Fusion Design System

Fusion Design System - V2023.1.0







fusion

Geofusion

PREFACE Fusion Design System

This design system guide is a valuable resource for designers and developers who want to create cohesive, scalable, and consistent digital products. In it, you'll find detailed information on how to establish a solid visual and interaction language, define component standards, and structure the architecture of an effective design system. With this guide, you will be able to speed up the process of creating digital products, increase the efficiency and quality of your work, and deliver exceptional experiences to your users.





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CHAPTER I Concept

by **Samuel Bember Simeão**

The design system is a set of design guidelines, components, and patterns that help ensure consistency in appearance and user experience across all company products and platforms. It was created with the aim of making the work of designers and developers easier, promoting efficiency and speed in the process of creating user interfaces and brand experiences. Furthermore, the design system also helps to establish a strong and cohesive visual identity for our company, ensuring that all of our communications are consistently recognized by our customers.



Introduction

Library ecosystem

A design system's library ecosystem is made up of a set of code libraries that contain components, styles, and interaction logic that allow design and development teams to work more efficiently and consistently.

These libraries are created to ensure that components and styles defined in the design system are easily accessible and reusable in future projects. Libraries also enable development teams to create new components and designs more quickly and consistently by ensuring that all components created fall within defined design guidelines.





Code vs Design

What's in code is in design

We seek to mirror as much as possible what is in code and what is in design, only in this way will we achieve the standardization and scalability between Geofusion products that we so desire.

Our design files in Figma must be the faithful copy of our products in production, in addition, they must be an objective and intuitive guide so that our interfaces and components as well as their behaviors are developed by our development team without any noise.





Design Tokens

The first pieces of the Design System

Design tokens are individual values that represent design properties in a design system, such as colors, font sizes, and spacing. They are defined once and can be reused across multiple components and projects, ensuring visual consistency across the platform.

By using design tokens, our developers and designers can work together more efficiently and consistently, reducing the need to constantly redefine design properties.

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 $font-size-lg \longrightarrow 32px$

\$brand-color-primary-pure ----- #000000

\$brand-color-secondary-pure → #1474FF



Global Tokens

Used in all Geofusion products

Global Tokens serve as universal building blocks within our design ecosystem. They encapsulate essential elements such as colors, typography, spacing, and more, establishing a unified language that resonates throughout all Geofusion products. These tokens aren't just static values; they represent dynamic variables that can adapt to different contexts and interfaces while maintaining coherence.





Brand Tokens

What changes between products

Brand Tokens encapsulate key brand attributes, such as colors and typography, providing a cohesive framework that guides the visual representation of our products. By embedding Brand Tokens within the broader Global Tokens ecosystem, we establish a unified brand language that permeates every aspect of the user experience.

OnMaps





Motion Tokens

Standardizing and scaling microinteractions

We currently establish some movement types and speed options to create Motion Tokens, which are applied to transitions in our components, in a hover for example.

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Slow + Medium + Fast



Components

How Tokens Create Components

Components are the elements that are repeated in our interfaces and that were created from our Design Tokens. They can be Base Components or Components and can be part of a Core or Team library.

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Label	Shape
font-family	fill
<pre>\$font-family-highlight</pre>	<pre>\$brand-primary-pure</pre>
font-weight	border-radius
<pre>\$font-weight-bold</pre>	<pre>\$border-radius-sm</pre>
font-size	
\$font-size-xs	
line-height	
\$line-height-lg	

Button Primary

fill \$color-neutral-high-pure





Base Components

Those who are indivisible

They are the smallest parts of our interfaces like a button, a checkbox or a title. They are strongly present in our Core libraries, but nothing prevents a Base Component from also appearing in a team library.





Components

Composites from a Base Component

We bring together Base Components to create Components, both in our Core libraries and in our Team libraries. It's worth remembering that we use spacing DesignTokens to support this composition.

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Base Components



Heading Small

Button Primary



Components

Multi-brand logic

Multi-Brand Logic are the adaptive elements within our design system that dynamically respond to different brand identities across Geofusion's portfolio. These components encapsulate logic and rules that govern visual variations, allowing us to seamlessly integrate multiple brands into our products without compromising consistency or scalability.









Variables only

When we change only Brand Tokens

In these cases, we only switch the Brand Tokens that are pointing to our library as a dependency and thus change the colors and/or typographic family from one brand or theme to another.

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OnMaps **Button Primary** \$secondary-color #000000 Calculadora **Button Primary** \$secondary-color #01BF69



Different styles

When brands can have different style types

When building the themes for each brand, in addition to the different variables that we brought from our Brand Tokens, we can change the Design Tokens that we apply to each component.

OnMaps

Heading Small

Label

Inp

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Heading Large

Heading Medium

Calculadora

Heading Large

Heading Medium

Heading Small

1	Label
out Default	Input Default
utton Primary	Button Primary



Naming Logic

Good naming practices

Here we do not use Atomic Design as a basis, we create a simpler separation: basically we understand that there are Design Tokens, Base Components and Components, but regardless of what they are, we use the same naming structure.

Is it a tag, a button, a modal or a card?

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What + Semantics + Variable

Is it primary, secondary, standard, inverse? What is the reason for each one to exist?

Is there variation in size, tone, position, etc.?



What



+	Semantics	+	Variable
	Primary		Default
	Secondary		Default
	Secondary		With Icon
	Small		
	Large		



Base Components

We look for semantics in anatomy

We use the difference in anatomy, whether it is big or small, horizontal or vertical, has an image or not to create differentiation between our components. Also remember to consult already consolidated references so as not to waste energy reinventing the names of very basic components.





Components

As for the more complex ones, we differentiate them according to the context



Login
E-mail
Insira seu e-mail
Senha
Insira a sua senha of
Esqueceu sua senha?
Cadastre-se Entrar



Design Tokens

The same logic applies to our Design Tokens

What they are (color, border, etc.), their semantics (what differentiates within the same type) and, in this case, the variables become their scale.

What	+	Semantics	+	Variable	
Color		Brand		Light	
Color		Neutral		Dark	
Border		Radius		Pill	
Border		Widht		Thin	





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CHAPTER II Global Tokens

by **Diogo Cassio Pereira**

Global Tokens are like the visual design atoms of the Design System (the smallest part of the design) specifically, they are named entities that store visual design attributes. We use them in place of hardcoded values (such as hex values for colors or pixel values for spacing) in order to maintain a scalable and consistent visual system for UI development. So we can say that Design Tokens are variables that carry certain information that is not dependent on a specific technology and that will serve as the basis for creating all components.



Line Height

Line Height is the vertical distance between two lines of text, measured between the baselines of two consecutive lines. Remembering that the baseline is the horizontal line that passes under the letters that do not extend downwards. Although 100% is the standard, we have other options to increase this spacing for aesthetic and accessibility purposes.



Lorem

\$line-height-md

MD

133%

\$line-height-lg

LG

150%

\$line-height-xl

XL

170%

Font Size

It is a value that represents the size of the font in points (pixel), that is, how many points there are in its height. This value must be considered carefully to avoid reading difficulties, as well as to create hierarchy between bodies of text. Conventionally, the REM value corresponding to 16px is used, therefore, a good practice in typographic scaling is to use values that are multiples of 8. We have a wide variety to diversify sizes for different situations and devices.







\$font-size-xxl

Aa \$font-size-sm

SM

20px

Aa

\$font-size-xxxl

XXXL **48px**

Aa \$font-size-md

MD

24px



\$font-size-display

Display

56px

Border Radius

It is a property that defines the radius of the corners of an element. That is, how rounded they will be. This value can be individual, for each corner, or global. We will prefer to apply value in points (pixel), but in the case of "Circular" it should only be applied in percentage and on all edges.



\$border-radius-none

None

0рх



\$border-radius-xs

XS

4рх







\$border-radius-lg

Large

24px



\$border-radius-pill

Pill

≥ 500px



\$border-radius-circular

Circular

50%

Border Width

It is the value in points (pixel) for the edges of an element. This property can receive different values on its four edges. Practically speaking, the value indicates how thick the element's edges will be. The value 0px means that the element has no borders. The little variation serves to maintain a good standard of the components without making them too rigid.



\$border-radius-none

None

Орх



\$border-width-hairline

Hairline **1px**



\$border-width-thin

Thin

2рх





\$border-width-thick

Thick

4px



\$border-width-heavy



8рх

Opacity

Opacity indicates the transparency of an element, that is, how visible the surface it overlaps is. 100% opacity indicates that the element is completely opaque (has no transparency), while 0% opacity means that the element is completely transparent, therefore, it appears to be invisible. This token is very useful for variations of component actions, such as hover, click, etc.



\$opacity-level-semiopaque

Semi Opaque

0.80



\$opacity-level-intense

Intense

0.64



\$opacity-level-medium

Medium

0.32





\$opacity-level-light

Light

0.16



\$opacity-level-semitransparent

Semi Transparent

0.08

Shadow

Property that allows you to add shadow to texts or elements. This property receives 4 values, the value of the X axis, Y axis, blur (blur) and alpha (opacity). We prefer to keep only shadows external to the element and little variation, precisely to maintain a good standard of the components.

\$shadow-level-1

Level 1

- X: 0px Y: 4px B: 8px
- α:8%



\$shadow-level-2



X: 0px Y: 8px B: 24px a: 16%





X: 0px Y: 16px B: 32px a: 16%



Level 4

\$shadow-level-4

X: 0px Y: 16px Β: 48px α: 24%

Spacing

Spacing indicates the distance between two or more elements. The spacing property is divided into two types, external spacing, which indicates the distance from a block of elements to another block, and internal spacing, which indicates the distance between the elements of a given block. As a universal measure of good practice, the spacing scale values are made in multiples of 8, but we added some spacing between smaller ones to give more design freedom.









Spacing Inset

Also known as padding, internal spacing is the value that represents the distance from an element to its edge. For example, a button usually has text inside a box, the internal spacing indicates the distance from the text to the edge of the box. In some cases we can use padding only vertically so that the components vary without depending on the size of the internal writing.



\$spacing_inset-quarck

Q	uarck	

V: 4 H: 4



\$spacing_inset-nano

Nano

V: 8 H: 8



\$spacing_inset-xs

X	S
V:	12
H:	12



\$spacing_inset-sm

V:	16
H:	16

Home Times Sobre

Spacing inset/padding



\$spacing_inset-md

MD

V: 20 H: 20



\$spacing_inset-lg

LG

V: 24 H: 24



\$spacing_inset-huge

Huge

V: 32 H: 32



\$spacing_inset-giant

Giant

V: 40 H: 40

Motion Tokens

Motion design refers to the application of animations and transitions to interface elements such as buttons, menus, icons and images. These animations are designed to create a more engaging and intuitive user experience by guiding the user through interacting with the interface. It also helps provide visual feedback for user actions. These Motion Tokens elements can be used independently or all in one component to generate a complete effect, selecting one of each of the 4 elements below.



\$type-transformation
\$type-fade
\$type-transition
\$type-hover

Туре

Tipo de movimento



\$direction-top-down
\$direction-down-top
\$direction-left-right
\$direction-right-left

Direction

Direção da animação





\$ease-linear
\$ease-in
\$ease-out
\$ease-in-out

Easing

Como uma animação inicia e finaliza em termos de aceleração



\$trigger-on-click
\$trigger-on-drag
\$trigger-while-hovering
\$trigger-while-pressing
\$trigger-gamepad

\$delay-instant
\$delay-200ms
\$delay-400ms
\$delay-800ms
\$delay-1500ms

Trigger e Delay

Como é acionada e quanto tempo após ser acionada a animação se inicia



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CHAPTER III Global Colors

by **Igor Passos**

Global colors strengthen brand colors within Geofusion products and harmoniously standardize the use of colors between applications.



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Color palette

Global colors are grouped into color palettes. To create the palettes, colors were selected that speak to Geofusion's visual identity. They start from 11 main colors that vary in their gradations from the lightest to the darkest spectrum, allowing adaptability, scalability and diversity in the application and creation of new themes.



Innovative Sophisticated Flexible

Reliable Dynamic Accessible

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Construction

Following the representations and meanings of the "Geofusion" brand, the creation of the color palette was supported by 3 main pillars: Flexibility, Dynamism and Accessibility. Pillars that allow freedom in the creation of new components.



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I. Accessibility

Dynamic Color is designed to meet accessibility standards for color contrast. The tonal palette system is key to making any color scheme accessible by default.

II. Dynamism

The diversity of colors within the 11 families allows representations of different brands or segments in the creation of components or system feedback signs in Geofusion products.

III. Flexibility

Within these color families, it is possible to add new colors, which also allows for even more scalability and versatility in the Geofusion product universe.



The Global Color Palette is responsible for fueling all themes of Geofusion's independent products and components.



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In practice

Any and all themes of Geofusion products

Feeding Themes

Themes are groupings of colors fed by tokens that must be used following the rules proposed for creating product components.

Global Color Palette

00	red500	red600	red700	red800	red900
95E	# F44336	# B73229	# 7A221B	# 3D110E	# 180705
400	pink500	pink600	pink700	pink800	pink900
371	# E8004D	# AE003A	# 740027	# 3A0013	# 170008
2400	purple500	purple600	purple700	purple800	purple900
1C5	#673AB7	# 4D2C89	# 341D5C	#1A0F2E	# 0A0612
100	blue500	blue600	blue700	blue800	blue900
3CE	# 218CC2	# 196992	# 114661	# 082331	# 030E13
100	cyan500	cyan600	cyan700	cyan800	cyan50
9DD	# 00BCD4	# 008D9F	# 005E6A	# 002F35	# 001315
400	green500	green600	green700	green800	green900
A33	# 80BD00	# 608E00	# 405F00	# 202F00	# 0D1300
v400	yellow500	yellow600	yellow700	yellow800	yellow900
433	#FFB500	# BF8800	# 805B00	# 402D00	# 1A1200
e400	orange500	orange600	orange700	orange800	orange900
D5E	#FF5C36	# BF4529	# 802E1B	# 40170E	# 1A0905
400	brown500	brown600	brown700	brown800	brown900
76D	# 795548	# 5B4036	# 3D2B24	# 1E1512	# 0C0907
400	grey500	grey600	grey700	grey800	grey900
1B1	# 9E9E9E	# 777777	# 4F4F4F	# 282828	# 101010
ey400	blue-grey500	blue-grey600	blue-grey700	blue-grey800	blue-grey900
E76	# 324A54	# 26383F	# 19252A	# 0D1315	# 050708

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CHAPTER IV Colors in Data

by **Samuel Bember**

Colors can be a powerful tool for representing data visually, as they can help highlight patterns and relationships in data and make it easier for people to understand.

Categorical

Categorical colors help users map non-numeric meanings to objects in a visualization. These are designed to be visually distinct from each other. Spectrum's 6-color categorical palette has been optimized to be distinguishable for users with color vision deficiencies.

6 color pallete

12 color pallete

category-1	category-2	category-3	category-4	category-5	category
ເວີ cyan500	C purple500	(=) orange400	🖙 green500	CP purple300	ເອ pink5

Sequential

Categorical colors help users map non-numeric meanings to objects in a visualization. These are designed to be visually distinct from each other. Spectrum's 6-color categorical palette has been optimized to be distinguishable for users with color vision deficiencies.

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Alto

Sequential Viridis

Sequential Magma

The matplotlib colormaps introduced in 2015 are widely popular, with implementations of the palettes in R, D3js, and others. Popular for good reason, the palettes are colorblind friendly, retain grayscale representational

clarity, and are generally aesthetically pleasing.

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https://waldyrious.net/viridis-palette-generator/

Sequential Turbo

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We tested Turbo using a color blindness simulator and found that for all conditions except Achromatopsia (total color blindness), the map remains distinguishable and smooth. In the case of Achromatopsia, the lower and upper extremes are ambiguous. As the condition affects 1 in 30,000 individuals (or 0.00003%), Turbo should be used by 99.997% of the population.

Source: https://ai.googleblog.com/2019/08/turbo-improved-rainbowcolormap-for.html

Sequential Purple

Sequential Green

https://r-charts.com/color-palette-generator/

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Sequential Red

Sequential Cyan

Divergent

Divergent colors also have numerical meaning. They are useful when dealing with negative values or ranges that have two extremes with a baseline in the middle. Divergent palettes are a pair of 2 color gradations that meet in the center.

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High

Low

Diverging Red-Yellow-Blue

Diverging Yellow-Green

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Diverging Orange-Yellow-Purple

When to use Categorical Colors

Categorical colors are not ordered. Use them for categorical scales. Do not use them for ordinal, interval, or ratio scales.

When use Sequential Colors

Sequential colors are ordered. Use them for ordinal and interval scales. It is also acceptable to use them for ratio scales. Don't use them for categorical scales.

ОК

 \checkmark

When to use Diverging Colors

Divergent colors are ordered. Use them for ordinal and ratio scales, especially when there is a significant average value. These can also be used for interval scales. Don't use them for categorical scales.

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Ratio Scale

 \checkmark

Use categorical colors only in certain cases

Instead of giving each item a categorical color, code them with a secondary dimension — ideally, one with few values. An exception is when the chart is paired with other charts that use colors for the same categories.

Use up to 6 categorical colors

It's best to use fewer than 6 colors in the Spectrum categorical color palette. Categorical colors become more difficult to understand at 6 colors and extremely difficult to understand at 12. If you need more than 6 colors, try alternative visual encoding, such as position, which may be easier to read and scale better.

Do not use categorical or divergent colors with sequential data

Categorical colors are optimized for maximum differentiation. Using them for sequences (ordinal, interval or proportion scales), even when organized by hue, makes it difficult for users to understand.

Cut divergent colors

Divergent colors are designed to be balanced from a central midpoint. When the maximum value in your data is not the same distance from the center as your minimum value, change the palette to reflect those values. It is better to cut unnecessary colors; do not distort the palette to adjust them.

Be consistent with colors in charts

It's important to be consistent with color when there are multiple charts in the same view. If a color is used to represent something in a chart, all other charts must reflect that relationship.

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CHAPTER IV Temas

by **Eliza Mizziara**

Theme colors are the mandatory structure that all Geofusion products must follow in order to standardize color tokens and allow for theme variability within products. All components must follow this color logic.

Theme Structure

Library ecosystem

A Design System can be composed of multiple libraries and dependencies, this changes radically from company to company. Geofusion's growth strategy is the platform concept, that is, several products within the same environment. To achieve this, the Design System needs to allow scalability of libraries. When it comes to colors, there is a global palette with all pre-defined colors and their nuances, each library will have a theme color (secondary), allowing differentiation between products but ensuring visual integrity.

Primary Key Color - Global

Variações do Tema

Library ecosystem

Using the color variations of the global palette as much as possible, after the product's primary colors have been defined, the theme must receive its dark variation.

Primary Key Color

Primary functions are used for key UI components such as FAB, prominent buttons, active states, as well as the tint of raised surfaces. In order to maintain visual consistency, the primary colors will not be changed between Geofusion products. In the example below, we see the application of primary colors in different products.

primaryon-primaryImage: Good blue-grey700Image: Good blue blue blue blue blue blue blue blue	primary-container
→ Login	→ Login
Insira seu e-mail	Insira seu e-mail
Senha	Senha
Insira a sua senha 💿	Insira a sua senha
Esqueceu sua senha?	Esqueceu sua senha?
OnMaps	Score de Sucesso Cadastre-se

Secondary **Key Color**

Secondary functions are used for less prominent components in the user interface, such as filter chips, while expanding the opportunity for color expression. Note that in the examples below, the primary colors do not change between products, but the secondary colors do.

Feedback Colors

Feedback interactions are extremely important within a system, they serve to inform the user whether their actions were processed correctly or whether they need to be careful and/or careful before executing something. To support these interactions, colors are used, which follow an international convention, the same used in traffic lights. In the example below we see the feedback colors and an example of application.

Neutral Colors

Neutral colors are used in the background, surfaces, typography, shadows, etc. They act as the foundation of the system, allowing primary, secondary, feedback, and data colors to stand out appropriately. Neutral colors are also global elements of Geofusion products.

In the example below we see the application of neutral colors to various elements on the screen, such as background, cards, surfaces, typography, shadows, etc. This wide use of neutral colors in Geofusion platform products increases quality, scalability and visual cohesion.

Visualizados recentemente

Todos os mapas

🖽 Nome do mapa