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AI FIRST. AGILE ALWAYS.



Figma Design Tokens

from Pixel to Production





What Are Figma Design Tokens and Why Do They Matter?

Design tokens function as the fundamental design system elements which include colors and spacing and typography and additional elements. Figma allows users to visually handle design tokens which they can export as predefined data formats. Organizations achieve a transformative advantage through design tokens because they establish brand consistency while shortening development times and enabling brand updates to be easily distributed across all products. The centralization of these values enables teams to minimize duplicate work and decrease operational mistakes while enabling designers and developers to share one standard language. The UX designers in an organization have the responsibility to develop and manage Figma

Building a Token Extraction Pipeline

The development teams must first complete all manual work required to convert design materials into programming code before they start building their automated token extraction pipeline. The developers examine each Figma element to collect its color information and distance measurements and font specifications which they will use to build CSS variables for their programming work. The inspect-and-copy workflow presents multiple challenges to users because it contains different instances of difficulties they must overcome.

Manual Token Inspection Overhead:

Developers use Figma and their code editor to check design elements when they build a new UI screen.

"Which color represents the button background?" Figma-#3366ff

"Which padding measurement is used here?" Figma - 16px

"Which font weight should I use?" - Check text properties - 500 (Medium)

Each developer creates their own CSS variables from the same Figma values. Different screens end up with slightly different variable names (--button-blue vs --primary-blue). Designers will change Figma color values but developers need to inspect the updated design before accessing color values which will become outdated when the design moves from #3366ff to #4d85ff.

Consistency Breakdown:

In the absence of a single source of truth, the rate at which design-code drift occurs will only increase:

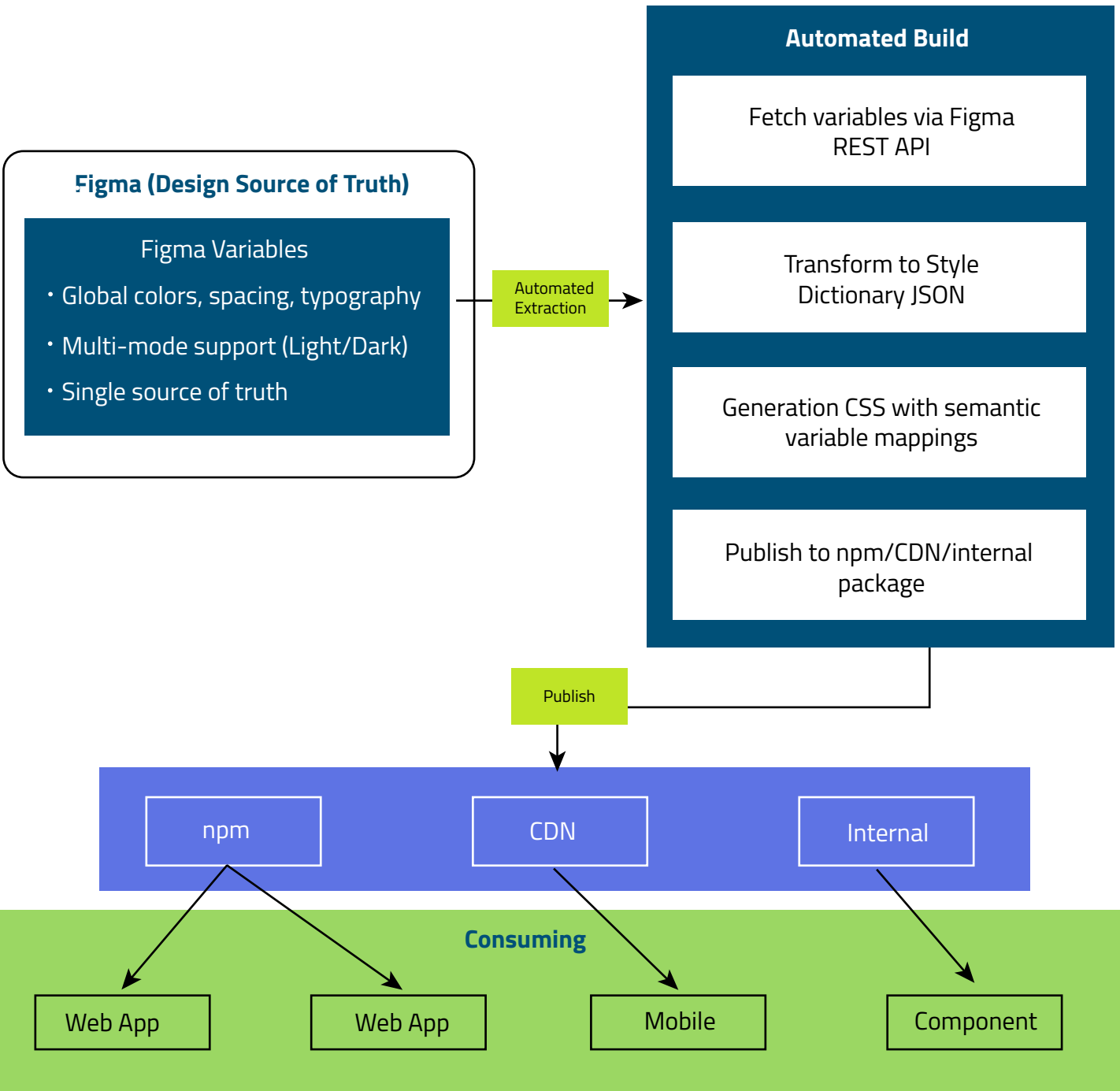
Designer makes changes to the background color in the light mode in Figma - Developers unaware of the changes made

Team A uses --spacing-large: 24px, while Team B uses --gap-big: 24px

Manual copying of dark mode tokens resulted in incorrect values

The Centralized Pipeline Solution

An automated process will help to resolve all the issues faced in the above scenarios by establishing **Figma as the single source of truth**.



Benefits Realized

Zero Manual Token Inspection: Developers never open Figma to check colors/spacing—they reference CSS variables directly

```
/* Before: Manual inspection */
.button-primary {
  background: #3366ff; /* Copied from Figma */
  padding: 16px 24px; /* Measured in Figma */
}

/* After: Semantic tokens */
.button-primary {
  background: var(--uiblue-background-primary-default);
  padding: var(--spacing-08) var(--spacing-10);
}
```

Consistency Across Teams: All projects consume identical token values from centralized CSS file

Team A and Team B use **--spacing-10: 24px (not --spacing-large vs --gap-big)**

Design updates propagate to all projects on next build

Dark mode tokens guaranteed mathematically correct (**postprocessor validates**)

Design-Code Sync: When designers update Figma, perform the following

```
# Developers re-run extraction
npm run build:tokens

# Pipeline fetches latest Figma variables
# Rebuilds CSS with new values
# All consuming apps get update on next dependency update
```

The system achieves reduced code duplication through a single CSS file which replaces dozens of hand-written variable files.

The single file `figma_design_token_variables.css` (1 file) distributed to 50+ projects

No per-project token definitions

No drift between projects

The upcoming blog post will provide an in-depth analysis of the token extraction pipeline.

ABOUT THE AUTHOR



HOMI CHOUDHURY

SENIOR ARCHITECT, PDES

Homi Choudhury is a result-driven Senior Architect with deep experience designing and building enterprise applications. He currently leads AI initiatives and LLM-based architectures, while also driving Model Context Protocol (MCP) adoption for interoperable, enterprise-grade conversational systems. Alongside strong frontend and backend expertise, Homi is known for mentoring teams, optimizing performance, and translating complex technical ideas into clear, practical outcomes for both technical and non-technical audiences.

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For more information, please write to us at business@happiestminds.com