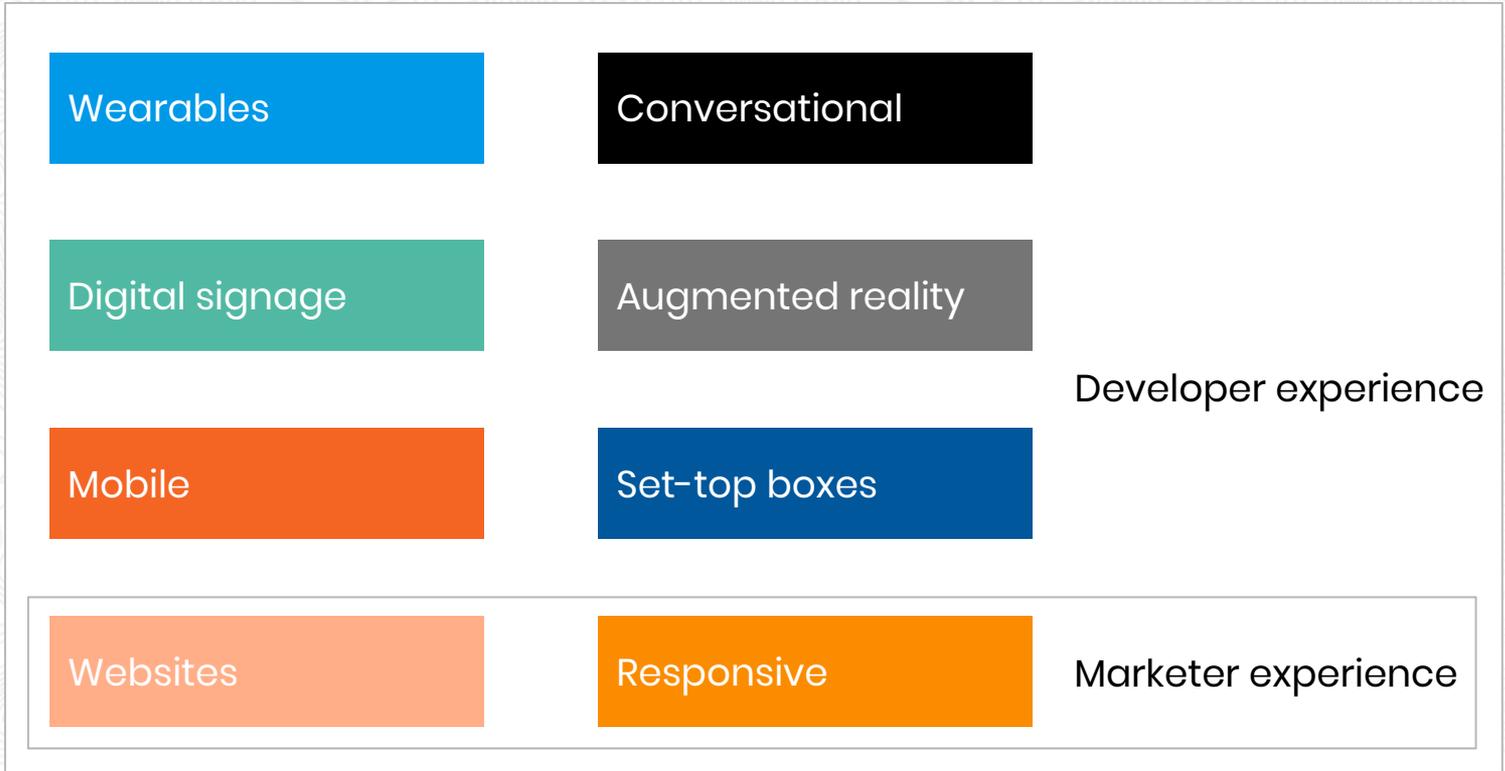
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# Drupal's editorial incongruity

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Drupal's value proposition is becoming incongruous between the three personas: the user, the marketer, and the developer.

I have asked before: Is this irreconcilable?



## Drupal's editorial incongruity

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In-place editing



Contextual links



Layout management

Drupal's contextual interfaces: Abandon ship?

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# Difficult questions

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- Should Drupal abandon its contextual administration tools?
- Or should Drupal aim to emphasize its current use cases first and foremost?
- Should Drupal abandon the themer persona?
- Or should Drupal double down on the themer persona?

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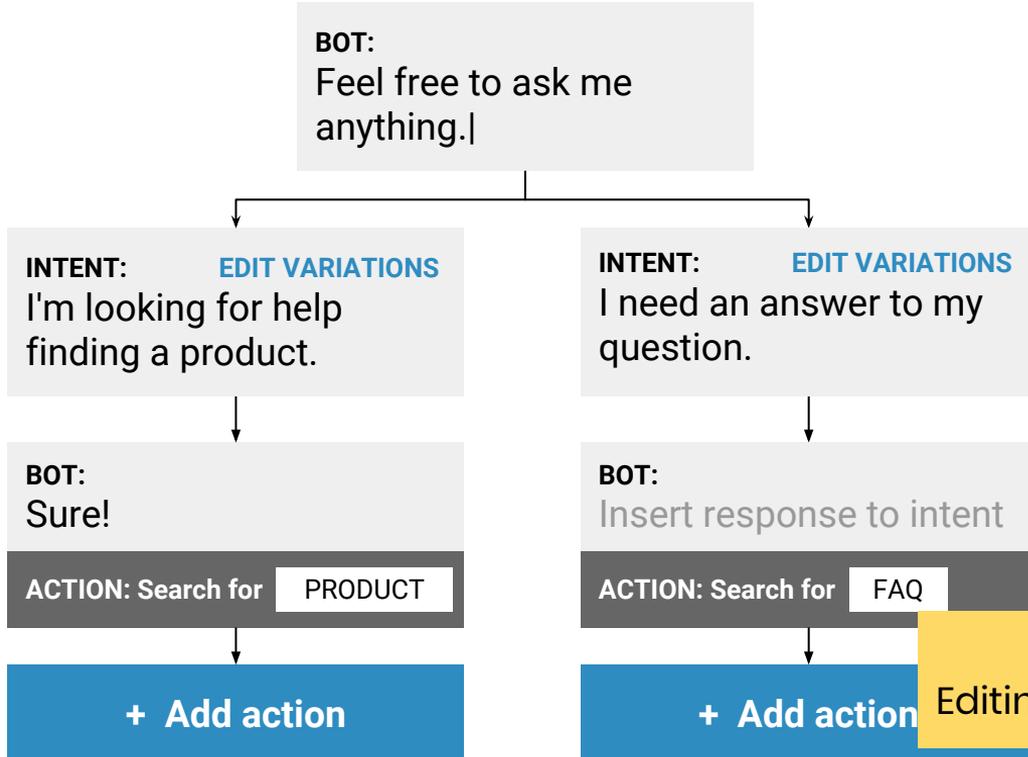
# 6

**Universal editing**

**Channel-designated content**

# Create a conversational interaction flow

Build an interaction flow to delineate which content is available to your Android and iOS chatbot, your web-driven chatbot, and your Alexa and Google Home voice assistants.



# Your content

- FAQ
  - Where can I purchase Lemon & Paeroa?
- PRODUCT
  - Lemon & Paeroa
- STORE LOCATION
  - Tauranga
- PROMOTION
  - 10% off all soft drinks

Editing conversational content

# Create an augmented reality overlay

Use this interface to determine which content to deliver to an augmented reality overlay. The appearance of the overlay will be determined by the application providing augmented reality. Provide a target and content to return.

### TARGET IMAGE



### RETURNED CONTENT

#### PRODUCT

TITLE  
Lemon & Paeroa

DESCRIPTION  
The best soft drink in the entire world and world-famous in New Zealand!

DESCRIPTION

ALTERNATE NAME  
L&P

## Your content

FAQ  
Where can I purchase  
Lemon & Paeroa?

PRODUCT Use Teaser mode  
Lemon & Paeroa Use Full mode  
Add all fields

STORE LOCATION  
Tauranga

PROMOTION  
10% off all soft drinks

Editing augmented reality content

# Create locational content

Insert a location and provide a push notification for each beacon by providing the beacon's unique identifier. Drupal will automatically provide a URL for the delivery of a push notification to the device.

## LOCATION

STORE LOCATION  
**Tauranga**



## PUSH NOTIFICATIONS

BEACON ID  
48c59773-0b51-461e-93e6-36ae93f4d788

## CONTENT TO PUSH

PROMOTION  
**10% off all soft drinks**

# Your content

FAQ  
**Where can I purchase  
Lemon & Paeroa?**

PRODUCT  
**Lemon & Paeroa**

STORE LOCATION  
**Tauranga**

PROMOTION  
**10% off all soft drinks**

Editing situational content

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# The theory of editing everything

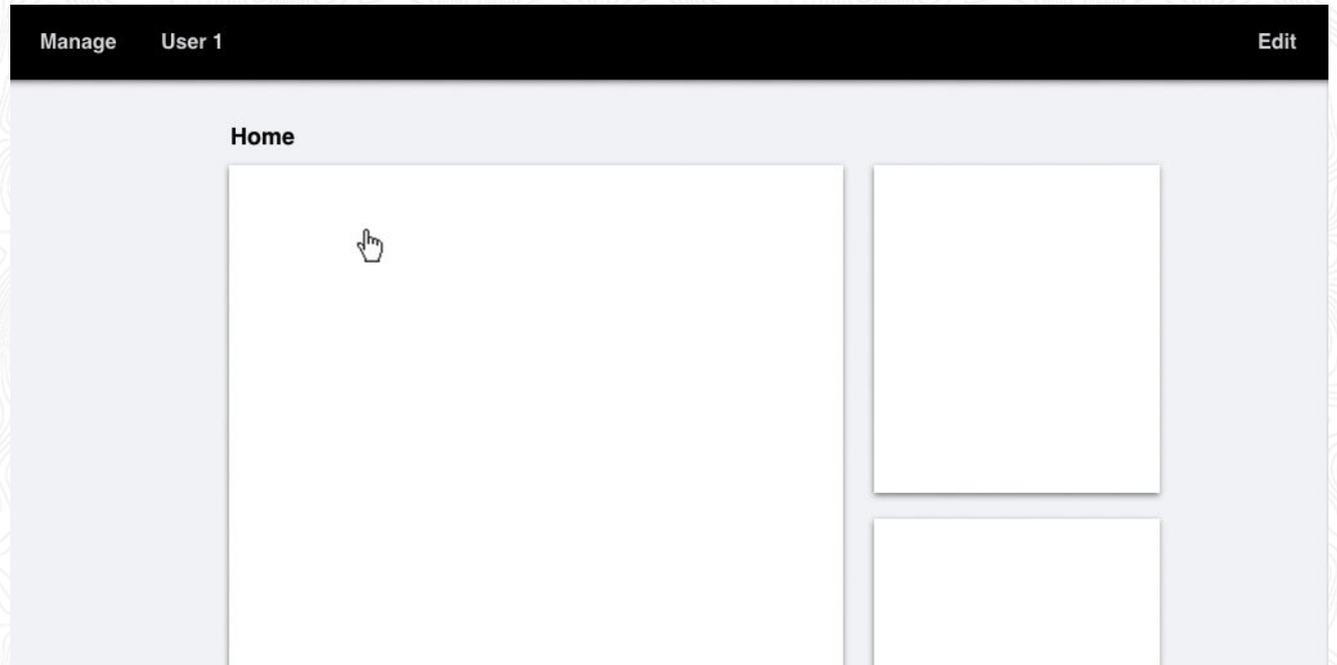
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- Edit every channel on "Drupal" through outside-in interfaces and API-first Drupal
- Consistent and seamless user experience across all channel editorial experiences
- Drupal for other experiences should be indistinguishable from Drupal for web experiences

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# Outside-in interfaces

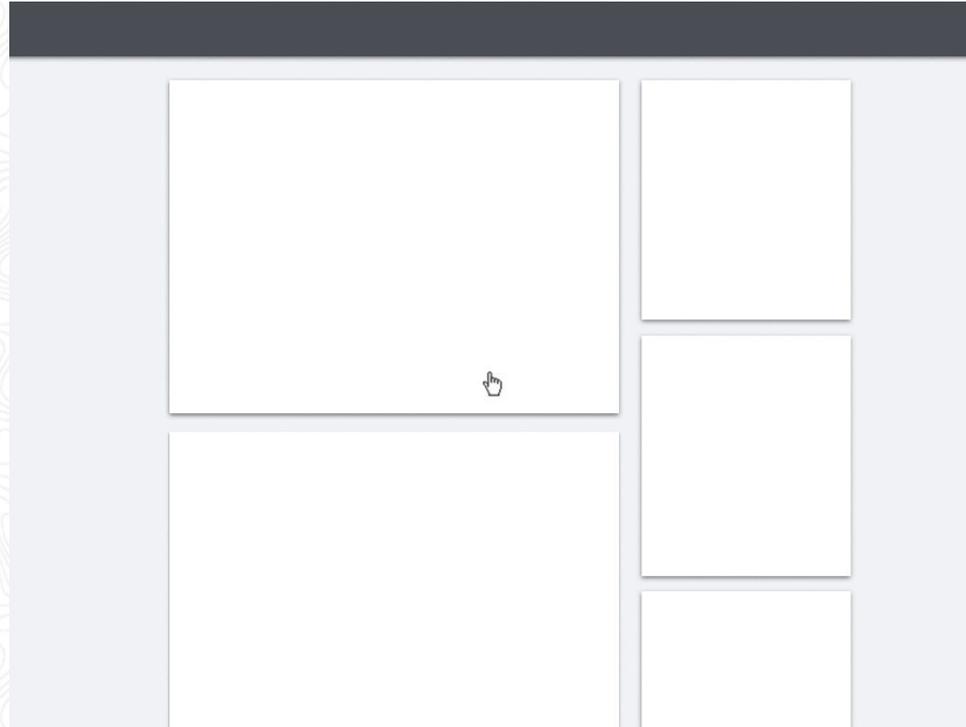
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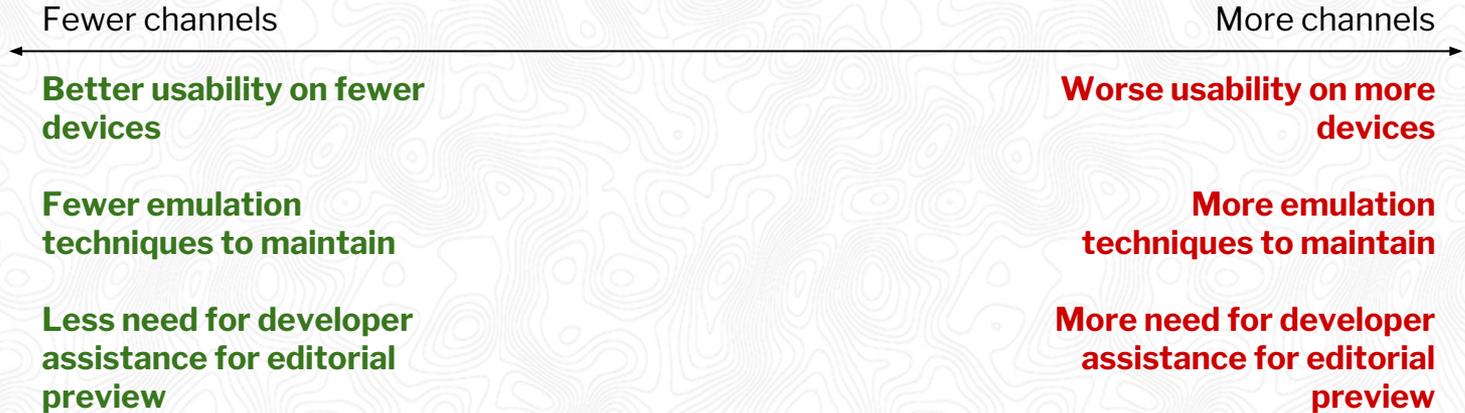


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# Outside-in interfaces

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The spectrum of edit everything

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**Universal editing overcontextualizes  
content in its specific channels**

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**Universal editing is thus beneficial  
for marketers but less for developers**



Tokyo

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**Universal editing flouts  
separation of concerns**

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**But marketers are fighting  
proper separation of concerns**

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# 7

**Contextless editing:**  
**Channel-agnostic content**

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**As the number of channels grows,  
Drupal is stuck between  
a rock and a hard place**

[+ Add content](#)

Content

Comments

Files

[Home](#) > [Content](#) > [Ada Lovelace](#)

Edit

# Ada Lovelace

Title (required)

Ada Lovelace

Cos

**B** **I**       Format  Source

**Ada Augusta Byron King, comtessa de Lovelace**, (Londres, 10 de desembre de 1815 - 27 de novembre de 1852) és la primera programadora en la història dels computadors. Matemàtica i física, va col·laborar amb Charles Babbage en el disseny d'una màquina analítica capaç de resoldre equacions diferencials.

A les seves notes de treball sobre aquesta, va incloure el que ara es considera el primer algorisme que es va intentar que dugués a terme una màquina. És per això que se la denomina la primera programadora.

La vida d'Ada Lovelace va transcórrer a la primera meitat del segle XIX, sota la influència de les idees clàssiques de la societat victoriana, molt arrelades a l'alta classe social a la qual pertanyia però a la vegada amarades dels ideals romàntics. El coneixement científic ja no era una referència de prestigi social, sinó la manera de no quedar-se al marge del "progrés", autèntica font de riqueses.

Save

Last save

08/20/2017 - 16:37

Author

admin

Published

Preview

Delete

MENU SETTINGS

Provide menu link

COMMENT SETTINGS

Admin UI Initiative (ckrina)

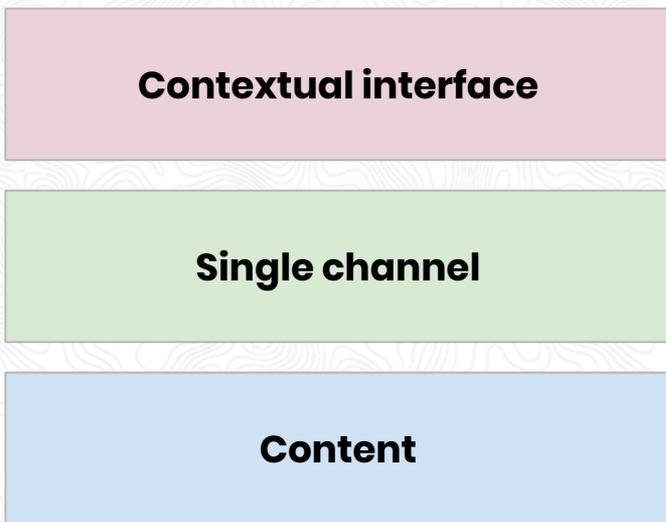
SDKs provide **contextual interface**

API responses served to **SDKs**

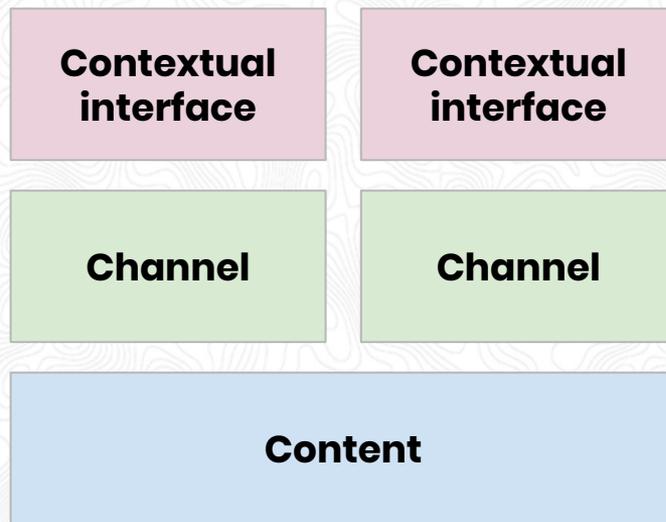
Content rendered into **API responses**

Contextless editing enables a different progression

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Traditional approach



Possible future approach

The old versus new Drupal way

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**Contextless editing focuses on  
the content rather than the context**

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# Contextless editing

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- Instead of in-place editing, decontextualized editing (the traditional node edit form)
- Instead of contextual links, a focus on the content itself and its organization (content view)
- Instead of layout management, a focus on organized API responses (e.g., Node Queue)

---

**Real-world examples of  
contextless editing exist**

---

**Contextless editing requires  
strong editorial awareness of  
omnichannel advantages**

The logo consists of a dark blue square. Inside the square, the word "ASK" is written in white, uppercase letters, positioned above a thin white horizontal line. Below the line, the word "GAGOV" is written in a larger, bold, white, uppercase font.

ASK  
GAGOV

**Ask GeorgiaGov** is a new Alexa skill which gives citizens of the state of Georgia answers to questions about popular state government topics such as how to renew a driver's license, how to register to vote, how to enroll a child in pre-K programs, and even who Georgia's governor is.

---

**GEORGIA GOV**

About Georgia Agencies Blog Cities & Counties Elected Officials Popular Topics

Home » Popular Topics » Business Licenses

## Business Licenses

Before you launch your new business, you'll need to apply for a business license with your city or county. The process of starting a business is often complicated, so the Georgia Secretary of State recommends that you consult an attorney or accountant as you create your business plan.

**What You Should Know:**

- In some cities and counties, you'll first need to secure a state tax identification number, a trade name registration and zoning approval for your business location. Additionally, your business may also need to apply for corporate registrations, professional licenses, or other special operating permits prior to application.
- To find out more about business licensing in your area, you can visit your local Chamber of Commerce or development authority.
- Learn more about starting a business and registering its trade name, fictitious name, or Doing Business As (DBA) title with the [First Stop Business Information Center](#) on the Georgia Secretary of State website.

**FAQs:**

**Do I have to register my business every year?**

Yes. You must file an [Annual Registration](#) each year. The Annual Registration period for entities registered with the Secretary of State is from Jan. 1 - April 1

**Affiliated Agencies**

- Georgia Secretary of State
- Georgia Department of Revenue
- Georgia Chamber of Commerce

## ★ Name Changes

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## ★ Voting

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To register to vote, either fill out and send in a Voter Registration Application or sign up when you renew your driver's license. After you register, the Secretary of State will send your precinct card to your county who will then send it to you. Although, it is important to note that you don't need to bring your precinct card to vote. Its purpose is to let you know where you need to go in order to vote.

### What You Should Know:

- See a [list of upcoming election dates](#) on the Georgia Secretary of State website.
- Log in to [My Voter Page](#) to find your polling location and see a sample ballot for the upcoming election.
- On Election Day, polling stations open at 7 a.m. and close at 7 p.m. If you can't vote during those times, you can either vote early or send in an absentee ballot.

FAQs:

Ask GeorgiaGov "popular topics" and "FAQs"



## Driver's Licenses

Topic

The Department of Driver Services (DDS) helps you obtain, renew, or replace learner's permits, ID cards, and licenses. In Georgia, you must be at least 16 years of age (with the exception of drivers with legally blind parents) to carry a full license for everyday, non-commercial vehicles.

What you should know

### What You Should Know:

- You must renew your license every 8 years. Customers may be required to pass a vision test, knowledge exam, and the road skills test.
- You'll pay \$32 to renew your license for 8 years. You may be eligible to receive a \$5.00 discount by [renewing online](#).

Structure of Ask GeorgiaGov content

---

## FAQs:

### **How do I transfer my out-of-state driver's license once I move to Georgia?**

Within 30 days of moving to Georgia you are required to visit the nearest Department of Driver Services (DDS) [Customer Service Center](#). Bring along:

- Your current license,
- Proof of your Social Security number,
- 2 proofs of Georgia residency (such as a bank statement, utility bill, or rental contract), and
- Proof of identity (such as a birth certificate, passport, or immigration card).

Additional documents required if you are changing your name. Visit the Department of Driver Services website to create a [Custom Checklist](#) and be sure you arrive with the necessary documents.

Question

Answer

FAQ

---

## Structure of Ask GeorgiaGov content

**Introduction**

Invite interest  
Encourage trust

**Orientation**

System options  
Actions to goal

**Action**

Set of tasks  
User controls

**Guidance**

Instructions  
Feedback

**Welcome to GeorgiaGov. Feel free to ask a question.**

(Unclear)

**Sorry, I didn't understand. Ask me a question related to the state government of Georgia.**

How do I renew my driver's license?

**Does this sound helpful? Driver's licenses.**

Yes.

Ask GeorgiaGov key moments

---

**Introduction**

Invite interest  
Encourage trust

**Orientation**

System options  
Actions to goal

**Action**

Set of tasks  
User controls

**Guidance**

Instructions  
Feedback

**The Department of Driver Services helps you obtain, renew, or replace ...**

**I have a list of related information. Would you like to hear it?**

Sure.

**Does this sound useful? How do I transfer my out-of-state driver's license once I move to Georgia?**

Yes.

Ask GeorgiaGov key moments

---

### Introduction

Invite interest  
Encourage trust

### Orientation

System options  
Actions to goal

### Action

Set of tasks  
User controls

### Guidance

Instructions  
Feedback

**Within 30 days of moving to Georgia you are required to visit the ...**

**Would you like to hear more related information?**

No.

**If you need a phone number for further assistance, say Phone number. If you have another question, feel free to ask it. Otherwise, you can say Exit.**

Exit.

Ask GeorgiaGov key moments

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**Content audits will help you to  
decontextualize your content**

## **Original**

How long can I receive benefits?

## **New**

How long can I receive unemployment benefits?

## **Original**

Are benefits taxable?

## **New**

Are unemployment benefits taxable?

Making content less contextually specific

---

## Original

Learn how to [change your name on your Social Security card.](#)

## New

The Social Security Administration can help you [change your name on your Social Security card.](#)

## Original

You can receive payments through either a debit card or direct deposit. [Learn more about payments.](#)

## New

You can [receive payments](#) through either a debit card or direct deposit.

---

Calls to action and link-rich text

## Original

[Read more about this.](#)

## New

In Georgia, the [Family Support Registry](#) typically pulls payments directly from your paycheck. However, you can send your own payments online through your bank account, your credit card, or Western Union. You may also send your payments by mail to the address provided in your court order.

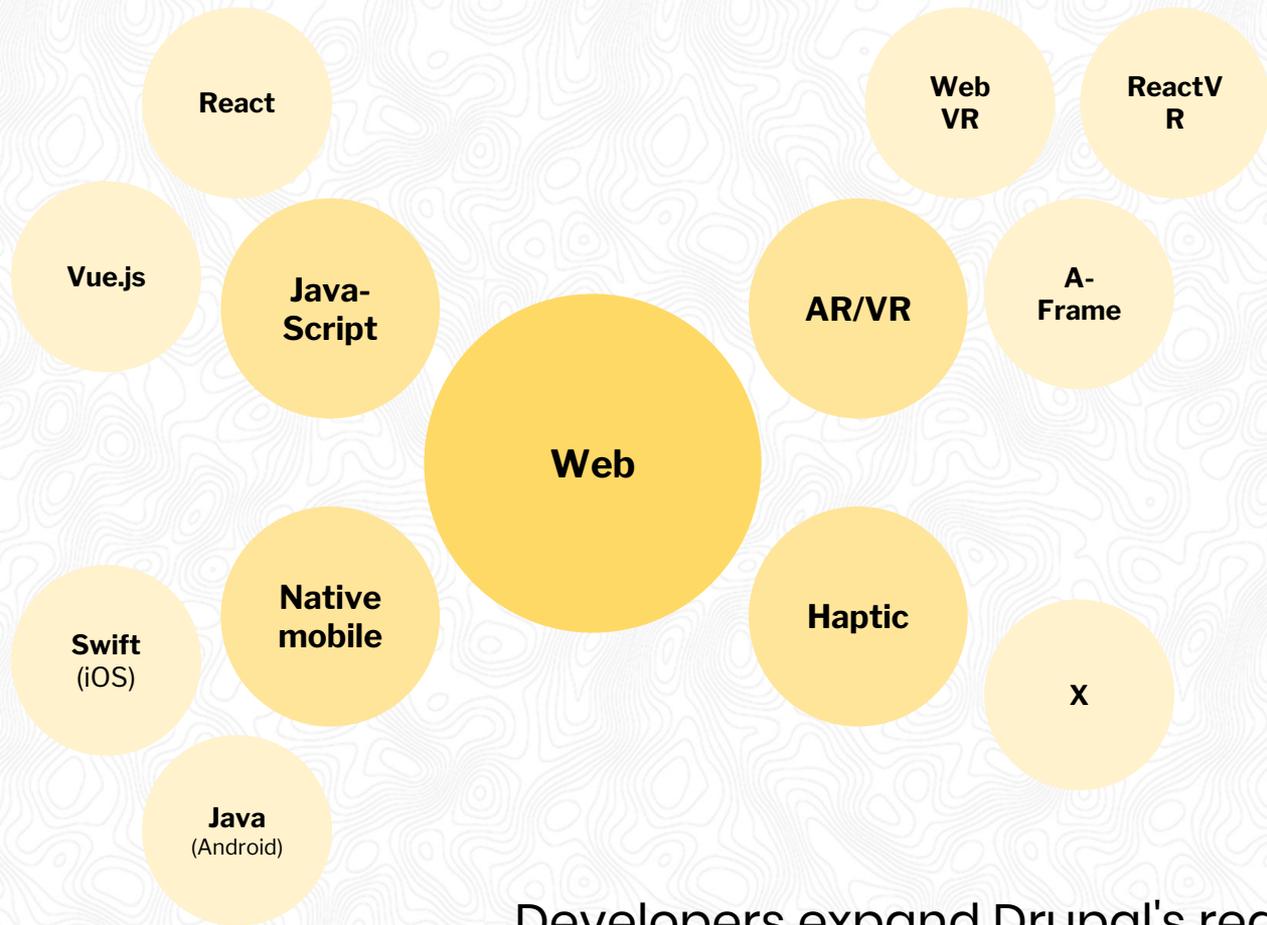
Calls to action and link-rich text

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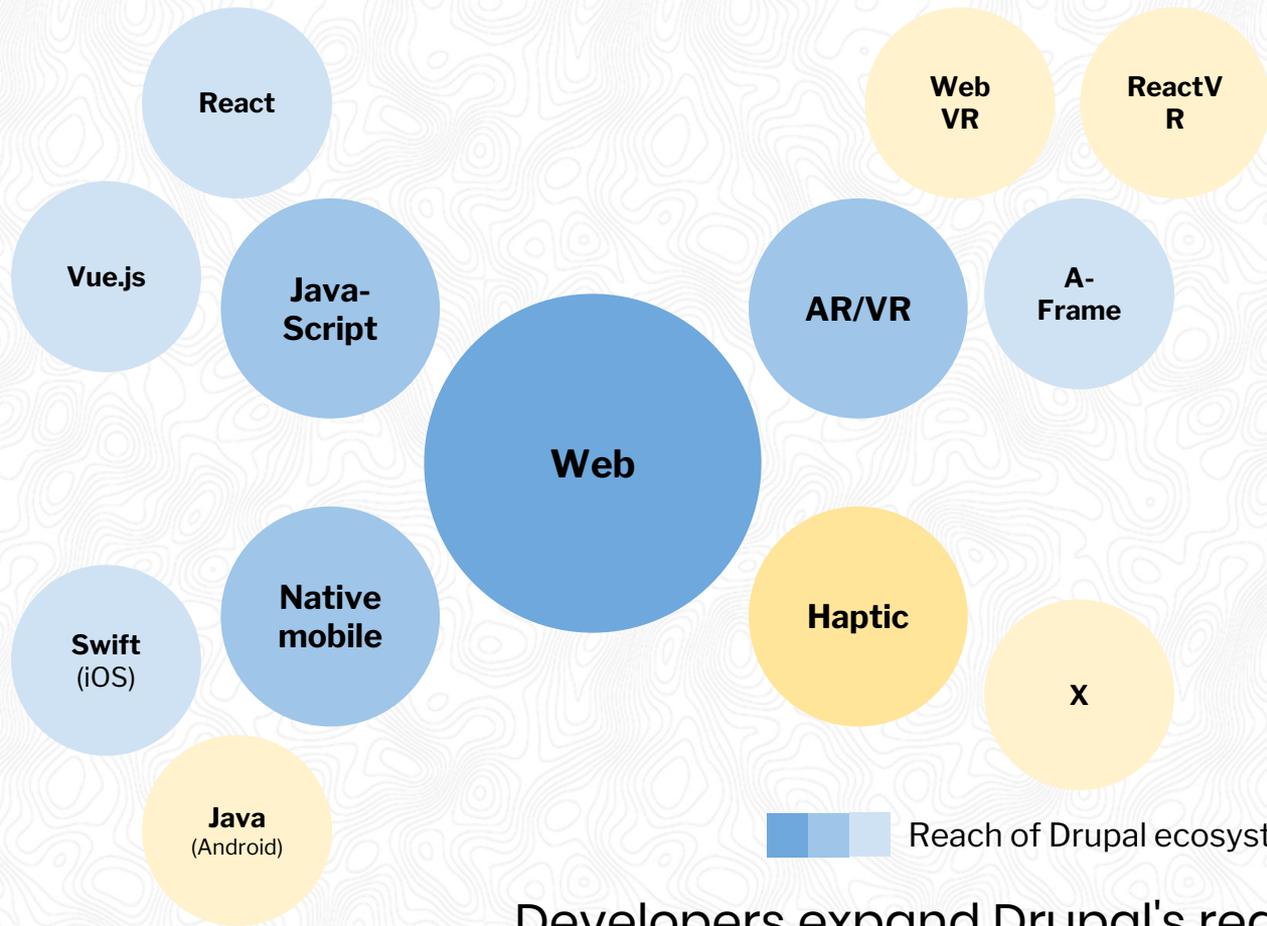
# 8

## Drupal's front-end future and developer enablement



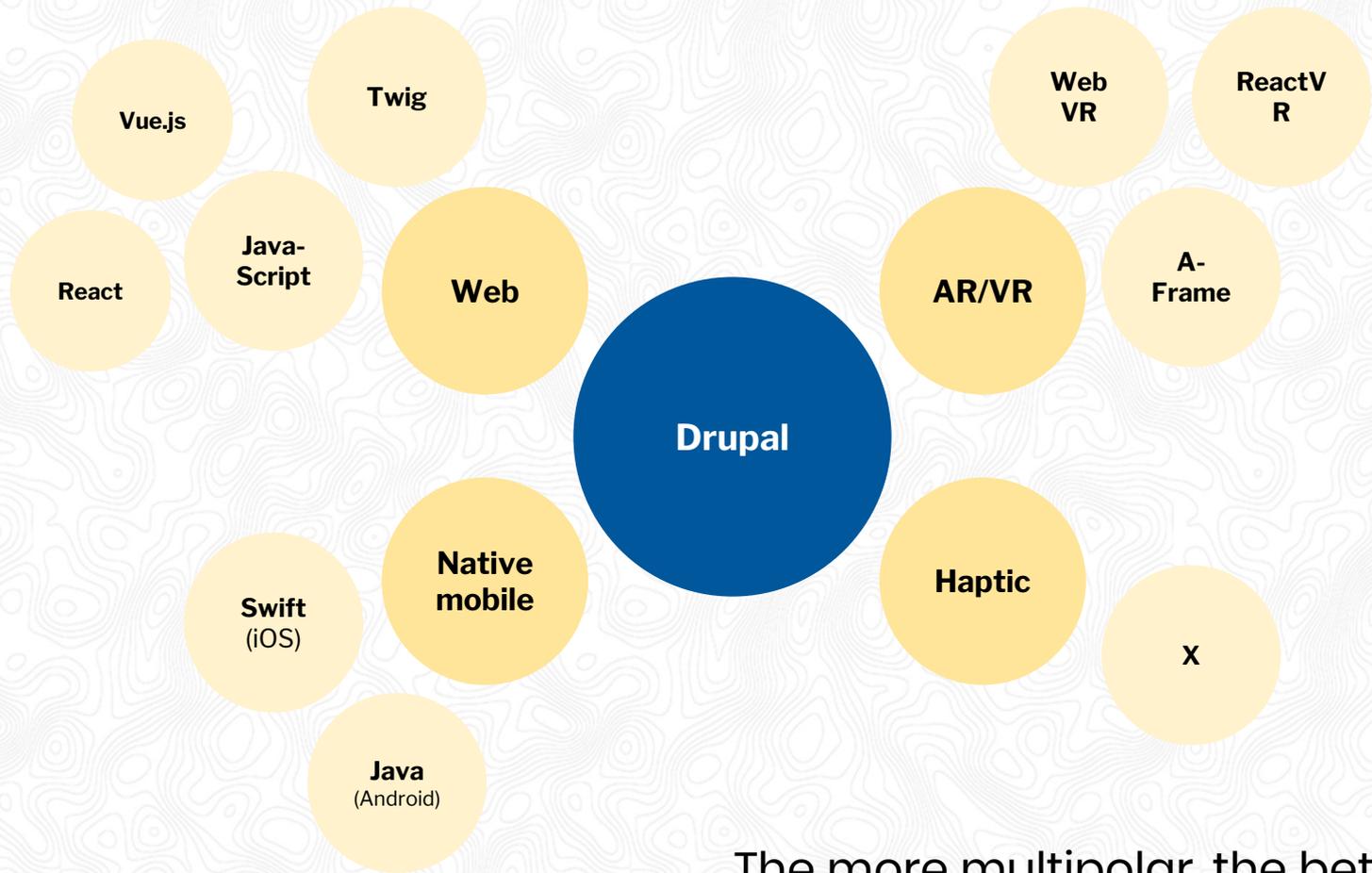
Developers expand Drupal's reach

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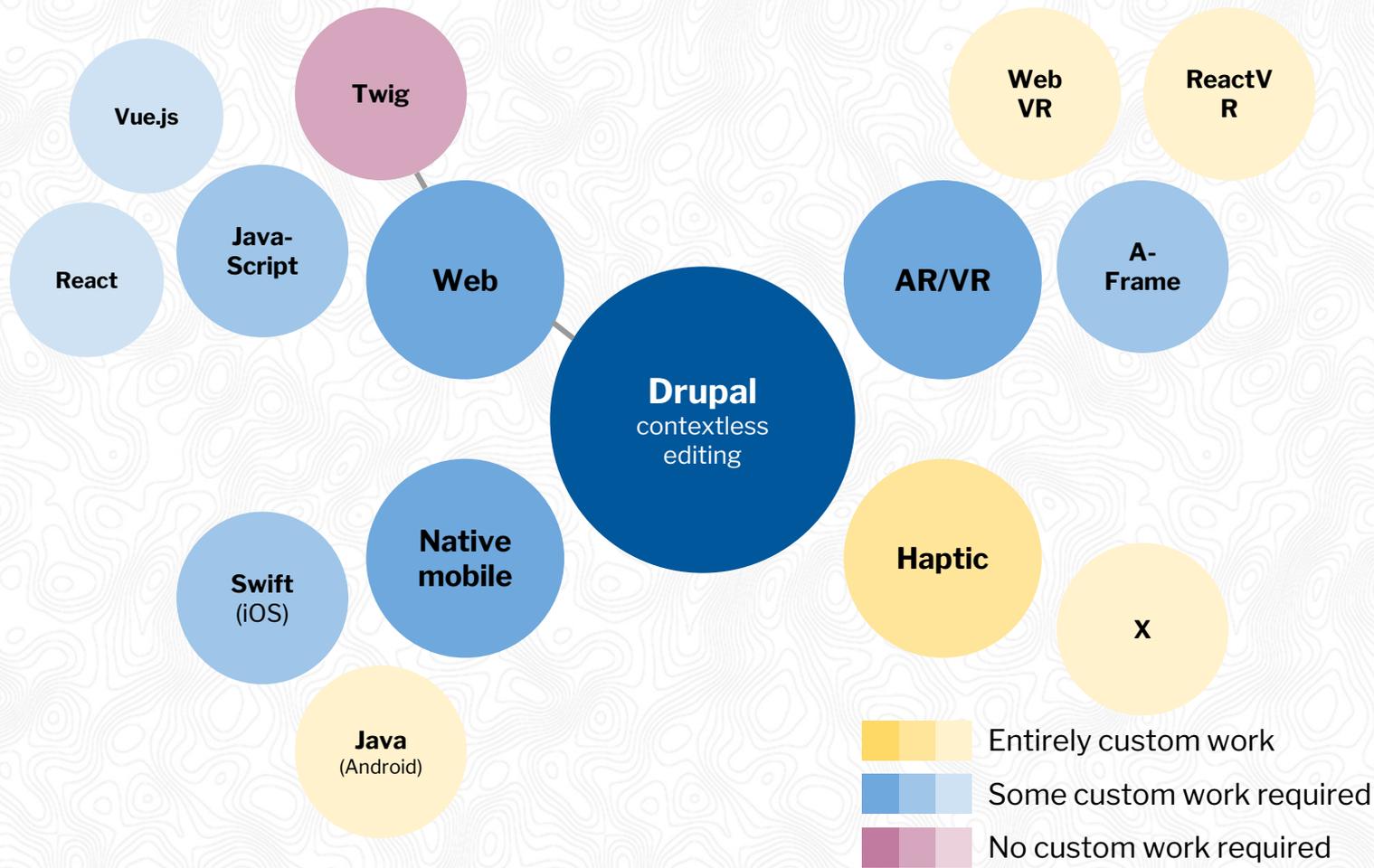
Developers expand Drupal's reach

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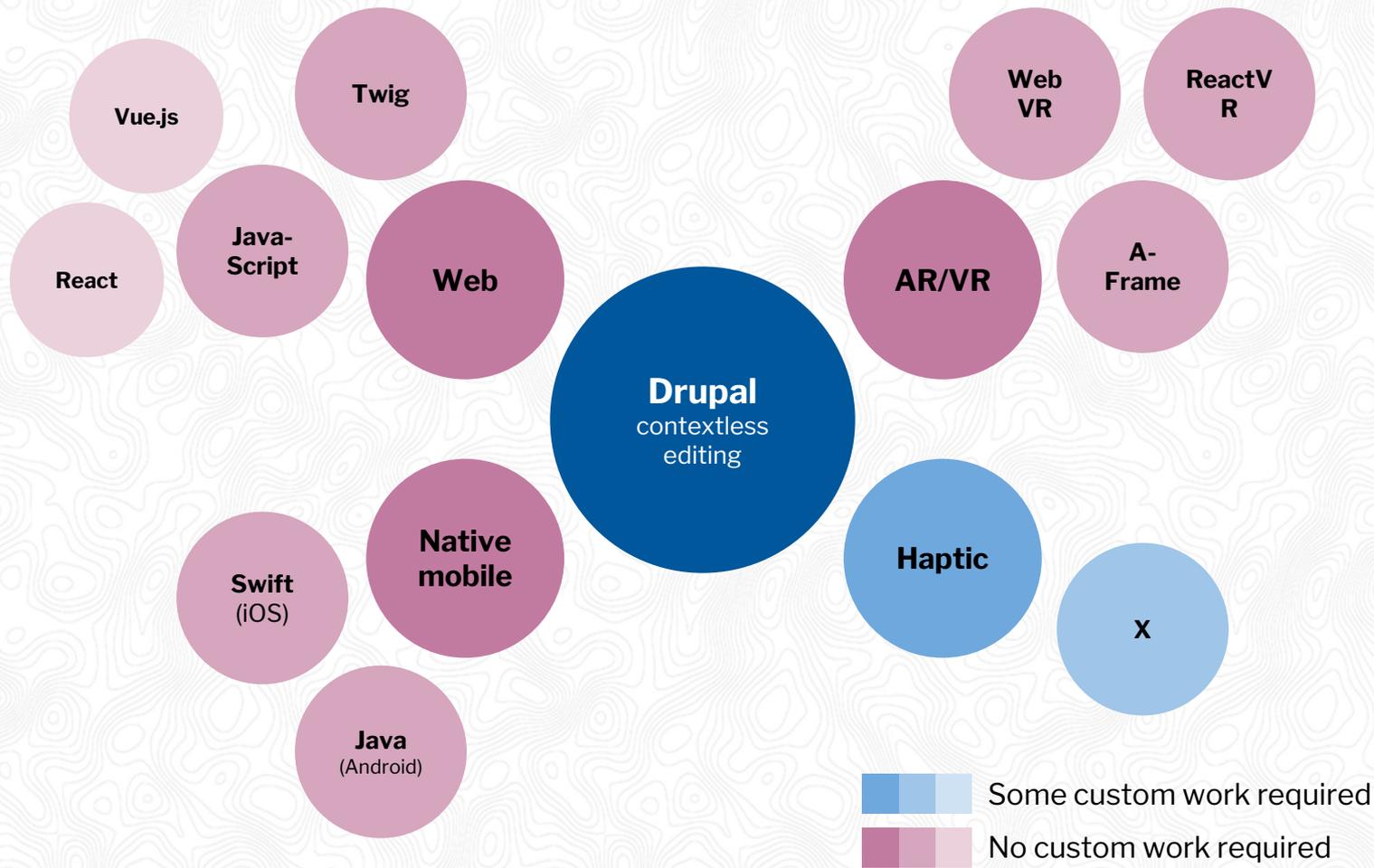
The more multipolar, the better

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**We need a new concept of  
editor enablement in addition to  
developer enablement**



Some custom work required  
No custom work required

---

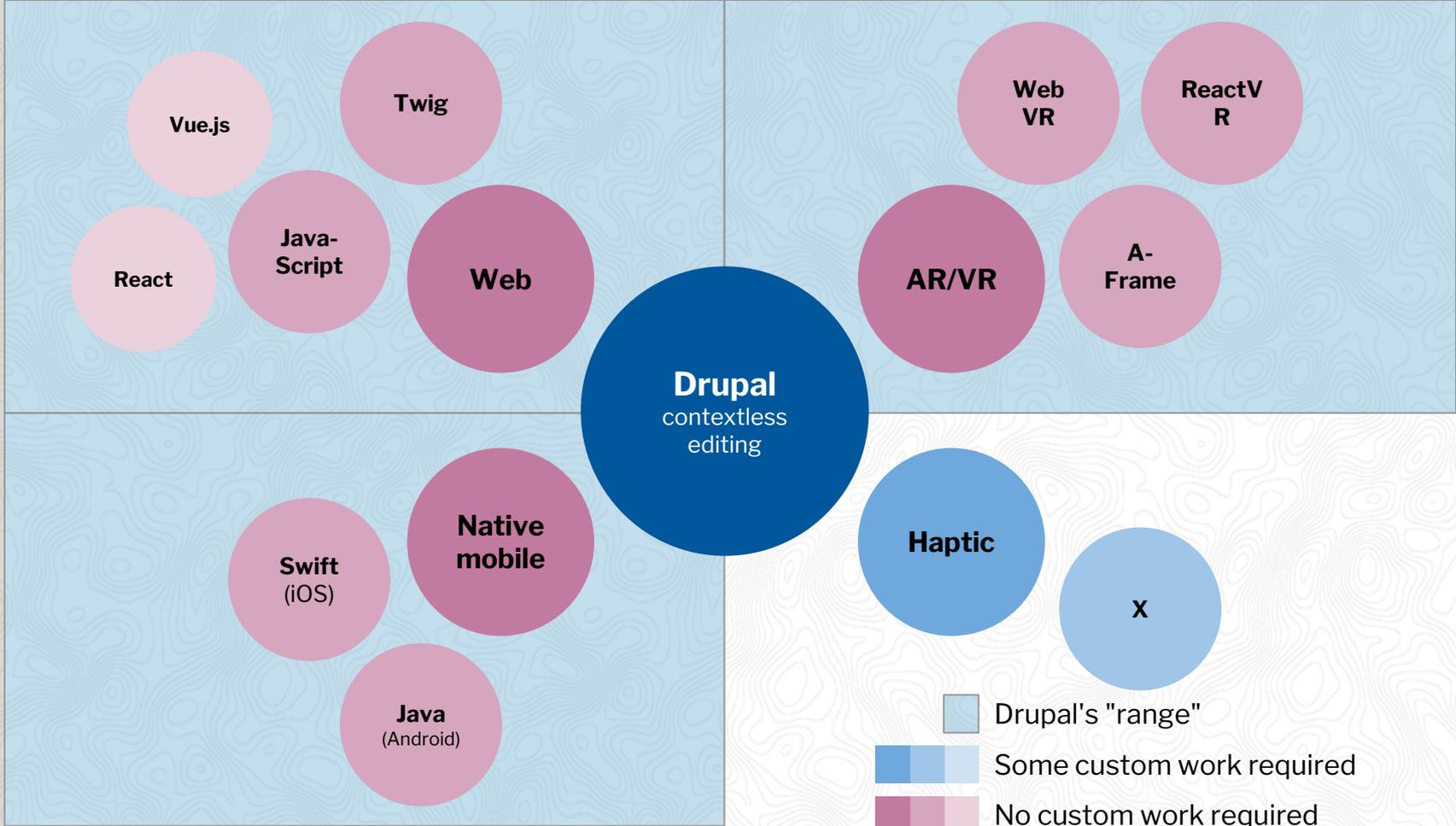
**If we build the APIs,  
the developers will come**

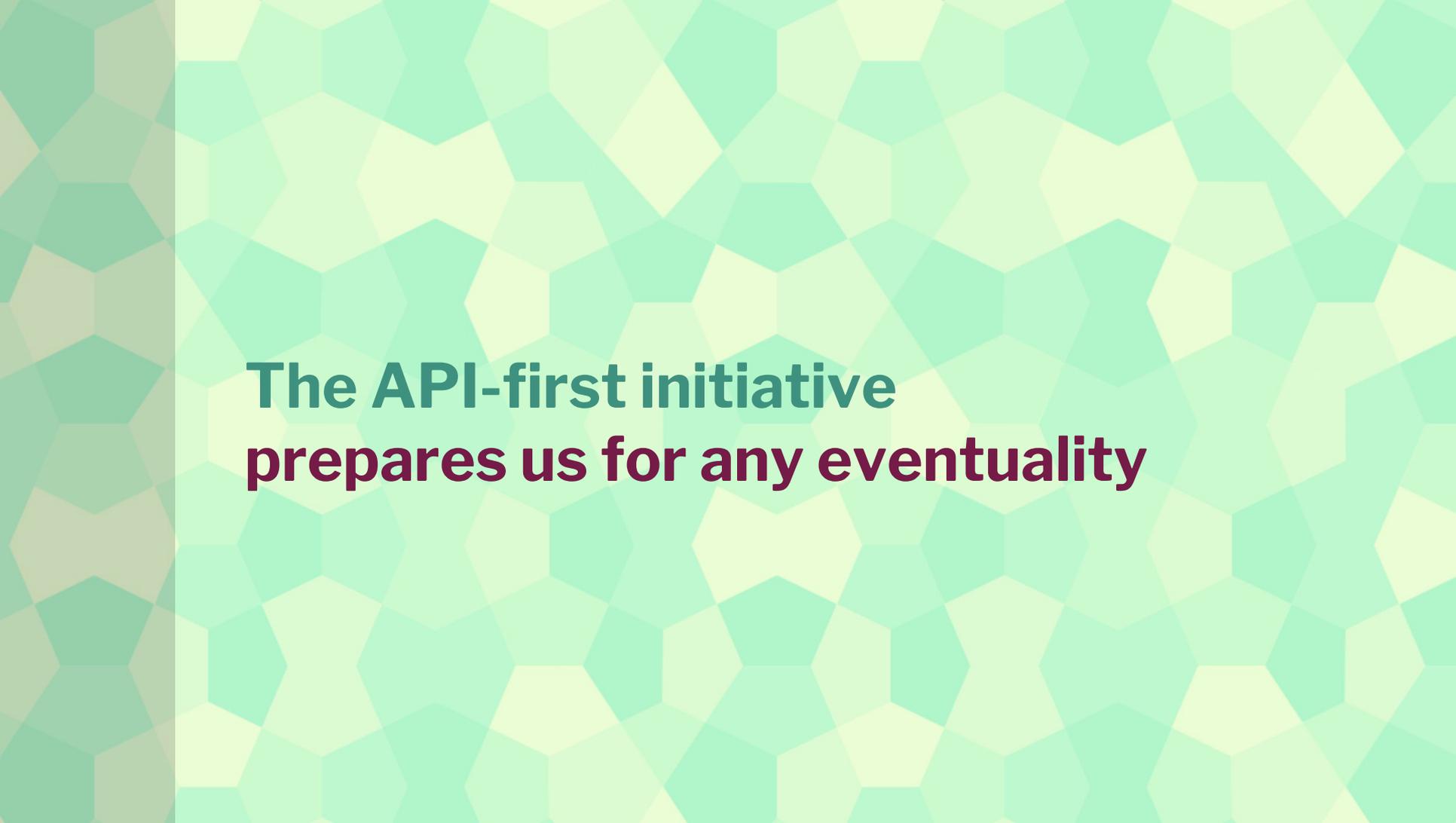
---

**If we enable developers to build UIs,  
editors will come along too**

---

**Drupal is not just the CMS;  
it encompasses the ecosystem too**





**The API-first initiative  
prepares us for any eventuality**

---

# 9

**Epilogue:**

**The Drupal front ends in 2024**

---

**Who is the Drupal front end for, and  
how do we make it work for them?**

---

**In my view, contextless editing  
will ultimately win out**

---

**But editors' and marketers' needs  
will only become more demanding**

---

**As such, we need an approach that  
enables developers *and* editors**



**Enable developers so that  
they can enable editors**



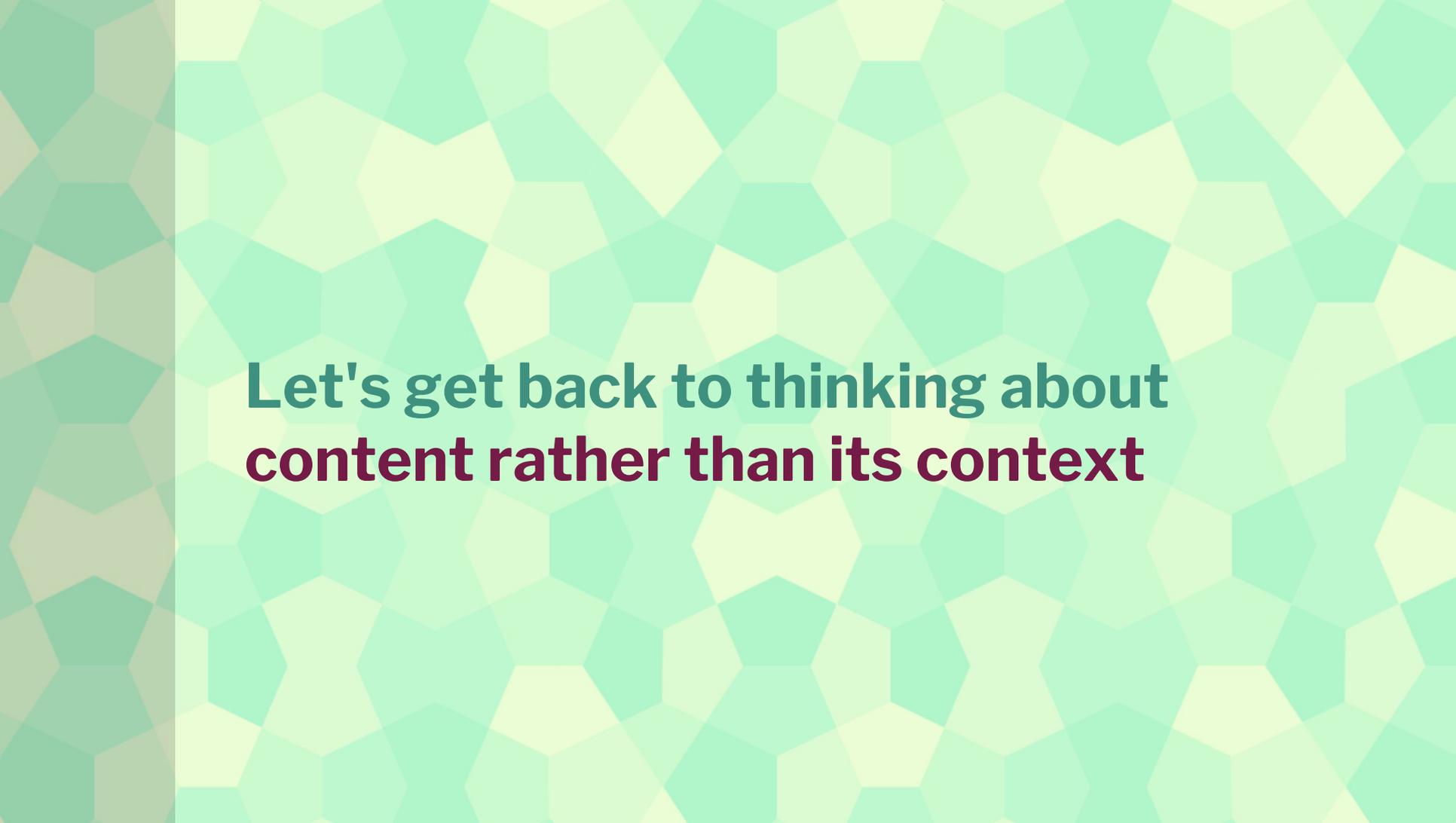
**Drupal's API-first orientation  
prepares us for any 2024 event**



**From stability in API-first  
we can expand editorial range**



**Content should adapt to context  
and not be content-specific**



**Let's get back to thinking about  
content rather than its context**

---

# Dank u wel! • Thank you!

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Preston is an innovation lead, researcher, speaker, and author of *Decoupled Drupal in Practice* (Apress, 2018).

A globally recognized voice on decoupled Drupal and subject matter expert in the decentralized web and conversational design, Preston is Director of Research and Innovation at Acquia, where he helms Acquia Labs, an innovation center architecting projects for clients like the State of Georgia and Nestlé Purina.

Having spoken twice at SXSW Interactive, Preston is a sought-after presenter with keynotes on four continents and in three languages.

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*Foreword by Dries Buytaert*

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