```css
/* ═══════════════════════════════════════════════════════════════════
   KURO :: LIQUID GLASS ENGINE — CSS Material System
   Apple iOS 26 HIG-compliant • OLED-optimized • Sovereignty-first
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/* ─── OLED-OPTIMIZED DESIGN TOKENS ─────────────────────────────────── */
:root {
  /* === True Black Foundation (OLED pixel-off) === */
  --lg-black: #000000;
  --lg-void: rgba(0, 0, 0, 1);

  /* === Surface Hierarchy (darkest → lightest) === */
  --lg-surface-0: rgba(0, 0, 0, 1);            /* Desktop / base */
  --lg-surface-1: rgba(12, 12, 14, 0.92);    /* Panels, sidebars */
  --lg-surface-2: rgba(22, 22, 26, 0.85);    /* Cards, windows */
  --lg-surface-3: rgba(32, 32, 38, 0.78);    /* Elevated elements */

  /* === Glass Material Tokens === */
  --lg-glass-bg: rgba(255, 255, 255, 0.04);
  --lg-glass-bg-hover: rgba(255, 255, 255, 0.07);
  --lg-glass-bg-active: rgba(255, 255, 255, 0.10);
  --lg-glass-border: rgba(255, 255, 255, 0.08);
  --lg-glass-border-bright: rgba(255, 255, 255, 0.15);
  --lg-glass-highlight: rgba(255, 255, 255, 0.12);
  --lg-glass-shadow: rgba(0, 0, 0, 0.5);

  /* === Refraction & Blur === */
  --lg-blur-standard: 40px;
  --lg-blur-heavy: 80px;
  --lg-blur-light: 16px;
  --lg-blur-frosted: 24px;
  --lg-saturate: 1.6;
  --lg-brightness: 1.05;
  --lg-contrast: 1.02;

  /* === Specular Highlight === */
  --lg-specular-color: rgba(255, 255, 255, 0.18);
  --lg-specular-angle: 135deg;
  --lg-specular-size: 60%;

  /* === Accent (KURO sovereign purple) === */
  --lg-accent: #a855f7;
  --lg-accent-glass: rgba(168, 85, 247, 0.15);
  --lg-accent-glow: rgba(168, 85, 247, 0.25);
```

```css
  /* === Text on Glass === */
  --lg-text-primary: rgba(255, 255, 255, 0.95);
  --lg-text-secondary: rgba(255, 255, 255, 0.65);
  --lg-text-tertiary: rgba(255, 255, 255, 0.40);
  --lg-text-on-accent: rgba(255, 255, 255, 1);


  /* === Timing (Apple HIG motion curves) === */
  --lg-ease-standard: cubic-bezier(0.25, 0.46, 0.45, 0.94);
  --lg-ease-decelerate: cubic-bezier(0.0, 0.0, 0.2, 1.0);
  --lg-ease-accelerate: cubic-bezier(0.4, 0.0, 1.0, 1.0);
  --lg-ease-spring: cubic-bezier(0.34, 1.56, 0.64, 1.0);
  --lg-ease-glass: cubic-bezier(0.22, 0.68, 0.0, 1.0);


  --lg-duration-instant: 80ms;
  --lg-duration-fast: 150ms;
  --lg-duration-standard: 280ms;
  --lg-duration-slow: 450ms;
  --lg-duration-morph: 600ms;


  /* === Radius (concentric with hardware) === */
  --lg-radius-xs: 8px;
  --lg-radius-sm: 12px;
  --lg-radius-md: 16px;
  --lg-radius-lg: 22px;
  --lg-radius-xl: 28px;
  --lg-radius-pill: 9999px;


  /* === Displacement (SVG filter scale) === */
  --lg-displace-scale: 12;
  --lg-displace-bevel: 0.15;
}


/* ─── LIGHT MODE OVERRIDES ──────────────────────────────────────────── */
:root[data-theme="light"],
.lg-light {
  --lg-surface-0: rgba(245, 245, 250, 1);
  --lg-surface-1: rgba(255, 255, 255, 0.85);
  --lg-surface-2: rgba(255, 255, 255, 0.72);
  --lg-surface-3: rgba(255, 255, 255, 0.60);
  --lg-glass-bg: rgba(255, 255, 255, 0.45);
  --lg-glass-bg-hover: rgba(255, 255, 255, 0.55);
  --lg-glass-bg-active: rgba(255, 255, 255, 0.65);
  --lg-glass-border: rgba(0, 0, 0, 0.06);
  --lg-glass-border-bright: rgba(0, 0, 0, 0.10);
  --lg-glass-highlight: rgba(255, 255, 255, 0.7);
  --lg-glass-shadow: rgba(0, 0, 0, 0.12);
```

```css
  --lg-specular-color: rgba(255, 255, 255, 0.5);
  --lg-text-primary: rgba(0, 0, 0, 0.88);
  --lg-text-secondary: rgba(0, 0, 0, 0.55);
  --lg-text-tertiary: rgba(0, 0, 0, 0.30);
}




/* ═══════════════════════════════════════════════════════════
   MATERIAL CLASSES — Apple's three glass variants
   ═══════════════════════════════════════════════════════════ */


/* === .lg-regular — Standard navigation glass === */
.lg-regular {
  position: relative;
  background: var(--lg-glass-bg);
  border: 1px solid var(--lg-glass-border);
  border-radius: var(--lg-radius-lg);
  overflow: hidden;
  isolation: isolate;
  -webkit-backdrop-filter:
    blur(var(--lg-blur-standard))
    saturate(var(--lg-saturate))
    brightness(var(--lg-brightness));
  backdrop-filter:
    blur(var(--lg-blur-standard))
    saturate(var(--lg-saturate))
    brightness(var(--lg-brightness));
  box-shadow:
    0 0.5px 0 0 var(--lg-glass-highlight) inset,
    0 1px 3px 0 var(--lg-glass-shadow),
    0 8px 24px -4px rgba(0, 0, 0, 0.2);
  transition:
    background var(--lg-duration-standard) var(--lg-ease-standard),
    box-shadow var(--lg-duration-standard) var(--lg-ease-standard),
    transform var(--lg-duration-standard) var(--lg-ease-glass);
  will-change: transform, backdrop-filter;
}

/* Specular rim highlight */
.lg-regular::before {
  content: '';
  position: absolute;
  inset: 0;
  border-radius: inherit;
  pointer-events: none;
  z-index: 1;
  background:
```

```css
    linear-gradient(
      var(--lg-specular-angle),
      var(--lg-specular-color) 0%,
      transparent var(--lg-specular-size)
    );
  opacity: 0.6;
  mix-blend-mode: overlay;
  transition: opacity var(--lg-duration-standard) var(--lg-ease-standard);
}


/* Refraction edge (inner bevel simulation) */
.lg-regular::after {
  content: '';
  position: absolute;
  inset: 0;
  border-radius: inherit;
  pointer-events: none;
  z-index: 2;
  box-shadow:
    inset 0 1px 0 0 rgba(255, 255, 255, 0.10),
    inset 0 -1px 0 0 rgba(0, 0, 0, 0.06),
    inset 1px 0 0 0 rgba(255, 255, 255, 0.04),
    inset -1px 0 0 0 rgba(255, 255, 255, 0.04);
}


.lg-regular:hover {
  background: var(--lg-glass-bg-hover);
  box-shadow:
    0 0.5px 0 0 var(--lg-glass-highlight) inset,
    0 2px 6px 0 var(--lg-glass-shadow),
    0 12px 32px -4px rgba(0, 0, 0, 0.25);
}


.lg-regular:active {
  background: var(--lg-glass-bg-active);
  transform: scale(0.985);
}


/* === .lg-clear — Transparent, content-passthrough glass === */
.lg-clear {
  position: relative;
  background: rgba(255, 255, 255, 0.015);
  border: 1px solid rgba(255, 255, 255, 0.05);
  border-radius: var(--lg-radius-lg);
  overflow: hidden;
  isolation: isolate;
```

```css
  -webkit-backdrop-filter:
    blur(var(--lg-blur-light))
    saturate(1.2);
  backdrop-filter:
    blur(var(--lg-blur-light))
    saturate(1.2);
  box-shadow:
    0 0.5px 0 0 rgba(255, 255, 255, 0.06) inset,
    0 1px 2px 0 rgba(0, 0, 0, 0.1);
  transition:
    background var(--lg-duration-standard) var(--lg-ease-standard),
    backdrop-filter var(--lg-duration-slow) var(--lg-ease-glass);
  will-change: backdrop-filter;
}


.lg-clear::before {
  content: '';
  position: absolute;
  inset: 0;
  border-radius: inherit;
  pointer-events: none;
  z-index: 1;
  background:
    linear-gradient(
      var(--lg-specular-angle),
      rgba(255, 255, 255, 0.06) 0%,
      transparent 50%
    );
  mix-blend-mode: overlay;
}


/* === .lg-tinted — Accent-colored glass === */
.lg-tinted {
  position: relative;
  background: var(--lg-accent-glass);
  border: 1px solid rgba(168, 85, 247, 0.12);
  border-radius: var(--lg-radius-lg);
  overflow: hidden;
  isolation: isolate;
  -webkit-backdrop-filter:
    blur(var(--lg-blur-standard))
    saturate(1.8)
    brightness(0.95);
  backdrop-filter:
    blur(var(--lg-blur-standard))
    saturate(1.8)
```

```css
    brightness(0.95);
  box-shadow:
    0 0.5px 0 0 rgba(168, 85, 247, 0.15) inset,
    0 1px 3px 0 rgba(0, 0, 0, 0.2),
    0 0 20px -8px var(--lg-accent-glow);
  transition: all var(--lg-duration-standard) var(--lg-ease-standard);
  will-change: transform, backdrop-filter;
}


.lg-tinted::before {
  content: '';
  position: absolute;
  inset: 0;
  border-radius: inherit;
  pointer-events: none;
  z-index: 1;
  background:
    linear-gradient(
      var(--lg-specular-angle),
      rgba(255, 255, 255, 0.12) 0%,
      transparent 55%
    );
  mix-blend-mode: overlay;
}


/* ═══════════════════════════════════════════════════════════════════
   COMPONENT PATTERNS
   ═══════════════════════════════════════════════════════════════════ */


/* === Pill / Capsule (toolbar controls, tab bars) === */
.lg-pill {
  border-radius: var(--lg-radius-pill);
  padding: 6px 16px;
  display: inline-flex;
  align-items: center;
  gap: 8px;
}


/* === Panel (sidebars, sheets, modals) === */
.lg-panel {
  border-radius: var(--lg-radius-xl);
  padding: 16px;
}


/* === Toolbar (floating action bars) === */
.lg-toolbar {
```

```css
  border-radius: var(--lg-radius-pill);
  padding: 8px 12px;
  display: flex;
  align-items: center;
  gap: 4px;
}

.lg-toolbar > * {
  padding: 8px 12px;
  border-radius: var(--lg-radius-pill);
  background: transparent;
  border: none;
  color: var(--lg-text-primary);
  cursor: pointer;
  transition:
    background var(--lg-duration-fast) var(--lg-ease-standard),
    transform var(--lg-duration-fast) var(--lg-ease-spring);
  display: flex;
  align-items: center;
  justify-content: center;
}

.lg-toolbar > *:hover {
  background: rgba(255, 255, 255, 0.08);
}

.lg-toolbar > *:active {
  transform: scale(0.92);
  background: rgba(255, 255, 255, 0.12);
}

/* === Dock === */
.lg-dock {
  border-radius: var(--lg-radius-xl);
  padding: 6px;
  display: flex;
  align-items: center;
  gap: 2px;
  --lg-blur-standard: 60px;
}

/* === Window (app container) === */
.lg-window {
  border-radius: var(--lg-radius-xl);
  overflow: hidden;
  display: flex;
  flex-direction: column;
```

```css
}

.lg-window-titlebar {
  padding: 12px 16px;
  display: flex;
  align-items: center;
  gap: 8px;
  background: rgba(255, 255, 255, 0.02);
  border-bottom: 1px solid rgba(255, 255, 255, 0.04);
  -webkit-app-region: drag;
  cursor: grab;
}

.lg-window-body {
  flex: 1;
  overflow: auto;
}

/* === Notification === */
.lg-notification {
  border-radius: var(--lg-radius-lg);
  padding: 14px 18px;
  max-width: 380px;
  --lg-blur-standard: 50px;
}


/* ═══════════════════════════════════════════════════════════════
   ANIMATION SYSTEM — Materialization & Morphing
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/* === Materialization (elements appearing like forming glass) === */
@keyframes lg-materialize {
  0% {
    opacity: 0;
    transform: scale(0.92) translateY(8px);
    backdrop-filter: blur(0px) saturate(1) brightness(1);
    -webkit-backdrop-filter: blur(0px) saturate(1) brightness(1);
  }
  40% {
    opacity: 0.6;
    backdrop-filter: blur(20px) saturate(1.3) brightness(1.02);
    -webkit-backdrop-filter: blur(20px) saturate(1.3) brightness(1.02);
  }
  100% {
    opacity: 1;
    transform: scale(1) translateY(0);
```

```css
    backdrop-filter:
      blur(var(--lg-blur-standard))
      saturate(var(--lg-saturate))
      brightness(var(--lg-brightness));
    -webkit-backdrop-filter:
      blur(var(--lg-blur-standard))
      saturate(var(--lg-saturate))
      brightness(var(--lg-brightness));
  }
}

.lg-materialize {
  animation: lg-materialize var(--lg-duration-morph) var(--lg-ease-glass) forward
}

/* === Dematerialize (dissolving) === */
@keyframes lg-dematerialize {
  0% {
    opacity: 1;
    transform: scale(1);
  }
  100% {
    opacity: 0;
    transform: scale(0.95) translateY(4px);
    backdrop-filter: blur(0px) saturate(1);
    -webkit-backdrop-filter: blur(0px) saturate(1);
  }
}

.lg-dematerialize {
  animation: lg-dematerialize var(--lg-duration-standard) var(--lg-ease-accelerat
}

/* === Morph (shape-shifting between states) === */
@keyframes lg-morph-shrink {
  from { padding: 8px 16px; border-radius: var(--lg-radius-pill); }
  to   { padding: 4px 10px; border-radius: var(--lg-radius-sm); }
}

@keyframes lg-morph-expand {
  from { padding: 4px 10px; border-radius: var(--lg-radius-sm); }
  to   { padding: 8px 16px; border-radius: var(--lg-radius-pill); }
}

/* === Scroll-responsive (tab bar shrink on scroll) === */
.lg-scroll-responsive {
  transition:
```

```css
    padding var(--lg-duration-standard) var(--lg-ease-glass),
    border-radius var(--lg-duration-standard) var(--lg-ease-glass),
    transform var(--lg-duration-standard) var(--lg-ease-glass);
}


.lg-scroll-responsive.scrolled {
  padding: 4px 8px;
  transform: scale(0.9);
}


/* === Pulse (subtle breathing for active/selected) === */
@keyframes lg-pulse {
  0%, 100% { box-shadow: 0 0 0 0 var(--lg-accent-glow); }
  50%      { box-shadow: 0 0 16px 2px var(--lg-accent-glow); }
}


.lg-pulse {
  animation: lg-pulse 2.4s var(--lg-ease-standard) infinite;
}


/* === Stagger children (cascade reveal) === */
.lg-stagger > * {
  animation: lg-materialize var(--lg-duration-morph) var(--lg-ease-glass) forward
  opacity: 0;
}
.lg-stagger > *:nth-child(1) { animation-delay: 0ms; }
.lg-stagger > *:nth-child(2) { animation-delay: 60ms; }
.lg-stagger > *:nth-child(3) { animation-delay: 120ms; }
.lg-stagger > *:nth-child(4) { animation-delay: 180ms; }
.lg-stagger > *:nth-child(5) { animation-delay: 240ms; }
.lg-stagger > *:nth-child(6) { animation-delay: 300ms; }
.lg-stagger > *:nth-child(7) { animation-delay: 360ms; }
.lg-stagger > *:nth-child(8) { animation-delay: 420ms; }



/* ================================================================
   REFRACTION FILTER (applied via filter: url(#lg-refract))
   This SVG is injected by LiquidGlassProvider.jsx
   ================================================================ */


.lg-refract {
  filter: url(#lg-refraction-filter);
}


.lg-refract-backdrop {
  -webkit-backdrop-filter: url(#lg-refraction-filter) blur(var(--lg-blur-standard
  backdrop-filter: url(#lg-refraction-filter) blur(var(--lg-blur-standard));
```

```css
}


/* ══════════════════════════════════════════════════
   ACCESSIBILITY & PERFORMANCE
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/* Reduced motion: disable all animation, keep glass static */
@media (prefers-reduced-motion: reduce) {
  .lg-regular, .lg-clear, .lg-tinted,
  .lg-materialize, .lg-dematerialize,
  .lg-scroll-responsive, .lg-pulse,
  .lg-stagger > * {
    animation: none !important;
    transition: none !important;
  }
}


/* Reduced transparency: increase opacity for legibility */
@media (prefers-reduced-transparency: reduce) {
  .lg-regular, .lg-clear, .lg-tinted {
    background: var(--lg-surface-2) !important;
    -webkit-backdrop-filter: none !important;
    backdrop-filter: none !important;
  }
}


/* High contrast: strengthen borders and text */
@media (prefers-contrast: high) {
  :root {
    --lg-glass-border: rgba(255, 255, 255, 0.25);
    --lg-text-primary: rgba(255, 255, 255, 1);
    --lg-text-secondary: rgba(255, 255, 255, 0.85);
  }
}


/* GPU acceleration hints */
.lg-regular, .lg-clear, .lg-tinted {
  -webkit-transform: translateZ(0);
  transform: translateZ(0);
  -webkit-backface-visibility: hidden;
  backface-visibility: hidden;
}


/* OLED battery optimization: enforce true black on base surfaces */
@media (dynamic-range: high) {
  :root {
```

```
    --lg-surface-0: #000000;
    --lg-glass-shadow: rgba(0, 0, 0, 0.7);
  }
}
```