

Modern SaaS UI Implementation Checklist

Production-oriented checklist for tokens, components, motion, accessibility, and performance.

1) Foundations (Tokens + Layout)

- Define spacing scale tokens (4/8/12/16/24/32/48/64).
- Define radii tokens (8/12/16/24) and apply consistently.
- Define elevation tokens (shadow-0/1/2) and hover elevation.
- Define border tokens (1px neutral; stronger on hover/focus).
- Define blur/material tokens (blur-sm, blur-md) and usage rules.
- Define typography scale + line heights; document max line length rules for long reading.
- Define semantic color roles (bg, surface, text, muted, border, accent, success, warning, danger).
- Document responsive grid rules (12-col, breakpoints, container widths, density per breakpoint).

2) Motion System

- Choose product motion scheme (fast + subtle) and marketing scheme (slightly slower + expressive).
- Define motion tokens: duration-fast (150ms), duration-med (220ms), duration-slow (320ms).
- Define easing tokens and keep them consistent across components.
- Implement prefers-reduced-motion fallbacks (remove non-essential movement/parallax; shorten transitions).
- Create reusable patterns: fade+translate, scale-in dialogs, shared layout transitions, list item insert/remove.

3) Components (Primitives)

- Button (primary/secondary/ghost/destructive) with hover/active/focus/disabled/loading states.
- IconButton with tooltip + screen-reader label.
- Input/Textarea with label, helper text, error + success states, and clear focus ring.
- Select/Combobox with keyboard navigation + search.
- Checkbox/Switch/Radio with accessible hit targets and focus states.
- Tabs with clear active indicator and optional subtle motion.
- Badge/Tag with semantic variants.
- Avatar (image + fallback initials).
- Separator/Divider tokens for density control.
- Tooltip and Popover (focus handling, escape close, click outside).

4) Components (Composed SaaS UI)

- Card system (default, interactive, and optional glass/chrome variant).
- Data table: sorting, filtering, empty state, loading state, and keyboard focus clarity.
- Pagination or infinite scroll with explicit loading and end states.
- Modal dialog: focus trap, escape close, scroll lock, and accessible heading.
- Drawer/Side sheet for secondary tasks (filters/details/edit forms).
- Toast system (success/error/warning) with optional action (Undo/Retry).
- Command palette (Ctrl/Cmd+K) for navigation and global actions.
- Breadcrumbs for deep navigation and clarity.
- Stepper/progress indicator for onboarding flows.
- Empty states for every zero-data screen (contextual + actionable).

5) Premium Surfaces + Microinteractions

- Bento section templates: hero card + supporting cards + tertiary cards (consistent spacing/radius).
- Glass used for chrome surfaces only unless content is short; verify readability in light/dark modes.
- Button press feels physical (tiny scale/translate + shadow shift).
- Inline validation is calm and explains how to fix issues.
- Save-sync status is explicit (saving → saved → retry on error).
- Skeleton loading for lists/dashboards where users expect content quickly.

6) Accessibility + Performance QA

- Keyboard navigation works everywhere; focus order is logical; no focus traps outside dialogs.
- Focus indicators are visible against all surfaces (including glass).
- Color contrast validated for text/icons and semantic states (success/warning/error).
- Hit targets meet touch guidance (>= 44px where relevant).
- Animations avoid layout thrash; transform-opacity used for motion.
- Heavy media (video/3D) is lazy-loaded; static fallbacks exist.

References (selected)

- Nielsen Norman Group. Glassmorphism: Definition and Best Practices (2024-06-07).
<https://www.nngroup.com/articles/glassmorphism/>
- Apple Developer Documentation. Adopting Liquid Glass.
<https://developer.apple.com/documentation/technologyoverviews/adopting-liquid-glass>
- Apple Human Interface Guidelines. Color (guidance for Liquid Glass/materials).
<https://developer.apple.com/design/human-interface-guidelines/color>
- MDN Web Docs. CSS scroll-driven animations (2025-12-16).
https://developer.mozilla.org/en-US/docs/Web/CSS/Guides/Scroll-driven_animations
- MDN Web Docs. Scroll-driven animation timelines (Timelines guide) (2025-11-08).
https://developer.mozilla.org/en-US/docs/Web/CSS/Guides/Scroll-driven_animations/Timelines
- W3C WAI (WCAG Technique C39). Using the CSS prefers-reduced-motion query to prevent animations. <https://www.w3.org/WAI/WCAG21/Techniques/css/C39>
- W3C WAI (WCAG Understanding 2.3.3). Understanding SC 2.3.3: Animation from Interactions.
<https://www.w3.org/WAI/WCAG21/Understanding/animation-from-interactions.html>
- Google Design Library. Making Motion Meaningful (2016-09-23).
<https://design.google/library/making-motion-meaningful>
- Material Design 3. Motion overview: How it works.
<https://m3.material.io/styles/motion/overview/how-it-works>
- Material Design 3. Easing and duration. <https://m3.material.io/styles/motion/easing-and-duration>
- Nielsen Norman Group. Microinteractions in User Experience (2018-10-21).
<https://www.nngroup.com/articles/microinteractions/>