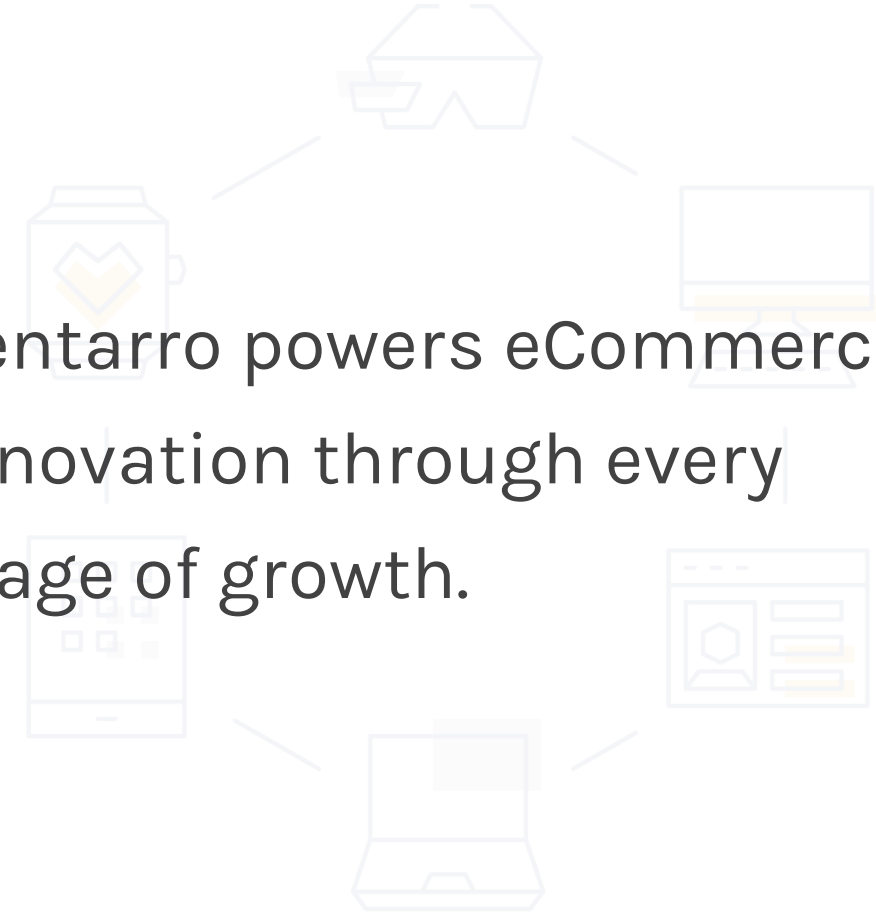
Decoupling Drupal Commerce to Multiply and Scale the Front-end

Matt Glaman | mglaman | @nmdmatt

Matt Glaman

Product Lead @ Centarro

Centarro powers eCommerce innovation through every stage of growth.



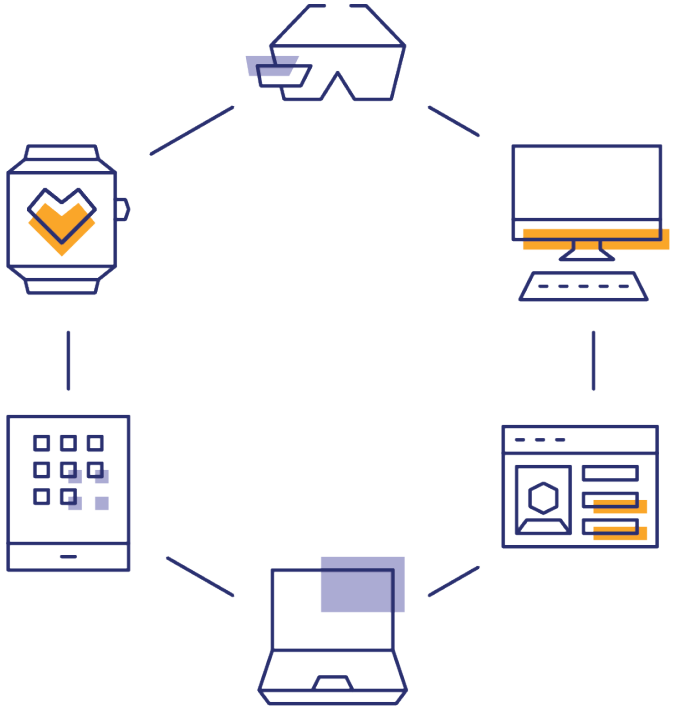
Why *decouple* Drupal Commerce?

If you need unique branding or localization for different markets...

Decoupling allows different teams to control each market's design and localization.

If you want to reach a modern audience that shops online through multiple devices...

Decoupling makes it easier to support multiple types of front-end applications.



If you need to scale for high demand through regular growth or spikes...

Decoupling removes rendering bottlenecks common to full-stack applications.

When to *decouple* Drupal Commerce?

Consider decoupling when you need to separate design and styles for each tenant in your application.

- Your Drupal theme can control the display for each tenant in your application, and...
- You can even switch the active theme based on the current store a customer is browsing...
- **BUT**! design changes are tied to full deployments of your application.

Leica Geosystems

Leica Geosystems is a multi-tenant, full-stack Drupal Commerce installation built by Oomph, Inc.

Each region is its own store with its own pricing thanks to price lists.

https://www.oomphinc.com/work/leica-geosystems-drupal-ecommerce/

Leica BLK360

BLK360

Configuration

SOFTWARE: AUTODESK RECAP PRO SUBSCRIPTION *

- ✔ **Autodesk ReCap Pro Subscription**
  A 1-year subscription for Autodesk's ReCap Pro is included with every BLK360 purchase.
  [Included]
- ○ **Subscription Starter Pack**
  Add a 1-year subscription to REGISTER 360
  [+ $2,260.00]
- ○ **Collaboration Package**
  Add 1-year subscriptions to Register 360 and TruView Cloud
  [+ $4,720.00]
- ○ **Permanent Starter Package**
  Add a permanent license for REGISTER 360.
  [+ $5,685.00]
- ○ **CAD Elite Subscription Package**

Leica BLK360

BLK360

Configuration

SOFTWARE: ABONNEMENT À AUTODESK RECAP PRO *

- ✔ **Abonnement à Autodesk ReCap Pro**
  Un abonnement d'1 an à Autodesk ReCap Pro est inclus avec chaque BLK360 acheté.
  [Inclus]
- ○ **Pack Leica Starter avec abonnement**
  Ajouter 1 an d'abonnement à Cyclone REGISTER 360
  [+ 1 850,00 €]
- ○ **Pack Collaboration**
  Ajouter 1 an d'abonnement à Register 360 et TruView Cloud
  [+ 3 900,00 €]
- ○ **Pack Starter Permanent**
  Ajoutez une licence permanente pour REGISTER 360.
  [+ 4 800,00 €]

Leica BLK360

BLK360

コンフィグレーション

SOFTWARE: AUTODESK RECAP PRO サブスクリプション *

- ✔ **Autodesk ReCap Pro サブスクリプション**
  BLK360購入時には、Autodesk ReCap Pro 1年間サブスクリプションが含まれます。
  [含む]
- ○ **サブスクリプション・スターターパック**
  1年 REGISTER 360 サブスクリプション 追加
  [+ ￥339,200]
- ○ **コラボレーションパッケージ**
  1年間 Register 360、TruView Cloudサブスクリプション追加
  [+ ￥605,700]
- ○ **Permanentスターターパッケージ**
  無期限 REGISTER 360 ライセンス 追加
  [+ ￥847,500]
- ○ **CAD Eliteサブスクリプションパッケージ**

Leica Geosystems

Leica Geosystems could benefit from decoupling *if* each region needed customized branding or user interactions relevant to its market.

https://www.oomphinc.com/work/leica-geosystems-drupal-ecommerce/

Consider decoupling when the business wants to reach customers beyond their website.

- The business wants to sell across platforms, beyond the website...
- Like on a native mobile application optimized for shopping their store.
- The business wants to harness new integrated eCommerce tools in social media platforms.

Eldum Rétt

Food delivery service built on Drupal Commerce by 1xINTERNET with a React Native based mobile application consuming the site's REST API.

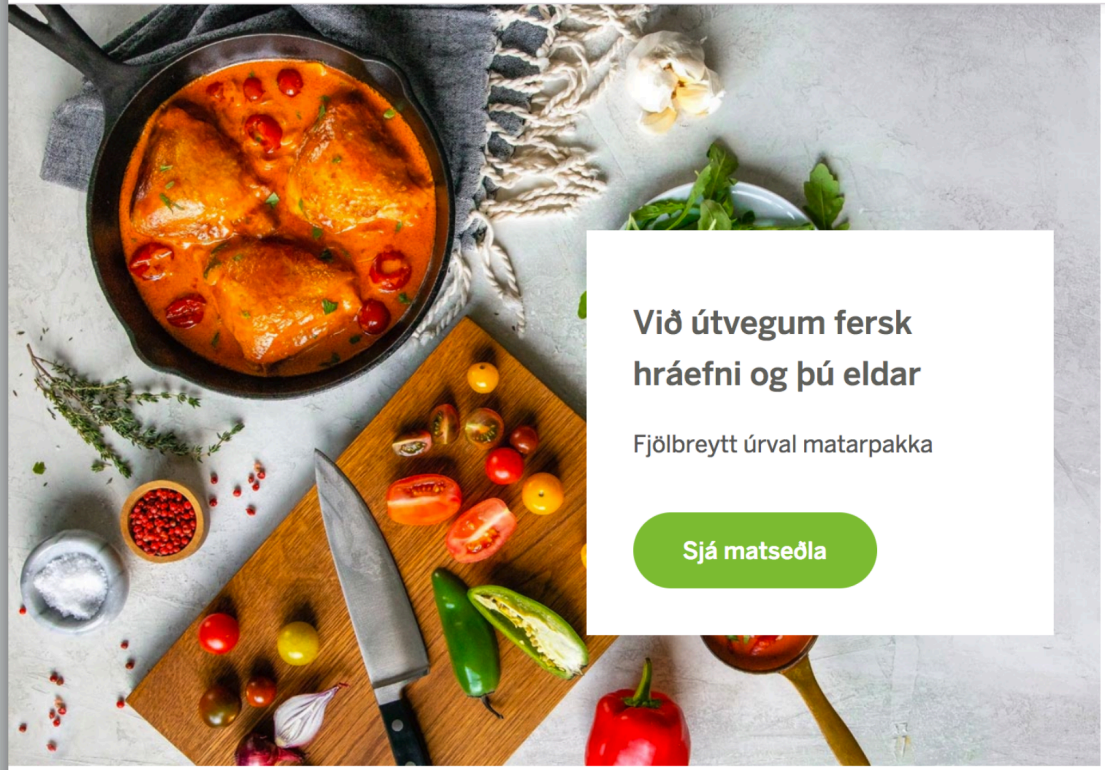
https://www.1xinternet.de/en/eldum-rett

ELDUM RÉTT

Matseðlar Matarpakkar Blogg

Samtals
0 kr.

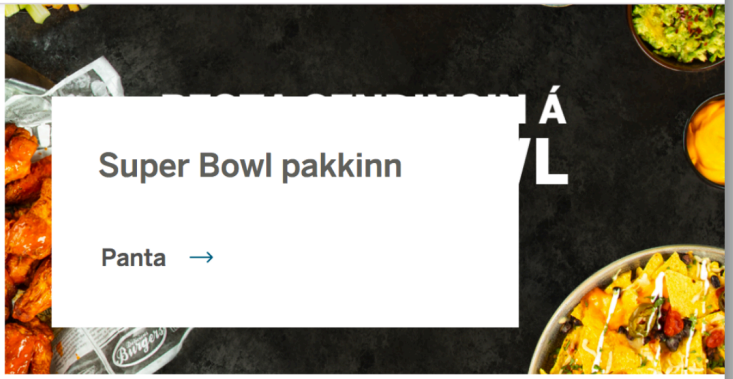
Innskrá



Við útvegum fersk hráefni og þú eldar

Fjölbreytt úrval matarpakka

Sjá matseðla

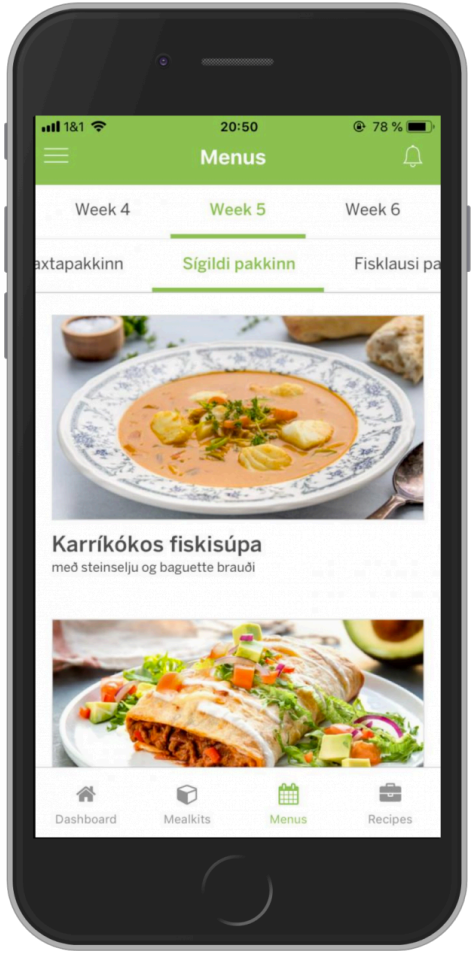


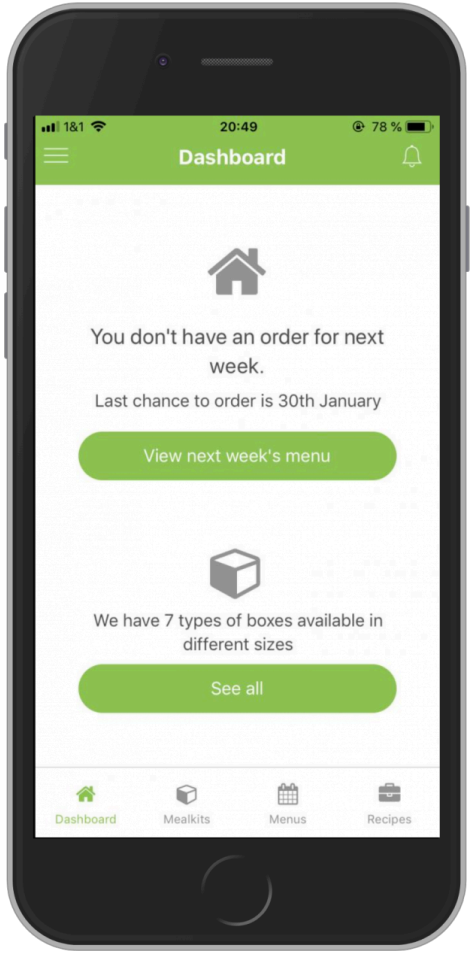
Super Bowl pakkinn

Panta →

Fersk hráefni

Einungis ferskustu hráefnin rata í matarpakkana!


1&1
20:50
78 %
Menus
Week 4
Week 5
Week 6
axtapakkinn
Sígildi pakkinn
Fisklausi pa
Karríkókos fiskisúpa
með steinselju og baguette brauði
Dashboard
Mealkits
Menus
Recipes


1&1
20:49
78 %
Dashboard
You don't have an order for next week.
Last chance to order is 30th January
View next week's menu
We have 7 types of boxes available in different sizes
See all
Dashboard
Mealkits
Menus
Recipes

Eldum Rétt

Eldum Rétt can eventually move their main web application to a decoupled front-end, using the same API built for the mobile application.

https://www.1xinternet.de/en/eldum-rett

Consider decoupling to meet the demands of sales growth and high scale availability.

- Even small eCommerce apps can be highly dynamic.
- Normal caching patterns for Drupal content sites won't always work.
- Drupal’s render system can perform at scale, but the form system is still a bottleneck.

Centarro's case study:

Matsmart.se

MATSMART

Sök...

Logga in | Favoriter | Support | Till kassan

- Nyinkommet
- Sista chansen
- Hett just nu

KATEGORIER

- Skafferi
  - Pasta, ris & matgryn
  - Konserver & matmixer
  - Kryddor & smaksättare
  - Såser & oljor
  - Kaffe & te
  - Sylt & marmelad
  - Flingor, gryn & müsli
  - Torkad frukt & fröer
  - Mjöl, bakning & dessert
- Snacks & godis

SKAFFERI

Pasta, ris & matgryn | Konserver & matmixer | Kryddor & smaksättare | Såser & oljor | Kaffe & te | Sylt & marmelad | Flingor, gryn & müsli | Torkad frukt & fröer | Mjöl, bakning & dessert

Sortera | Filtrera

2 för 10:- 7 kr/st

Poké bowl-kit

Blue Dragon | 164g

Normalpris: ~~39,90 kr/st~~

Du sparar 69,80 kr (-87%)

Köp

2 för 20:- 12 kr/st

Eko Kikärter

GoGreen | 290g

Normalpris: ~~12,90 kr/st~~

Du sparar 5,80 kr (-22%)

Köp

15:-

Tomatsalsa Medium

Texas Longhorn | 250ml

Normalpris: ~~39,95 kr/st~~

Du sparar 24,95 kr (-62%)

Köp

5:-

Senapsås Honey Mustard

Hellmann's | 190g

Normalpris: ~~19,90 kr/st~~

Du sparar 14,90 kr (-75%)

Köp

15:-

19:-

25:-

20:-

“

Matsmart built a grocery business on Drupal Commerce, quickly scaling to €10M's in revenue. Centarro took them fully headless to increase performance and sales.

Matsmart goes fully headless with Drupal Commerce
https://splashawards.org/nominees/matsmart-goes-fully-headless-drupal-commerce

Matsmart grew from full-stack to fully decoupled.

Decoupling allowed them to scale and more quickly launch in new markets.

- Removing Drupal from the render pipeline, especially with respect to Views and forms, greatly improved front-end performance.
- Deep integrations to third party services for client side interactions allowed the back-end to focus on serving transactions.
- New markets could launch without changes to the back-end server.

The journey to building decoupled Drupal Commerce in Drupal 8:

- Matsmart is expanding into new markets on Drupal 8 this year.
- They're long-time supporters of Drupal Commerce transitioning to engaging Centarro as an open source software vendor, not merely a consultant.
- Their support helped us build a fully featured, cross-border eCommerce platform.

Would you like to know more?

Reach out! We're on-boarding multiple customers *right now* to Centarro Commerce, a new kind of Open SaaS optimized for merchant collaboration.

The more feedback the better!

What's inside our vision for a *decoupled multi-tenant* eCommerce platform?

Multi-tenancy using defined stores

A store as a region, brand, or physical location

- Each store defines its default supported currency
- Limit the available billing and shipping countries per store
- Products are assigned to the stores they can be purchased from (and the catalogs that control their merchandising)

Price lists for multiple currencies and per-store pricing

drupal/commerce_pricelist

- Price lists allow for product pricing based on a set of conditions
- Lists based on user roles, stores, purchased quantity, and dates
- Designed for a site with 15,000,000+ SKUs and price lists containing 300,000+ SKUs

JSON:API for standardized data consumption

- JSON:API implementation available in Drupal core
- Didn’t require writing all of the code infrastructure for an API
- Allowed us to focus on figuring out the mechanics of how *our* API should interact with the Commerce data model – not how it should be entirely represented in JSON.

JSON:API queries across entity bundles

drupal/jsonapi_cross_bundles

- Allows accessing entities over JSON:API without specifying a bundle
- This allows fetching all types of products (clothing, books) from one endpoint

https://www.centarro.io/blog/supporting-cross-bundle-entity-collections-jsonapi

JSON:API Resources

drupal/jsonapi_resources

- The JSON:API module has *no* PHP API for extending the implementation
- JSON:API has *no* way to define custom resources that leverage the JSON:API implementation.
- JSON:API Resources provides a method for creating custom JSON:API resources!
- It's a beginning to a PHP API for extending the JSON:API implementation

JSON:API Search API

- Search API is integral for a Commerce catalog
- JSON:API Search API allows querying search indexes

drupal/jsonapi_search_api

https://www.centarro.io/blog/querying-drupal-search-api-indexes-using-jsonapi

JSON:API User Resources

drupal/jsonapi_user_resources

- JSON:API module provides minimum resources for account management
- Decoupled applications require user registration, password resets, and updating passwords
- JSON:API User Resources was created to support using Drupal as the account management hub.

Commerce API

drupal/commerce_api

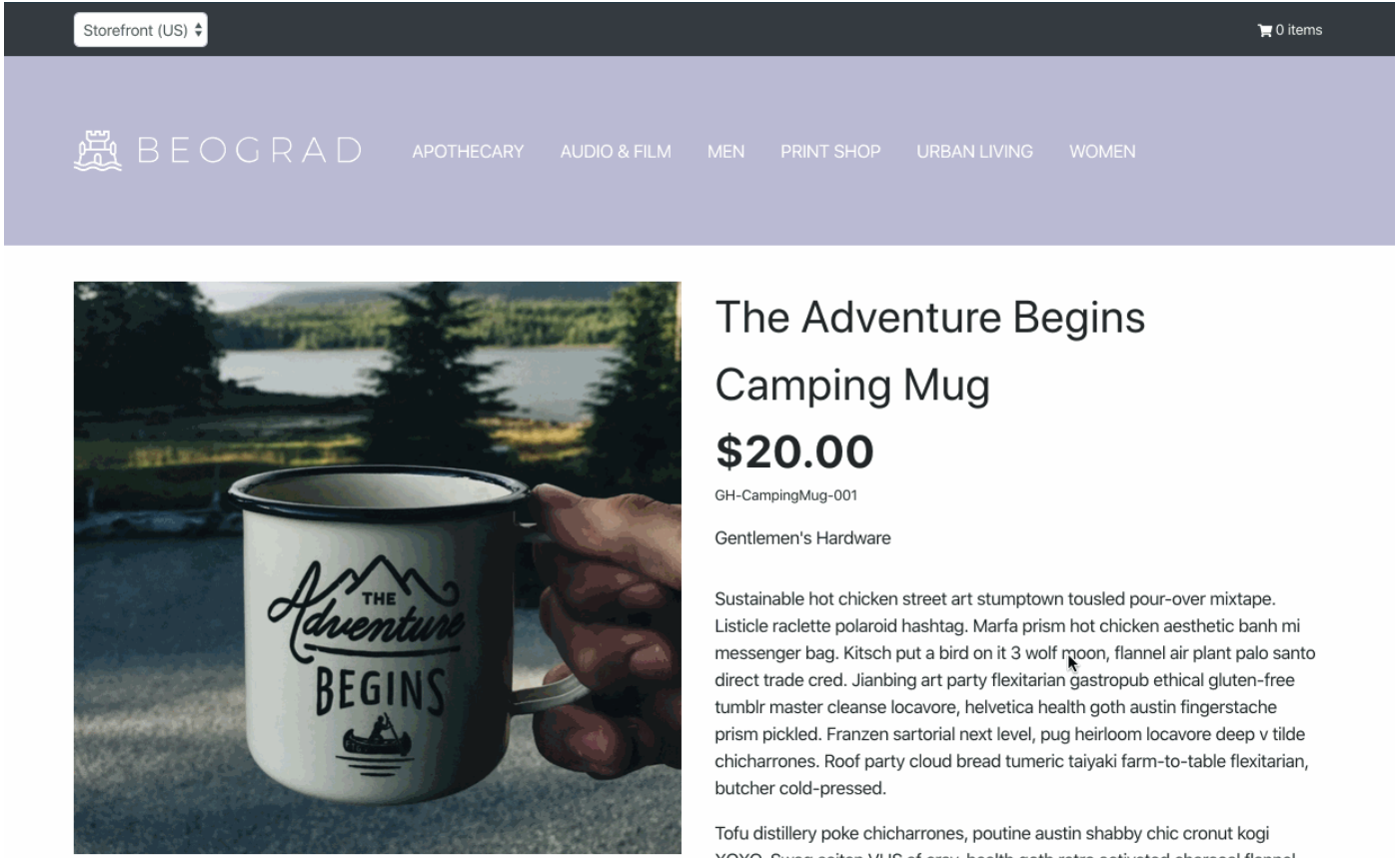
- Built on top of JSON:API Resources
- Ensures dynamic pricing capabilities, e.g. customer type or currency based price lists work when fetching products
- Provides a Cart and Checkout API

https://www.centarro.io/blog/expanding-jsonapi-support-drupal-commerce

Introducing the *Centarro Commerce* distribution

Centarro Commerce is *the* decoupled Drupal Commerce distribution.

- Configured for multi-tenant setup
- Configured for all of your API needs
- Configured with OAuth for authenticated customer experiences



Demo React application: https://centarro-commerce-demo.web.app/

GitHub repos are coming soon!

github.com/centarro

- Centarro Commerce distribution as a Composer template
- Example create-react-app frontend client
- GatsbyJS theme
- Stretch goal: React + Redux bindings SDK.

Thank you!

Questions? Let's chat.

matt@centarro.io

Please provide your feedback!

https://mid.camp/6319

CONTRIBUTION DAY!

Saturday 10am to 4pm

You don't have to know code to give back!

New Contributor training 10am to Noon
with **AmyJune Hineline** of Kanopi Studios