# Introducing Corrison

The Multi-Functional Framework for Deployment Across Multiple Domains

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### The Corrison Platform

Building a multi-functional platform that can be deployed across multiple domains while maintaining code consistency is a challenge I set for myself and achieved.

I am excited to introduce Corrison, a Django-based platform designed specifically with reusability and tailoring in mind.

Corrison is designed to be fully headless and modular.

In my experience developing eCommerce solutions and websites, I repeatedly encountered the same challenge: clients wanted similar functionality but with unique branding.

The traditional approach of creating separate codebases for each project was time consuming and I went in search of a faster, more sustainable way.

This led to the development of Corrison - a platform that provides enterprise-level functionality while remaining flexible enough to adapt to different business needs.

### **Key Design Principles**

### Service-Oriented Architecture

At its core, Corrison separates business logic from presentation through a comprehensive service layer. This means:

Cleaner Code: Views remain thin and focused on presentation

Reusability: Business logic can be shared across different views and contexts

**Testability:** Services can be tested independently of the web framework

Maintainability: Changes to business rules don't require modifications to views

#### Modular Architecture

Corrison has been arranged into focused Django apps, each responsible for specific functionality:

corrison/
products/ # Product catalog
blog/ # Content management
Pages/ # Build websites and landing pages
LinkHub/ # Display links to your content around the web
Events/ # Coming soon - set up and manage events
Calendar/ # Coming soon - let your clients book appointments

There are plans to include a number of different apps. An events app for setting up and managing events. A calendar that can be used to book clients. Add it to your website with your available dates and clients can book and pay online.

### **One Platform - Multiple Uses**



### Multi-Domain Deployment

Corrison uses a sophisticated settings structure that makes deployment across different environments seamless: **Base Settings**: Shared configuration across all environments **Environment-Specific**: Development, staging, and production settings **Site Settings**: Domain-specific configuration for multi-site deployment.



### **Business Website**

Your website at potteryplace.com. Need a different UK and USA site? Create your site once, set it up on different domains. Need a promo page - promo.potteryplace.com gives you one.

Need a documentation site docs.potterplace.com or a place to sell your pottery. Set up the ecommerce store.



### Same Code Different Domains

Deploy the same codebase across different brand domains with unique:

- Visual styling and branding
- Product catalogs
- Pricing strategies
- Content and messaging

#### **International Markets**

Easily adapt the platform for different regions:

- Currency and language support
- Region-specific product availability
- Localised payment methods
- Compliance with local regulations

# Headless API

Corrison has been created using a headless, API approach. One site. Many uses. It uses a Django-based API that serves content (blog posts, products, pages) to any front-end. Right now, I am using the Astro framework as the frontend.

It includes a CMS backend built with Django and Django REST Framework, powering multiple websites with a shared API infrastructure.

### Single API Endpoint

Corrison uses a Single API endpoint. I deploy the Django app once (e.g. at corrison.yourdomain.com), and it exposes REST or GraphQL endpoints like:

GET /posts/ GET /products/ GET /pages/

### The front-end then fetches the data.

Any front-end, whether it's Astro, React, Vue, Gatsby, Next.js, a mobile app, or even another Django instance. Your front-end framework simply calls those endpoints, receives JSON, and renders it however it likes.



## **CORS & Authentication**

With a plug-and-play system like this one does that mean anyone can set up a site using my domain name?

NO! And I'll tell you for why...

The site has the ability to enable CORS on the API so that requests from domain-a.com, domain-b.com, etc. are allowed.

API keys or OAuth tokens are issued so that each front-end or client registers and authenticates when it asks for data.

So if a domain is not registered with your site it can't get access to your information.

### Astro Front-End

By pairing Corrison's headless Django API with Astro's ultra-fast SSG and islands architecture, we get:

### • Data-first builds

- We use Astro's getStaticPaths/getStaticProps hooks to pull from Corrison's REST or GraphQL endpoints at build time. Every page—blog post, product listing, landing page—is generated as a lean, pre-rendered HTML file, with data baked in for instant load times.

### Islands for interactivity

Minimal client JavaScript is shipped by default; when you need a dynamic component (cart widget, live stock ticker, booking calendar), Astro lets you "island-hydrate" only that piece with React/Vue/Svelte, keeping the rest of the page static.

### • Plugin ecosystem

– We leverage Astro plugins for enhanced images, Tailwind CSS integration, and automatic sitemap/RSS feed generation from Corrison's content. That means your blog, product catalog, and event listings all flow straight from the API into a fully fledged site.

### Incremental builds & preview deploys

– Astro's incremental-build support means only changed pages are rebuilt when you push updates to your Corrison backend. Your latest content goes live in seconds, and preview URLs let you take a look at feature updates before they hit production.

### • SEO & performance by default

 Pre-rendered output, built-in meta-tag controls, and CDN-friendly asset bundling give you top Lighthouse scores and search-engine visibility out of the box. Meanwhile, Corrison's canonical headers and cross-site linking dovetail perfectly with Astro's auto generated sitemap, keeping all your multi-domain sites unified in Google Search Console.



# SEO tips to "unify" sites

You might think that having all these different sites will affect your SEO but there is a way to make sure that does not happen.

A central hub (potteryplace.com) links prominently to each sub-domain.

Cross-linking: In the Footer or Navigation bar of each sub-domain I point back to the central hub domain.

Shared branding: Use the same logo, meta tags, CSS so Google (and users) see them as part of one brand.

### Sitemap & Search Console:

Create a root sitemap at potteryplace.com/sitemap.xml that references all sub-site sitemaps.

In Google Search Console, add the "Domain Property" (potteryplace.com) to cover all sub-domains automatically.

Use of canonical headers (if any content overlaps) so Google knows which URL you prefer indexed.

#### **INITIAL SITES**

Below are the two main sites that make this work. When you visit the main website you can check out any other sites we have included

https://www.corrisonapi.com - Astro Frontend

https://corrison.corrisonapi.com (the Django engine that makes this work)

https://corrisonapi.com/architecture/ The architecture

### **More Information**

For any questions, please contact:

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