

Button

<https://playdocs1.orangeriver-ad055946.westus2.azurecontainerapps.io/play-docs/docs/ui-components/Inputs/Button>

Button

The Button is one of the most commonly used fundamental components of AAVA Play. It is not just a click target. It's the pulse of the interface—alive, intentional, and radiant with purpose.

The component provides a highly customizable clickable element with advanced visual effects including glass morphism, multiple interaction states, and comprehensive theming options. It supports various variants, sizes, icons, and custom styling while maintaining accessibility standards.

```
<aava-button>
```

How to use

```
import { AavaButtonComponent } from "@aava/play-core";
```

```
import { AavaButtonComponent } from "@aava/play-core";
```

Interactive Matrix

Explore all button combinations with our interactive playground.

```
<div class="matrix-demo"> <div class="demo-header"> <!-- Matrix Table --> <div class="matrix-table-container"> <!-- Size Headers --> <div id="size-tabs" class="size-tabs"> <aava-tabs [tabs]="sizeTabs" [activeTabId]="selectedSize" variant="button" size="sm" [showContentPanels]="false" (tabChange)="onSizeTabChange($event)" class="size-tabs-container"> </aava-tabs> </div> <!-- Matrix Grid --> <div class="matrix-grid"> <!-- Column Headers --> <div class="matrix-header"> <div class="mode-header">Mode</div> <div class="fill-header"> <ngFor="let fill of fills">{{ fill }}</div> </div> <!-- Matrix Rows --> <div class="matrix-row" *ngFor="let mode of modes"> <div class="mode-label">{{ mode }}</div> <div class="button-cell" *ngFor="let fill of fills"> <ng-container > <aava-button *ngIf="getButtonConfig(mode, fill, selectedSize) as config" [label]="config.label" [pill]="config.pill" [outlined]="config.outlined" [clear]="config.clear" [iconName]="config.iconName" [iconPosition]="config.iconPosition || 'left'" variant="primary" class="matrix-button" *ngIf="!config.available" ></aava-button> <div> Not Available </div> </ng-container> </div> </div> </div> </div> </div></div>
```

```
<div class="matrix-demo"> <div class="demo-header"> <!-- Matrix Table --> <div class="matrix-table-container"> <!-- Size Headers --> <div id="size-tabs" class="size-tabs"> <aava-tabs [tabs]="sizeTabs" [activeTabId]="selectedSize" variant="button" size="sm" [showContentPanels]="false" (tabChange)="onSizeTabChange($event)" class="size-tabs-container"> </aava-tabs> </div> <!-- Matrix Grid --> <div class="matrix-grid"> <!-- Column Headers --> <div class="matrix-header">Mode</div> <div class="fill-header"> <ngFor="let fill of fills">{{ fill }}</div> </div> <!-- Matrix Rows --> <div class="matrix-row" *ngFor="let mode of modes"> <div class="mode-label">{{ mode }}</div> <div class="button-cell" *ngFor="let fill of fills"> <ng-container > <aava-button *ngIf="getButtonConfig(mode, fill, selectedSize) as config" [label]="config.label" [pill]="config.pill" [outlined]="config.outlined" [clear]="config.clear" [iconName]="config.iconName" [iconPosition]="config.iconPosition || 'left'" variant="primary" class="matrix-button" *ngIf="!config.available" ></aava-button> <div> Not Available </div> </ng-container> </div> </div> </div> </div></div>
```

```
type ButtonMode = 'pill' | 'default' | 'action' | 'quick-action';type ButtonFill = 'filled' | 'outline' | 'clear';type ButtonSize = 'xs' | 'sm' | 'md' | 'lg' | 'xl';interface ButtonConfig { mode: ButtonMode; fill: ButtonFill; size: ButtonSize; pill: boolean; outlined: boolean; clear: boolean; iconName?: 'left' | 'right' | 'only'; iconName: string; label: string; available: boolean; iconColor?: string;}modes: ButtonMode[] = ['pill', 'default', 'action', 'quick-action']; fills: ButtonFill[] = ['filled', 'outline', 'clear']; sizes: ButtonSize[] = ['xsmall', 'small', 'medium', 'large', 'xlarge']; sizeTabs: TabItem[] = [ { id: 'xsmall', label: 'XSmall' }, { id: 'small', label: 'Small' }, { id: 'medium', label: 'Medium' }, { id: 'large', label: 'Large' }, { id: 'xlarge', label: 'XLarge' } ]; variants: ButtonVariant[] = [ 'primary', 'secondary', 'success', 'warning', 'danger', 'info' ]; selectedSize: ButtonSize = 'md'; selectedMode: ButtonMode = 'pill'; selectedFill: ButtonFill = 'filled'; toggleTheme(): void {
```

```

this.isDarkTheme = !this.isDarkTheme;    document.body.setAttribute('data-theme', this.isDarkTheme ? 'dark' : 'light' ); } onSizeTabChange(tab: TabItem): void { this.selectedSize = tab.id as ButtonSize; }
getStatusLabel(size: ButtonSize): string { switch (size) { case 'xs': return 'XSmall'; case 'sm': return 'Small'; case 'md': return 'Medium'; case 'lg': return 'Large'; case 'xl': return 'XLarge'; default: return size; } } getSizeMapping( size: ButtonSize ): 'xs' | 'sm' | 'md' | 'lg' | 'xl' { switch (size) { case 'xs': return 'xs'; case 'sm': return 'sm'; case 'md': return 'md'; case 'lg': return 'lg'; case 'xl': return 'xl'; default: return 'md'; } } getButtonConfig( mode: ButtonMode, fill: ButtonFill, size: ButtonSize ): ButtonConfig { // All fills are now available const baseConfig = { mode, fill, size, outlined: fill === 'outline', clear: fill === 'clear', available: true, iconColor: '#fff', }; switch (mode) { case 'pill': return { ...baseConfig, pill: true, iconPosition: 'left' as const, iconName: 'star', label: 'Pill', }; case 'default': return { ...baseConfig, pill: false, iconName: '', iconPosition: 'left' as const, label: 'Default', }; case 'action': return { ...baseConfig, pill: false, iconPosition: 'left' as const, iconName: 'zap', label: 'Action', }; case 'quick-action': return { ...baseConfig, pill: true, iconPosition: 'only' as const, iconName: 'plus', label: '' }, default: return { ...baseConfig, pill: false, iconPosition: undefined, iconName: '', label: mode, available: false, }; } }

```

```

type ButtonMode = 'pill' | 'default' | 'action' | 'quick-action'; type ButtonFill = 'filled' | 'outline' | 'clear'; type ButtonSize = 'xs' | 'sm' | 'md' | 'lg' | 'xl'; interface ButtonConfig { mode: ButtonMode; fill: ButtonFill; size: ButtonSize; pill: boolean; outlined: boolean; clear: boolean; iconPosition?: 'left' | 'right' | 'only'; iconName: string; label: string; available: boolean; iconColor?: string; } modes: ButtonMode[] = ['pill', 'default', 'action', 'quick-action']; fills: ButtonFill[] = ['filled', 'outline', 'clear']; sizes: ButtonSize[] = ['xsmall', 'small', 'medium', 'large', 'xlarge']; sizeTabs: TabItem[] = [ { id: 'xsmall', label: 'XSmall' }, { id: 'small', label: 'Small' }, { id: 'medium', label: 'Medium' }, { id: 'large', label: 'Large' }, { id: 'xlarge', label: 'XLarge' }, ]; variants: ButtonVariant[] = [ 'primary', 'secondary', 'success', 'warning', 'danger', 'info' ]; selectedSize: ButtonSize = 'md'; selectedMode: ButtonMode = 'pill'; selectedFill: ButtonFill = 'filled'; toggleTheme(): void { this.isDarkTheme = !this.isDarkTheme; document.body.setAttribute('data-theme', this.isDarkTheme ? 'dark' : 'light' ); } onSizeTabChange(tab: TabItem): void { this.selectedSize = tab.id as ButtonSize; }
getStatusLabel(size: ButtonSize): string { switch (size) { case 'xs': return 'XSmall'; case 'sm': return 'Small'; case 'md': return 'Medium'; case 'lg': return 'Large'; case 'xl': return 'XLarge'; default: return size; } } getSizeMapping( size: ButtonSize ): 'xs' | 'sm' | 'md' | 'lg' | 'xl' { switch (size) { case 'xs': return 'xs'; case 'sm': return 'sm'; case 'md': return 'md'; case 'lg': return 'lg'; case 'xl': return 'xl'; default: return 'md'; } } getButtonConfig( mode: ButtonMode, fill: ButtonFill, size: ButtonSize ): ButtonConfig { // All fills are now available const baseConfig = { mode, fill, size, outlined: fill === 'outline', clear: fill === 'clear', available: true, iconColor: '#fff', }; switch (mode) { case 'pill': return { ...baseConfig, pill: true, iconPosition: 'left' as const, iconName: 'star', label: 'Pill', }; case 'default': return { ...baseConfig, pill: false, iconName: '', iconPosition: 'left' as const, label: 'Default', }; case 'action': return { ...baseConfig, pill: false, iconPosition: 'left' as const, iconName: 'zap', label: 'Action', }; case 'quick-action': return { ...baseConfig, pill: true, iconPosition: 'only' as const, iconName: 'plus', label: '' }, default: return { ...baseConfig, pill: false, iconPosition: undefined, iconName: '', label: mode, available: false, }; } }

```

Basic Usage

Basic button implementation with default settings.

```
<aava-button label="Primary" variant="primary" (userClick)="onButtonClick($event)" [pill]="true"></aava-button><aava-button label="Primary" variant="primary" (userClick)="onButtonClick($event)"></aava-button>
```

```
<aava-button label="Primary" variant="primary" (userClick)="onButtonClick($event)" [pill]="true"></aava-button><aava-button label="Primary" variant="primary" (userClick)="onButtonClick($event)"></aava-button>
```

```
onButtonClick(event: Event) { console.log('Button clicked:', event); }
```

```
onButtonClick(event: Event) { console.log('Button clicked:', event); }
```

Variants

The button component supports 9 semantic variants that control the visual appearance and meaning of the button.

```
<aava-button label="Primary" variant="primary"></aava-button><aava-button label="Secondary" variant="secondary"></aava-button><aava-button label="Success" variant="success"></aava-button><aava-button label="Warning" variant="warning"></aava-button><aava-button label="Danger" variant="danger"></aava-button><aava-button label="Info" variant="info"></aava-button><aava-button label="Tertiary" variant="tertiary"></aava-button>
```

```
<aava-button label="Primary" variant="primary"></aava-button><aava-button label="Secondary" variant="secondary"></aava-button><aava-button label="Success" variant="success"></aava-button><aava-button label="Warning" variant="warning"></aava-button><aava-button label="Danger" variant="danger"></aava-button><aava-button label="Info" variant="info"></aava-button><aava-button label="Tertiary" variant="tertiary"></aava-button>
```

Available Variants

- primary- Main call-to-action button (pink/brand color)
- secondary- Outlined style with transparent background
- success- Positive actions (green)
- warning- Cautionary actions (orange)
- danger- Destructive actions (red)
- info- Informational actions (blue)
- tertiary- Text-only action (transparent)

Sizes

Five size options to fit different layout requirements and visual hierarchies.

```
<aava-button label="Extra Small" variant="primary" size="xs"></aava-button><aava-button label="Small" variant="primary" size="sm"></aava-button><aava-button label="Medium" variant="primary" size="md"></aava-button><aava-button label="Large" variant="primary" size="lg"></aava-button><aava-button label="Extra Large" variant="primary" size="xl"></aava-button>
```

```
<aava-button label="Extra Small" variant="primary" size="xs"></aava-button><aava-button label="Small" variant="primary" size="sm"></aava-button><aava-button label="Medium" variant="primary" size="md"></aava-button><aava-button label="Large" variant="primary" size="lg"></aava-button><aava-button label="Extra Large" variant="primary" size="xl"></aava-button>
```

Available Sizes

- xs (Extra Small)- Extra compact size for very dense interfaces
- sm (Small)- Compact size for dense interfaces
- md (Medium)- Standard size for most use cases (default)
- lg (Large)- Prominent size for primary actions
- xl (Extra Large)- Extra large size for hero sections and CTAs

Hover Effects

Dynamic hover effects that enhance user interaction feedback.

```
<aava-button label="Torch (Recommended)" variant="primary" hoverEffect="torch" [pill]="true"></aava-button><aava-button label="Glow Effect" variant="warning" hoverEffect="glow" [pill]="true"></aava-button><aava-button label="Tint Effect" variant="success" hoverEffect="tint" [pill]="true"></aava-button><aava-button label="Scale Effect" variant="danger" hoverEffect="scale" [pill]="true"></aava-button>
```

```
<aava-button label="Torch (Recommended)" variant="primary" hoverEffect="torch" [pill]="true"></aava-button><aava-button label="Glow Effect" variant="warning" hoverEffect="glow" [pill]="true"></aava-button><aava-button label="Tint Effect" variant="success" hoverEffect="tint" [pill]="true"></aava-button><aava-button label="Scale Effect" variant="danger" hoverEffect="scale" [pill]="true"></aava-button>
```

Available Hover Effects

- torch- Internal semicircular sunrise effect (default)
- glow- Outer glow with elevation
- tint- Color overlay with brightness increase
- scale- Scale transformation with elevation

Pressed Effects

Visual feedback for button press interactions with various animation styles.

```
<aava-button label="Ripple (Recommended)" variant="primary" pressedEffect="ripple" [pill]="true"></aava-button><aava-button label="Inset Effect" variant="warning" pressedEffect="inset" [pill]="true"></aava-button>
```

```
<aava-button label="Ripple (Recommended)" variant="primary" pressedEffect="ripple" [pill]="true"></aava-button><aava-button label="Inset Effect" variant="warning" pressedEffect="inset" [pill]="true"></aava-button>
```

Available Pressed Effects

- ripple- Multi-layered ripple animation (default)
- inset- Inset shadow effect

Icons

Comprehensive icon support with flexible positioning and customization options.

```
<aava-button label="Left Icon" iconName="star" iconPosition="left" variant="primary" iconColor="#fff"></aava-button><aava-button label="Right Icon" iconName="star" iconPosition="right" variant="primary" iconColor="#fff"></aava-button><aava-button iconName="star" iconPosition="icon-only" variant="primary" iconColor="#fff"></aava-button>
```

```
<aava-button label="Left Icon" iconName="star" iconPosition="left" variant="primary" iconColor="#fff"></aava-button><aava-button label="Right Icon" iconName="star" iconPosition="right" variant="primary" iconColor="#fff"></aava-button><aava-button iconName="star" iconPosition="icon-only" variant="primary" iconColor="#fff"></aava-button>
```

Icon Properties

- iconName- Lucide icon name
- iconPosition- Position relative to text:left,right,icon-only
- iconColor- Custom icon color (defaults to currentColor)
- iconSize- Icon size in pixels (default: 20)

left

right

icon-only

States

Interactive states for different user scenarios and feedback.

```
<aava-button label="Default State" variant="primary" size="md" [pill]="true"></aava-button><aava-button label="Processing State" variant="primary" [processing]="true" size="md" [pill]="true" iconName="loader" iconColor="white" iconPosition="left"></aava-button><aava-button label="Disabled State" variant="primary" [disabled]="true" size="md" [pill]="true"></aava-button>
```

```
<aava-button label="Default State" variant="primary" size="md" [pill]="true"></aava-button><aava-button label="Processing State" variant="primary" [processing]="true" size="md" [pill]="true" iconName="loader" iconColor="white" iconPosition="left"></aava-button><aava-button label="Disabled State" variant="primary" [disabled]="true" size="md" [pill]="true"></aava-button>
```

Available States

- default- Programmatically active state
- processing- Loading/async operation state with pulse animation

- disabled- Non-interactive state

Shapes & Styles

Shape modifiers and style variants for different design requirements.

```
<aava-button label="Primary" variant="primary" [pill]="true" [customStyles]="{{ 'max-width': '100px' }}></aava-button><aava-button label="Secondary" variant="secondary" [pill]="true" [customStyles]="{{ 'max-width': '100px' }}></aava-button><aava-button label="Primary" variant="primary" [customStyles]="{{ 'max-width': '100px' }}></aava-button><aava-button label="Secondary" variant="secondary" [customStyles]="{{ 'max-width': '100px' }}></aava-button>
```

```
<aava-button label="Primary" variant="primary" [pill]="true" [customStyles]="{{ 'max-width': '100px' }}></aava-button><aava-button label="Secondary" variant="secondary" [pill]="true" [customStyles]="{{ 'max-width': '100px' }}></aava-button><aava-button label="Primary" variant="primary" [customStyles]="{{ 'max-width': '100px' }}></aava-button><aava-button label="Secondary" variant="secondary" [customStyles]="{{ 'max-width': '100px' }}></aava-button>
```

Available Shapes

- default- Standard rectangular with border radius
- pill- Fully rounded corners (50px border radius)

Style Variants

- outlined- Transparent background with colored border
- clear- Transparent background with no border, uses variant text colors
- customStyles- Allows to apply inline CSS styles directly to the component. This property accepts a key-value pair object where the key is the CSS property name and the value is the corresponding CSS value.

Events

The button component emits events for user interactions.

```
<aava-button label="Click Handler" variant="primary" (userClick)="onButtonClick()" [customStyles]="{{ 'max-width': '200px' }}" [pill]="true"></aava-button>
```

```
<aava-button label="Click Handler" variant="primary" (userClick)="onButtonClick()" [customStyles]="{{ 'max-width': '200px' }}" [pill]="true"></aava-button>
```

```
onButtonClick() { setTimeout(() => { alert('Hi There!'); }, 200); }
```

```
onButtonClick() { setTimeout(() => { alert('Hi There!'); }, 200); }
```

Available Events

- userClick- Emitted on button click or keyboard activation (Enter/Space)

Accessibility

The button component follows WAI-ARIA accessibility guidelines:

- Proper keyboard navigation (Enter and Space key support)
- ARIA attributes for screen readers (aria-disabled,aria-pressed)
- Focus management with visible focus indicators
- Semantic button element usage

```
aria-disabled
```

```
aria-pressed
```

API Reference

Inputs

```
Property | Type | Default | Description
label | string | '' | Button text content
variant | ButtonVariant | 'default' | Visual variant: | 'default' | , | 'primary' | , | 'secondary' | , |
'success' | , | 'warning' | , | 'danger' | , | 'info'
size | ButtonSize | 'md' | Button size: | 'xs' | , | 'sm' | , | 'md' | , | 'lg' | , | 'xl'
state | ButtonState | 'default' | Interaction state: | 'default' | , | 'hover' | , | 'active' | , | 'disabled' | ,
| 'processing' | , | 'focus'
hoverEffect | ButtonHoverEffect | 'torch' | Hover effect: | 'torch' | , | 'glow' | , | 'tint' | , | 'scale' | , | 'none'
pressedEffect | ButtonPressedEffect | 'ripple' | Pressed effect: | 'ripple' | , | 'inset' | , | 'solid' | , | 'none'
processingEffect | ButtonProcessingEffect | 'pulse' | Processing effect: | 'pulse' | , | 'none'
focusEffect | ButtonFocusEffect | 'border' | Focus effect: | 'border' | , | 'none'
disabledEffect | ButtonDisabledEffect | 'dim' | Disabled effect: | 'dim' | , | 'none'
disabled | boolean | false | Whether button is disabled
processing | boolean | false | Whether button is in processing state
pill | boolean | false | Whether to use pill shape
outlined | boolean | false | Whether to use outlined style variant
clear | boolean | false | Whether to use clear style variant (transparent, no border)
width | string | '' | Custom width value
height | string | '' | Custom height value
gradient | string | undefined | Legacy | – use | customStyles | instead
background | string | undefined | Legacy | – use | customStyles | instead
color | string | undefined | Legacy | – use | customStyles | instead
dropdown | boolean | false | Legacy | – use separate dropdown component
glassVariant | ButtonGlassVariant | 'glass-10' | Default recommended glass intensity
customStyles | Record | {} | CSS custom properties override
iconName | string | '' | Lucide icon name
iconColor | string | '' | Custom icon color
iconSize | number | 20 | Icon size in pixels
iconPosition | 'left' | 'right' | 'only' | 'left' | Icon position relative to text
```

label

string

..

variant

ButtonVariant

'default'

'default'

'primary'

'secondary'

'success'

'warning'

'danger'

'info'

size

ButtonSize

'md'

'xs'

'sm'

'md'

'lg'

'xl'

state

ButtonState

'default'

'disabled'

'hover'

'active'

'processing'

'focus'

hoverEffect

ButtonHoverEffect

'torch'

'glow'

'tint'

'scale'

'none'

pressedEffect

ButtonPressedEffect

'ripple'

'ripple'

'inset'

'solid'

'none'

processingEffect

ButtonProcessingEffect

'pulse'

'pulse'

'none'

focusEffect

ButtonFocusEffect

'border'

'border'

'none'

disabledEffect

ButtonDisabledEffect

'dim'

'dim'

'none'

disabled

boolean

false

processing

boolean

false

pill

boolean

false

outlined

boolean

false

clear

boolean

false

width

string

..

height

string

..

gradient

string

undefined

customStyles

background

string

undefined

customStyles

color

string

undefined

customStyles

```
dropdown
```

```
boolean
```

```
false
```

```
glassVariant
```

```
ButtonGlassVariant
```

```
'glass-10'
```

```
customStyles
```

```
Record<string, string>
```

```
{}
```

```
iconName
```

```
string
```

```
..
```

```
iconColor
```

```
string
```

```
..
```

```
iconSize
```

```
number
```

```
20
```

```
iconPosition
```

```
'left' | 'right' | 'only'
```

```
'left'
```

Outputs

```
Event | Type | Description
```

```
userClick | EventEmitter | Emitted when button is clicked or activated via keyboard
```

```
userClick
```

```
EventEmitter<Event>
```

Design Tokens & Theming

AAVA Play buttons use semantic design tokens for all surfaces, spacing, radius, and motion. While global tokens define the visual language of the system, buttons expose a set of scoped override tokens that allow you to fine-tune appearance without breaking consistency.

Use these only when necessary—for instance, to adjust a button's vertical padding inside a dense UI or to sharpen the radius for compact layouts.

Available Design Tokens for Button

Token	Purpose	Default Value
--button-size-xsm-padding	Padding for extra small size buttons	Theme-based
--button-size-sm-padding	Padding for small size buttons	Theme-based
--button-size-md-padding	Padding for medium size buttons	Theme-based
--button-size-lg-padding	Padding for large size buttons	Theme-based
--button-size-xlg-padding	Padding for extra large size buttons	Theme-based
--button-size-xsm-height	Height for extra small size buttons	Theme-based
--button-size-sm-height	Height for small size buttons	Theme-based
--button-size-md-height	Height for medium size buttons	Theme-based
--button-size-lg-height	Height for large size buttons	Theme-based
--button-size-xlg-height	Height for extra large size buttons	Theme-based
--button-border-radius	Border radius for default shape	Theme-based

--button-size-xsm-padding

--button-size-sm-padding

--button-size-md-padding

--button-size-lg-padding

--button-size-xlg-padding

--button-size-xsm-height

--button-size-sm-height

--button-size-md-height

--button-size-lg-height

--button-size-xlg-height

--button-border-radius

Token	Purpose	Default Value
--button-font-weight	Font weight for button text	Theme-based
--button-transition	Default transition animation	Theme-based

--button-font-weight

--button-transition

Token	Purpose	Default Value
--button-icon-margin	Margin around icons	Theme-based

--button-icon-margin

Token Override Example

You can define overrides in your theme configuration or component styles:

```
/* Custom button theming */.my-compact-buttons { --button-size-md-padding: 8px 16px; --button-border-radius: 4px; --button-transition: 100ms ease;}
```

```
/* Custom button theming */.my-compact-buttons { --button-size-md-padding: 8px 16px; --button-border-radius: 4px; --button-transition: 100ms ease;}
```

This would make buttons more compact, sharper, and snappier—ideal for dense interfaces or admin tools. These tokens are opt-in overrides. If not set, the button will inherit global styles via the design system tokens.

Best Practices

Design Guidelines

- Use semantic variants- Choose variants that match the action's intent (primary for main actions, danger for destructive actions)
- Default variant- Use defaultvariant for standard buttons; primary for main CTAs
- Size selection- Use medium as the default size; extra small/extra large for extreme cases only
- Effects system- Default effects work well together; customize only when needed
- Icon usage- Use icon-only for compact interfaces, left/right for labeled actions
- Consistent sizing- Match button sizes to surrounding elements and visual hierarchy

default

primary

medium

extra small

extra large

icon-only

left

right

Accessibility

- Always provide meaningful labels- Even for icon-only buttons, use proper ARIA labels
- Keyboard navigation- Ensure all interactive elements are keyboard accessible
- Focus indicators- Maintain clear focus states for navigation
- Screen reader support- Use semantic HTML and proper ARIA attributes
- Color contrast- Ensure sufficient contrast for all variants and states

Performance

- Avoid excessive custom styling- Use built-in variants when possible
- Debounce rapid clicks- Prevent accidental multiple submissions
- Optimize icon loading- Use icon systems efficiently
- Consider bundle size- Import only needed effects and variants