

UI UX Design

GDS Design Verification Plugin

Indegenie

ROLE

UI/UX Design, UX Strategy, Interaction Design, UX Writing

TOOLS

Figma, Design Systems, UX Architecture

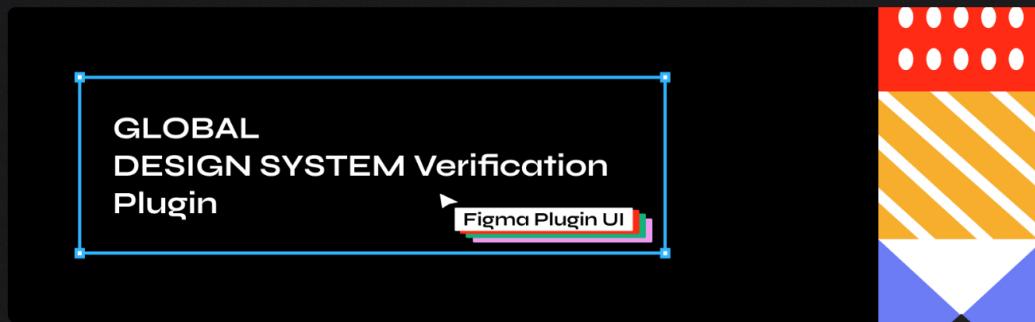
Design System Typography Case Study

-  **Consistency** Unified scale across platforms
-  **Accessibility** WCAG-compliant sizes
-  **Scalability** Easy to extend and adapt

Project Overview

The plugin UI is designed to help designers verify their designs against predefined design system rules without depending on manual reviews. It focuses on clarity, speed, and actionable feedback while handling complex validation logic in the background.

This case study highlights UI decisions, UX flows, and business value, making it suitable for real-world enterprise design system teams.



Problem Definition

Design system violations are usually identified through manual design reviews, which are time-consuming and inconsistent. Designers often receive feedback late, without clear guidance on where or how to fix issues.

Core UX Problem

- Designers depend heavily on senior reviewers
- Feedback is scattered across comments and tools
- Difficult to track issues across multiple artboards
- No structured visibility into design quality

Opportunity

- Allows designers to self-verify
- Clearly explains what is wrong and why
- Reduces review cycles
- Scales across desktop and mobile designs

Manual Review Representation

Aligns to Labeled Issues	Can it be addressed by verification Team?	No.	Screenshot	Page Section / Component	Context	What is the Issue	Solution	Comments
Theming								
Yes	Yes	1		Primary Logo	Theming	The logo(s) has/have not been correctly applied in the theming file for the regular and contrast versions. Logos will reflect properly in the regular version of the component only when applied in the theming file.	Do not detach the logo styling. Instead, select the logo name, click the edit button, and change the new logo.	
Yes	Yes	2		Color	Accessibility	The Primary and Secondary colours are not meeting the WCAG Accessibility standards	Use an accessibility check file www.webaim.org/resources/contrastchecker/ to check the contrast and legibility of the fonts	Primary color not passing the accessibility test
Yes	Yes	3		Color	Theming	Same color can not be used to two color variable	Use the different colors or shade of the same color to the interaction and interaction dark	
Yes	Yes	4		Typography	Theming	Typography has not been updated as per the project needs	Use the approved fonts provided by BI. If you have a brand specific font for both as per the project needs, please do share the	Fonth used in the design file and theming file are different. Use a same font for both as per the project needs.
Context						# of Issues		
						13		
Total								

UX Goals

- Enable designers to verify designs independently
- Reduce cognitive load during design reviews
- Provide clear, actionable error feedback
- Support both Desktop and Mobile workflows

Success Metrics

- Reduced review time per artboard
- Faster issue resolution
- Higher design system compliance rate
- Improved designer confidence and autonomy

Target Users

Primary Users: UI/UX Designers (Junior to Senior)

Secondary Users: Design Leads, Design System Managers

Tertiary Users: Developers, QA (via exported reports)

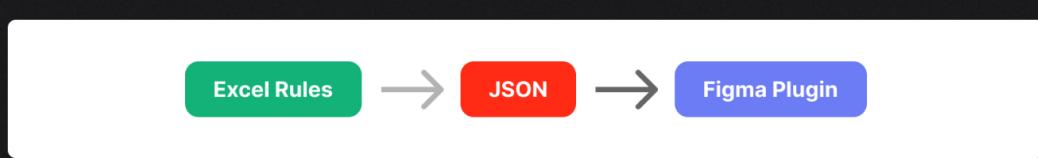
Platform & Technical Context

This verification tool is designed as a Figma plugin, allowing designers to validate their work directly inside the design environment without switching tools.

Technology Context (High-Level)

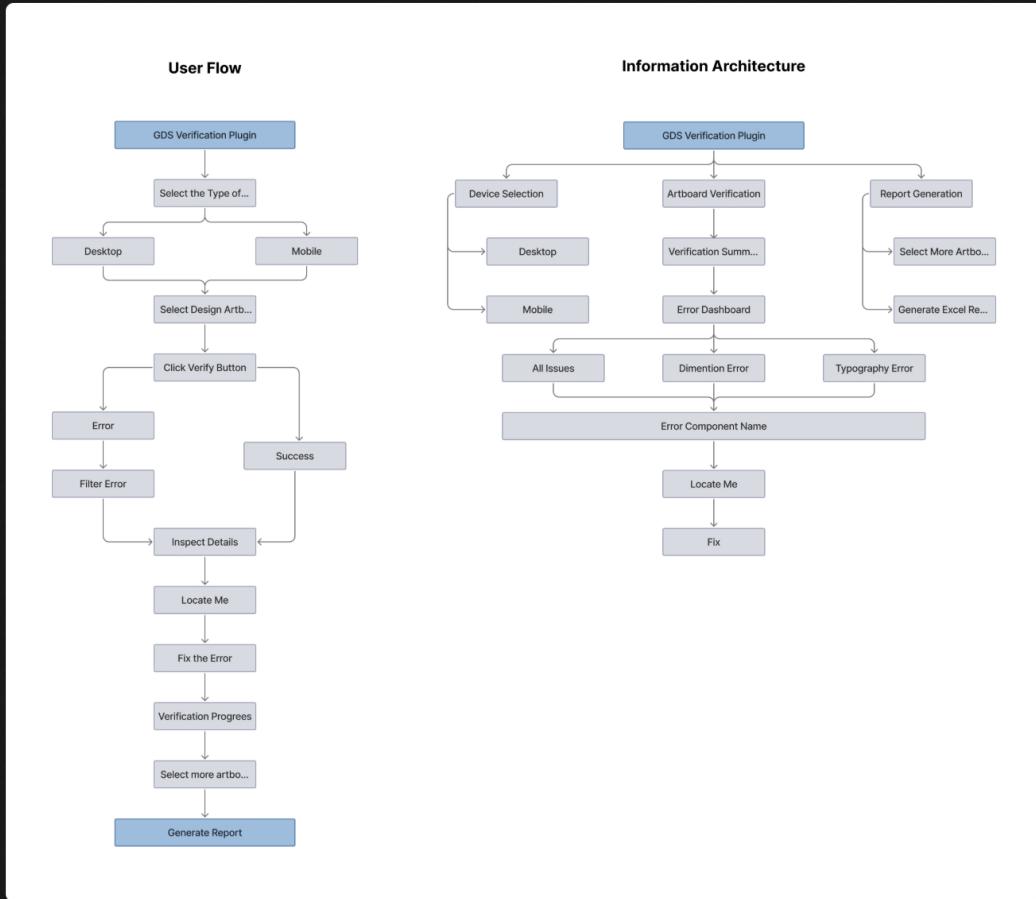
- Plugin UI designed in Figma
- Plugin logic powered by JSON-based rule definitions
- JSON is generated and maintained from structured Excel sheets

The technical details are intentionally abstracted in the UI so designers can focus purely on fixing issues, not understanding implementation complexity.



Design Process Overview

- Understanding existing manual review workflows
- Identifying repeatable design system checks
- Defining rule-to-design mappings
- Structuring UX flows for clarity and speed
- Designing error-first experiences
- Iterating based on usability feedback



Key UX & UI Design Decisions

1. Device-First Selection

Design system rules differ for Desktop and Mobile. Placing device selection at the start prevents confusion and ensures contextual validation.

2. Artboard List with Multi-Select

Designers rarely work on single screens. Multi-artboard selection reflects real workflows and enables batch verification.

3. Summary Before Details

Showing total Errors and Success first gives designers a quick health check before diving deeper.

4. Tab-Based Error Management

Separating Errors and Success avoids clutter and keeps focus on fixes.

5. Category Filters

Typography, Color, Spacing & Padding, Dimensions, Component rules

Plugin UI

GDS Design verification

GDS Design verification

Total number of Artboards in this file : 18

Select up to 5 artboards from the canvas, choose a device type to start the verification

Select the Type of Device

Desktop

List of Desktop Artboards (0/8 Verified)

- Home
- Contact Us
- Products
- Services
- About Us
- Privacy Policy
- FAO

Verify

Total number of Artboards in this file : 18

Select up to 5 artboards from the canvas, choose a device type to start the verification

Select the Type of Device

Desktop

List of Desktop Artboards (0/8 Verified)

- Home
- Contact Us
- Products
- Services
- About Us
- Privacy Policy
- FAO

Verify

GDS Design verification

Desktop Verification Complete! | Issues Found - 8 | Passed Checks - 19

Verified 5 artboards successfully, 5 of 18 artboards verified

Select Artboard: Home

Issues Found | Matches Design System

All | Typography | Spacing | Colour | Font

Hero Primary

Typography style mismatch
Layer: Hero Primary > Content Group > Copy > Headline
Found: **Heading S**
Expected: Heading XXL, Heading XL, Heading L, Heading M

Typography style mismatch
Path: Hero Primary > Content Group > Copy > Headline
Found: **Heading S**
Expected: Heading XXL, Heading XL, Heading L, Heading M

Content Block

Key Fact

Promo Card

To generate a consolidated report verify all artboards | Select more artboards

Artboards verified: 5/8 (Desktop), 0/10 (Mobile)

OR — Generate Report for selected

GDS Design verification

Boehringer Ingelheim Core Theming | Boehringer Ingelheim Core Library

Total number of Artboards in this file : 18

Select up to 5 artboards from the canvas, choose a device type to start the verification

Select the Type of Device

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List of Desktop Artboards (5/10 Verified)

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Verify

GDS Design verification

Boehringer Ingelheim Core Theming | Boehringer Ingelheim Core Library

Total number of Artboards in this file : 18

Select up to 5 artboards from the canvas, choose a device type to start the verification

Select the Type of Device

Desktop

List of Desktop Artboards (5/10 Verified)

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- FAO

Verify

GDS Design verification

Desktop Verification Complete! | Issues Found - 20 | Passed Checks - 32

Verified 3 more artboards successfully, 8 of 18 artboards verified

Select Artboard: Services

Issues Found | Matches Design System

All | Typography | Spacing | Colour | Font

Services

Component Name: Hero Primary

Typography style mismatch
Layer: Hero Primary > Content Group > Copy > Headline
Found: **Heading S**
Expected: Heading XXL, Heading XL, Heading L, Heading M

Typography style mismatch
Path: Hero Primary > Content Group > Copy > Headline
Found: **Heading S**
Expected: Heading XXL, Heading XL, Heading L, Heading M

Component Name: Content Block

Component Name: Key Fact

Component Name: Promo Card

To generate a consolidated report verify all artboards | Select more artboards

Artboards verified: 8/8 (Desktop), 0/10 (Mobile)

OR — Generate Report for selected

GDS Design verification

Desktop Verification Complete! | Issues Found - 24 | Passed Checks - 38

Verified 3 more artboards successfully 18 of 18 artboards verified

Select Artboard: Home

Issues Found | Matches Design System

All | Typography | Spacing | Colour | Font

Services

Component Name: Meta Navigation

Styles for all elements in Meta Navigation component matched the GDS specification

Component Name: Content Block

Component Name: Key Fact

Component Name: Promo Card

To generate a consolidated report verify all artboards | Select more artboards

Artboards verified: 8/8 (Desktop), 10/10 (Mobile)

OR — Generate consolidated report

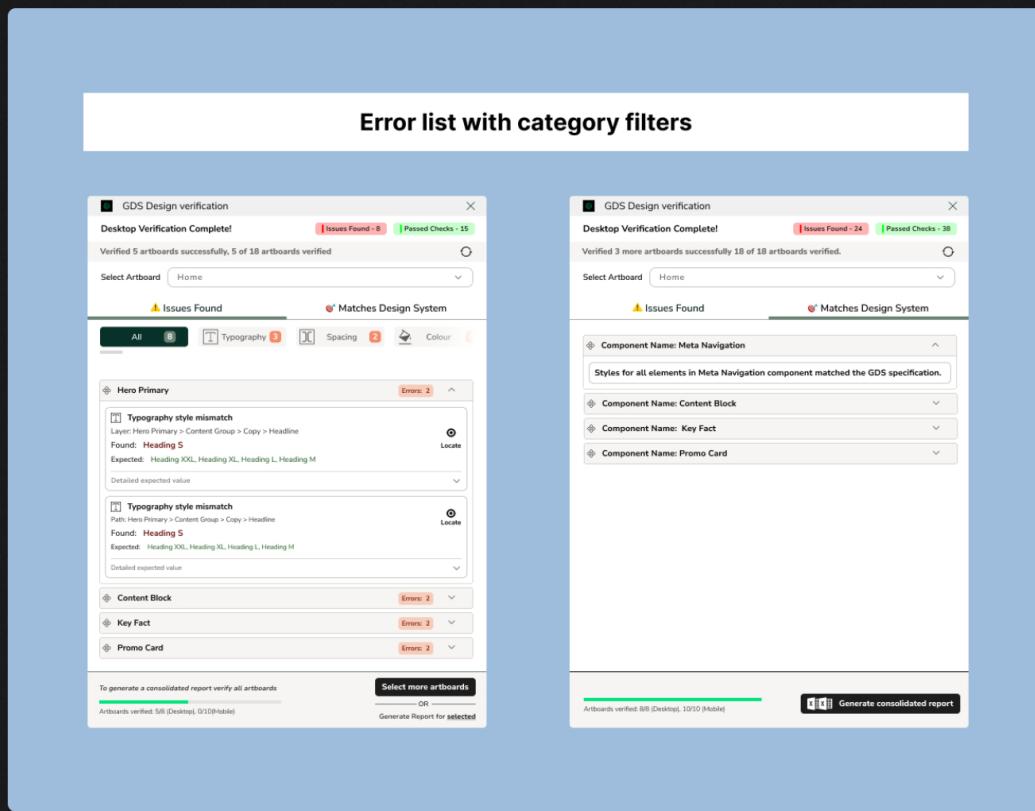
Error Card Structure

- Component name
- Number of errors in the same component
- Error category (typography, color, spacing, etc.)

- Layer name
- Property checked
- Found value vs Expected value
- Locate Me button to jump to the exact layer

Why This Matters

- Removes guesswork
- Saves navigation time
- Encourages immediate fixing
- Builds trust in automated validation



Backend Rule System

Design system rules are authored and maintained in a structured Excel file by the design system team.

Rule Structure

- Component name
- Layer name
- Variant
- Typography (font family, size, weight, line height)
- Padding & Spacing
- Gap values
- Color tokens

Progress Indicator

- Total artboards verified
- Desktop vs Mobile count
- Report generation status

JSON Conversion Layer

The Excel rules are converted into JSON format, which the Figma plugin consumes for validation.

Validation Logic (Conceptual)

- Plugin reads selected artboards

- Extracts layer properties from Figma
- Compares values against JSON rules
- Returns pass or error states to the UI

UX Benefit

- Rules can be updated without redesigning the plugin UI
- Consistent validation across teams and files
- Easy scalability as design systems grow

Component Name	Variants	Identifiers	Layer	Requirement Placement	Sizing	Typography style	Colour style	Background Colour	Internal Spacing
1	Separator	Vertical	Separator		width: 1px;			Primary/Primary 3-100	
			Separator, Use						
					height: 1px;				
								Primary/Primary 3-100	
2	Copy	Default, Cord, Copy, Default	Device, Variants, Style, Size	Copy		Mandatory			
				Copy, Small caption		Small Copy/Small caption	Primary/Primary 3-100		
				Copy, Headline		Headline/Desktop/Regular/Heading S	Functional Colours/Web Black 3-100		
				Copy, Headline, Small		Headline/Desktop/Regular/Heading XS	Functional Colours/Web Black 3-100		
				Copy, Headline		Body Default/Regular	Functional Colours/Web Black 3-100		
				Copy, Copy		Body Default/Regular	Functional Colours/Web Black 3-100		
				Copy, Copy		Body Small/Regular	Functional Colours/Web Black 3-100		
3	Link/With-arrow	Left, Light, Default	Icon, Background, Size	Link/With-arrow	width: 1px; height: 1px; width: 1px; height: 1px;			gray 10px	
			Link/With-arrow, Icon					gray 10px	
			Link/With-arrow, Icon, Icon					gray 10px	
			Link/With-arrow, Icon, Icon, Vector					gray 10px	
			Link/With-arrow, Label	Mandatory	width: 1px; height: 1px; width: 1px; height: 1px;	Body Default/Bold	Neutral Colours/Gray 80	Primary/Primary 3-100	
			Link/With-arrow, Icon					gray 10px	
			Link/With-arrow, Icon, Icon					gray 10px	
			Link/With-arrow, Icon, Icon, Vector					gray 10px	
			Link/With-arrow, Label	Mandatory	width: 1px; height: 1px;	Body Default/Bold	Functional Colours/White	Functional Colours/White	

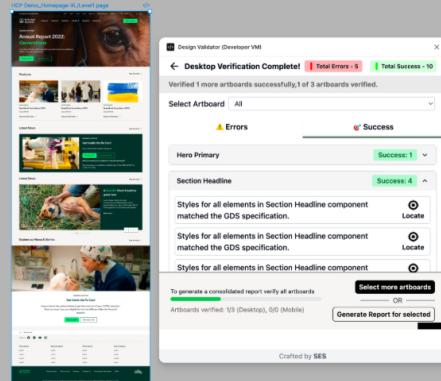
Verification Output & Reporting Experience

Why Excel Reports?

- Easy sharing with stakeholders
- Developer-friendly reference
- Audit-ready documentation

The report includes:

- Artboard name
- Device type
- Component
- Error category
- Found vs Expected values
- Status



Design Validator (Developer VM) | Desktop Verification Completed | Total Errors: 10 | Total Success: 1

Verified 1 more artboards successfully, of 3 artboards verified.

Select Artboard: All

Errors: 10 | Success: 1

Hero Primary

Section Headline

Image on top

Image on top

Content block

Crafted by SES

Artboard Name	Component Name	Type of Success	Screenshot
HCP Demo_Homepage-XL/Level1 page	Hero Primary	Styles for all elements in Hero Primary component matched the GDS specification.	
HCP Demo_Homepage-XL/Level1 page	Section Headline	Styles for all elements in Section Headline component matched the GDS specification.	
HCP Demo_Homepage-XL/Level1 page	Image on top	Styles for all elements in Image on top component matched the GDS specification.	
HCP Demo_Homepage-XL/Level1 page	Image on top	Styles for all elements in Image on top component matched the GDS specification.	
HCP Demo_Homepage-XL/Level1 page	Section Headline	Styles for all elements in Section Headline component matched the GDS specification.	
HCP Demo_Homepage-XL/Level1 page	Content block	Styles for all elements in Content block component matched the GDS specification.	

Artboard Name	Component Name	Type of Error	Layer	Element Missing	Property	Expected	Actual	Overrides	Variant Expected	Variant Found	Screenshot
HCP Demo_Homepage-XL/Level1 page	Header	Style Mismatch	Header	null	width	1366	1366.477531	null	null	null	
HCP Demo_Homepage-XL/Level1 page	Meta Navigation	Style Mismatch	Meta navigation	null	width	1366	1366.477531	null	null	null	
HCP Demo_Homepage-XL/Level1 page	Cards	Style Mismatch	Card	null	height	481.000297	481.000297	null	null	null	
HCP Demo_Homepage-XL/Level1 page	Highlight Banner	Background Color Style Mismatch	highlight banner; icon placeholder	null	null	Desired background color: #f0f0f0; background-color: #f0f0f0; background-size: cover; background-repeat: no-repeat; background-position: center; background-image: url('https://www.google.com/images/branding/googlelogo/1x/googlelogo_color_277x95dp.png'); height: 220px; width: 220px;	url('https://www.google.com/images/branding/googlelogo/1x/googlelogo_color_277x95dp.png') 220px 220px / cover no-repeat;	null	null	null	
HCP Demo_Homepage-XL/Level1 page	Breadcrumbs	Variant match for Component. This found/other implementation might be detached or modified.	nav	null	null	null	null	Background, Home icons, Home Label, Background, Home icons, Home Label	Light, true, N/A		

Usability Outcomes

- Designers fix issues faster with precise navigation
- Reduced back-and-forth with reviewers
- Improved trust in design system rules
- Higher adoption of the plugin across teams

Business Impact

- 60–70% reduction in manual review time
- Scalable design governance without increasing headcount
- Improved design-to-development handoff
- Stronger design system compliance

Key Learnings

- Designers prefer actionable feedback over generic warnings
- Navigation to exact layers is critical for adoption
- Categorization significantly improves efficiency

Future Enhancements

- Real-time validation while designing
- Severity levels for errors
- Jira / DevOps integration
- Version comparison between design updates

Final Thoughts

This GDS Verification Plugin UI design demonstrates how thoughtful UX can simplify a highly complex design governance problem.

- Clear step-by-step flows
- Actionable error feedback
- Strong visual hierarchy
- Scalable system thinking

The plugin empowers designers to own design quality while supporting business scalability.

This case study reflects my ability to design enterprise-ready UX, balance usability with system constraints, and translate abstract design system rules into intuitive user experiences.

Next Project



Let's make something
Let's make something

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