



# Schema.org Blueprints

The fastest way to build standardized content models in Drupal.

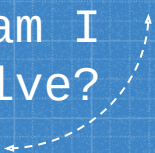


# 1

# Introduction



Who am I &  
what problem am I  
trying to solve?



# Hello!

## I am Jacob Rockowitz

I want to make your life easier,  
by solving complex problems  
with simple, well thought  
out solutions.

You can find me at:  
@jrockowitz



## WHO AM I IN JSON-LD ([HTTPS://SCHEMA.ORG](https://schema.org))



```
{
  "@context": "https://schema.org",
  "@type": "Person",
  "name": "Jacob Rockowitz",
  "givenName": "Jacob",
  "additionalName": "Samuel",
  "familyName": "Rockowitz",
  "description": "Hello! I am Jacob Rockowitz. I want to make your life easier,
    by solving complex problems with simple, well thought out solutions.",
  "gender": "Male",
  "knowsLanguage": [
    "English"
  ],
  "sameAs": [
    "https://www.drupal.org/u/jrockowitz",
    "https://twitter.com/jrockowitz",
    "https://www.linkedin.com/in/jrockowitz",
    "https://jakesbodega.com",
  ],
}
```

## CHALLENGE



We need to create, personalize, and distribute content that is consumable by multiple channels.

## APPROACH



Explore implementing a next-generation Content Management System (CMS) that supports progressive decoupling, structured data, advanced content authoring, and omnichannel publishing.

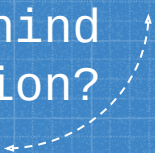


# 2

# Concepts



What are the key  
concepts behind  
this solution?





## HEADLESS/DECOUPLED CONTENT MANAGEMENT SYSTEM (CMS)



A headless Content Management System is a back-end-only content management system that acts primarily as a content repository (and content authoring tool).

A headless CMS makes content accessible via an API for display on any device without a built-in, front-end or presentation layer.

SCHEMA.ORG



Schema.org is a collaborative community activity with a mission to create, maintain, and promote schemas for structured data on the Internet, on web pages, in email messages, and beyond.

<https://schema.org>



**- DEMO -**

Schema.org

## SCHEMA.ORG-FIRST

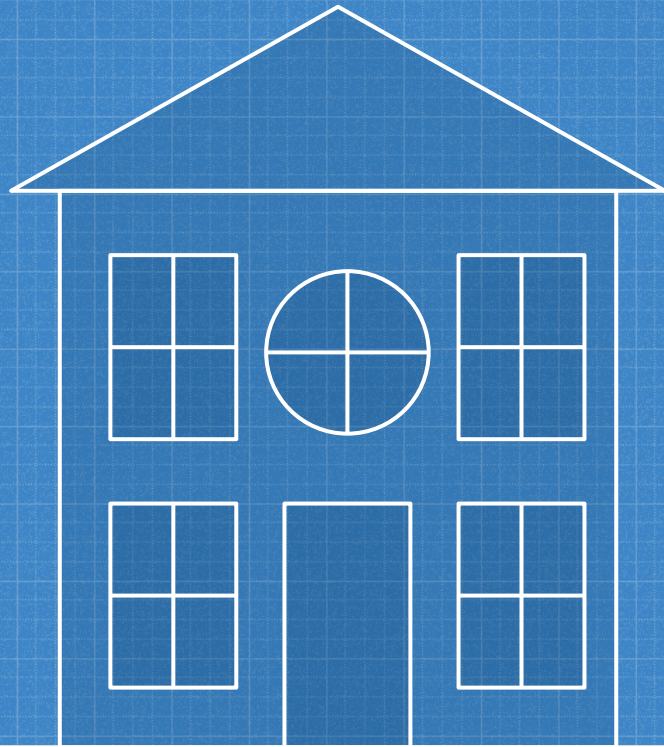


A Schema.org-first approach leverages Schema.org as the foundation for building content models using structured data, which is API-first, standardized, and universal.

## SCHEMA.ORG BLUEPRINTS MODULE



The Schema.org Blueprints module takes a Schema.org-first approach to building content models and structured data in Drupal.



SCHEMA.ORG BLUEPRINTS



Next.js (Frontend)

JSON:API (APIs)

JSON-LD (SEO)

Structured Data (Backend)



**- DEMO -**

Schema.org + Drupal



# 3

## Goals

What are the  
primary, secondary,  
and tertiary goals?





## NINE GOALS

### Primary

Content modeling

1. Structured Data
2. Application Program Interfaces (APIs)
3. Search Engine Optimization (SEO)

### Secondary

Content authoring

4. Administration interface
5. Content authoring
6. Progressive Decoupling

### Tertiary

Collaboration

7. Open source
8. Modular and extendable
9. Stable and reliable

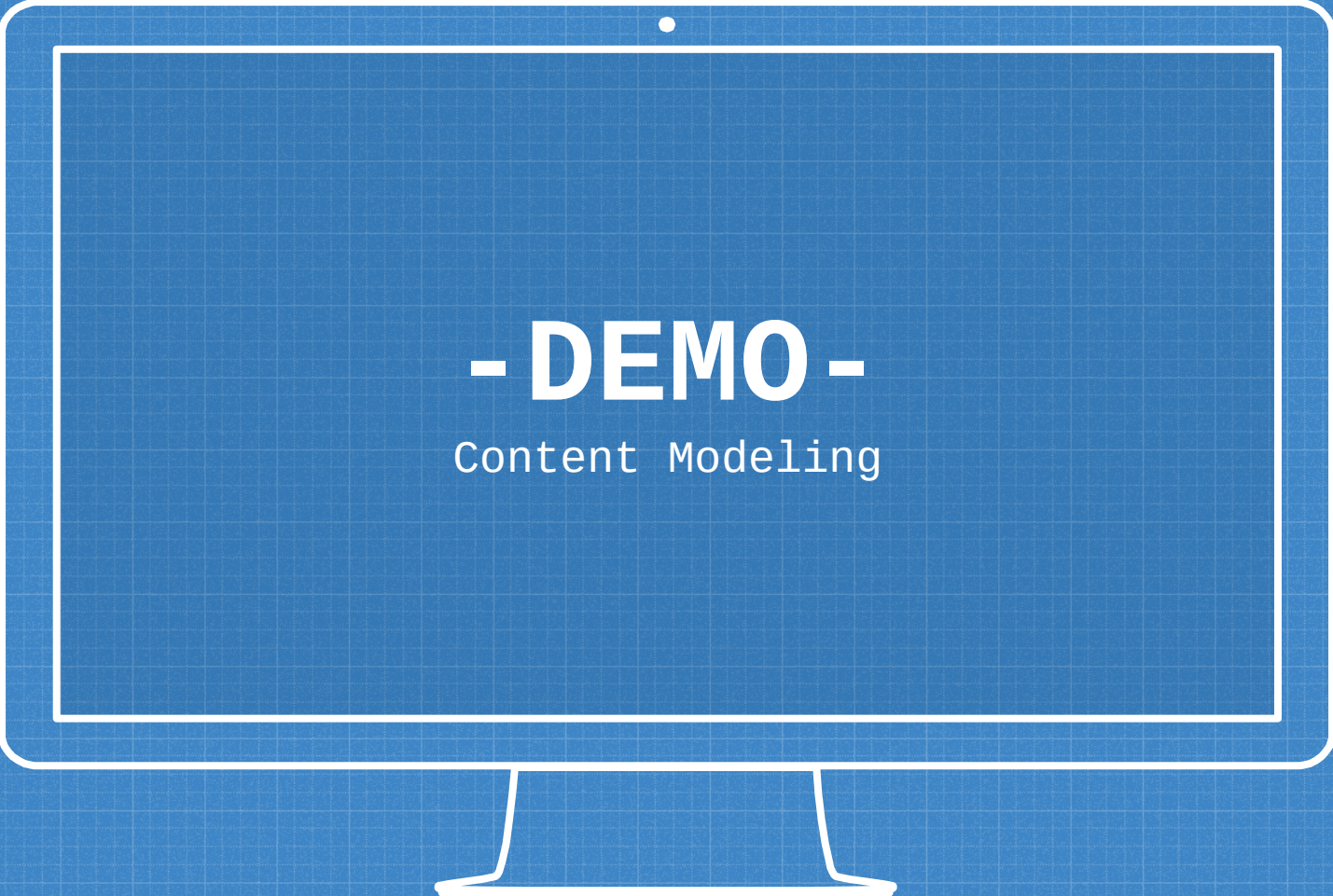


**The Schema.org Blueprints module provides perfect data structures (Schema.org), pristine APIs (JSON:API), and great SEO (JSON-LD).**

## PRIMARY GOALS - Content Models



1. **Perfect data structures (Schema.org)**  
Reporting, mappings, mapping sets, and mapping types.
2. **Pristine APIs (JSON:API)**  
Naming conventions and Open API documentation
3. **Great SEO (JSON-LD)**  
JSON-LD preview with dedicated JSON-LD endpoints



**- DEMO -**  
Content Modeling

## SECONDARY GOALS - Content Authoring



- 4. A radically new administration interface**  
Login page, admin toolbar, customizable dashboards, and environment indicator.
- 5. Implementing content authoring best practices and patterns**  
Multimedia support, embedded content, content browsing, inline entity editing, entity usage, content cloning, drag-n-drop file uploads, and link management.
- 6. Progressive decoupling using Next.js**  
PDF generation, Next.js for Drupal module, live preview, and components generation.



**- DEMO -**

Content Authoring

## TERTIARY GOALS - Collaboration



### 7. **Leverage the best-in-class Open Source tools**

This demo is inspired by popular Drupal distributions. The Schema.org Blueprints module is open source.  
<https://www.drupal.org/project/schemadotorg>

### 8. **Build modular and extendable code**

Well-defined groups of features and functionality, with exposed configurable settings, and extensible APIs.

### 9. **Produce stable, reliable, and testable code**

The Schema.org Blueprints module has test coverage with user interface and command line tools for testing.



# 4

# Benefits

What are the benefits  
of this solution?





# THE BENEFITS OF USING SCHEMA.ORG BLUEPRINTS



Standardization



Simplification



Acceleration

## STANDARDIZATION



### **Easy to understand - less thinking**

Leveraging Schema.org, an open and established standard, makes it easier for organizations to create a content and information architecture that is simple for API consumers and search engines to understand.

## SIMPLIFICATION



### **Simpler to build - fewer resources**

Having a standardized content and information architecture removes the challenge of naming and relating things, making it easier to build rich content with fewer resources.

## ACCELERATION



### **Faster to implement - quicker development**

The Schema.org Blueprints module allows your organization's content and information architecture to be built in a few clicks.



The #1 goal of the Schema.org Blueprints module is to empower organizations to reach their goals by making it easier, simpler, and faster to author, maintain, and share content.





# 5

# Conclusions



What are some big picture  
conclusions?






## CONCLUSIONS

- **Schema.org** makes an excellent standardized foundation for a next-generation Drupal website/application.
- **Drupal's content authoring** UI/UX has become extremely robust and flexible and can fully support Schema.org data structures.
- **JSON-LD** helps to ensure great SEO when decoupling the frontend from the back end.
- **JSON:API** provides stable, reliable, clean APIs to decoupled frontends.
- **Next.js** is poised to become the defacto frontend for Drupal and other headless Content Management Systems.
- **Decoupling** adds complexity that can be mitigated by improving a team's tooling and overall approach.



# Appendix

What are some  
additional resources  
and references?





## GETTING HELP



Project	(README.md)
Roadmap	(docs/ROADMAP.md)
Modules	(docs/MODULES.md)
Drush	(docs/DRUSH.md)
Development	(docs/DEVELOPMENT.md)
Checklists	(docs/CHECKLISTS.md)
References	(docs/REFERENCES.md)

<https://www.drupal.org/project/schemadotorg>

# MY BLOG POSTS ABOUT SCHEMA.ORG-FIRST



April 11<sup>th</sup>, 2022

**The future of our Drupal CMS and Schema.org: APIs, UI, and UX**

<https://www.jrockowitz.com/blog/drupal-schema-api-ui-ux>

October 6<sup>th</sup>, 2020

**Using a Schema.org-First approach to build a single source of truth and a unified Content Management System**

<https://www.jrockowitz.com/blog/schema-org-first>

September 1<sup>st</sup>, 2020

**Exploring a Schema-First approach to Drupal and Content Management Systems**

<https://www.jrockowitz.com/blog/schema-first>

May 9<sup>th</sup>, 2020

**Introducing the Schema.org Blueprints Module for Ambitious Drupal Site Builders**

<https://www.jrockowitz.com/blog/schemadotorg-blueprints>



# POPULAR & INSPIRING DRUPAL DISTRIBUTIONS

## **Contenta**

Contenta is a content API and CMS based on Drupal.

<https://www.contentacms.org/>

## **Acquia CMS**

An opinionated implementation of Drupal 9 for running low code websites in the Acquia platform.

[https://www.drupal.org/project/acquia\\_cms](https://www.drupal.org/project/acquia_cms)

## **Thunder**

Thunder is a Drupal distribution for professional publishers.

<https://www.drupal.org/project/thunder>

## **EzContent**

EzContent is a Drupal installation profile that addresses common content management pain points and accelerates CMS implementations.

<https://www.drupal.org/project/ezcontent>

# FEATURES FOR THE NEXT PHASE OF THIS DEMO



## General

- User management
- Authentication
- Access controls
- Configuration management
- Administrative views
- Advanced APIs

## SEO

- Robots.txt
- Sitemap.xml

## Content authoring

- HTML editor enhancements
- Page layout
- Advanced fields
- Advanced preview
- Image manipulation
- Content moderation
- Workflow
- Revisioning

# Thanks!

## QUESTIONS?

You can find me at:

@jrockowitz

Learn more:

<https://www.drupal.org/project/schemadotorg>

