

SEO & Search Strategy / Programmatic SEO

Design scalable URL patterns and variable schemas for programmatic page creation (e.g., location + service, brand + product type).

Difficulty: Advanced

Model: GPT-4 / Claude / Gemini

Use Case: URL Architecture, Variable Schema, Programmatic Structure

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Why This Prompt Exists

Most programmatic SEO projects fail because URL structures are inconsistent or poorly designed.

You get:

- URLs that are too long or unreadable
- inconsistent variable ordering (confusing for Google)
- no clear hierarchy (flat vs. nested)
- duplicate URL potential (canonical issues)
- scalability problems as variables multiply

But URL structure is not random.

It is the foundation of your programmatic site architecture.

- Pattern: domain.com/[category]/[subcategory]/[variable]/
- Variable order: most important variable first
- Separator: hyphens for readability
- Depth: 1-3 levels max for most programmatic pages

Without a solid URL schema, your programmatic pages won't scale cleanly.

This framework forces AI to design scalable URL patterns.

The Prompt

Assume the role of a programmatic SEO architect who designs scalable URL structures.

Your task is to create URL patterns and variable schemas.

Generate:

1. URL PATTERN OPTIONS (3-5 options)
 - Option 1: [structure example]
 - Option 2: [structure example]
 - Option 3: [structure example]

2. VARIABLE HIERARCHY
 - Most important variable first
 - Secondary variables
 - Optional variables

3. URL EXAMPLE FOR EACH PATTERN (with real variables)

4. RECOMMENDED PATTERN (with rationale)

5. CANONICALIZATION PLAN
 - How to handle potential duplicate URLs
 - Parameter handling

6. SCALABILITY NOTES

- How pattern handles 1,000+ pages
- Potential issues

INPUTS:

Primary Topic or Category:

[INSERT]

Core Variables (with priority order):

[LIST]

Secondary Variables (if any):

[LIST]

Site Structure (existing URL patterns):

[DESCRIBE]

SEO Tools Requirements (static vs. dynamic URLs):

[STATIC / DYNAMIC / BOTH]

Number of Pages Planned:

[<100 / 100-1k / 1k-10k / 10k+]

RULES:

- URLs should be readable (users should understand them)
- Use hyphens, not underscores
- Keep depth shallow (3 levels max for most pages)
- Most important variable first in URL

- Plan for canonicalization early (avoid duplicate content)
- Consider pagination if relevant
- Test URLs on mobile (length matters)

How To Use It

- Choose a URL pattern that scales to your page volume.
- Order variables by importance (most important first).
- Keep URLs short (under 100 characters when possible).
- Plan canonicalization to prevent duplicate content.
- Test URL patterns with a small batch before full implementation.

Example Input

Primary Topic or Category: Plumbing services

Core Variables: City (highest priority), Service type (medium priority), Emergency (low priority)

Secondary Variables: Neighborhood (for large cities)

Site Structure: domain.com/blog/, domain.com/about/, no programmatic pages yet

SEO Tools Requirements: STATIC URLs (no parameters)

Number of Pages Planned: 1k-10k (all cities in multiple states)

Why It Works

Most programmatic URL structures are afterthoughts.

This framework improves outcomes by forcing:

- multiple URL pattern options (design space)
- variable hierarchy planning (importance ordering)

- concrete examples (testability)
- canonicalization plan (duplicate prevention)
- scalability notes (future-proofing)

Great programmatic URL structures don't just work today — they scale tomorrow.

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