AiiA UI Color Reference

This document provides a comprehensive overview of all colors used in the AiiA application, including their definitions, usage, and locations.

Color System Overview

The AiiA application uses a combination of:
1. **CSS Custom Properties (CSS Variables)** - Defined in `app/globals.css`
2. **Tailwind CSS Configuration** - Extended in `tailwind.config.ts`
3. **Direct Hex Values** - Used in specific components
4. **Tailwind Utility Classes** - Standard and custom color classes

CSS Variables (Primary Color System)

All primary colors are defined as HSL values in `app/globals.css` at `:root`:

Variable	HSL Value	Usage	Description
`--background`	`222 47% 11%`	Main app background	Dark blue-gray background
`--foreground`	`210 40% 96%`	Primary text color	Light gray text
`--card`	`222 47% 14%`	Card backgrounds	Slightly lighter than main background
`--card-foreground`	`210 40% 96%`	Card text color	Same as foreground
`--popover`	`222 47% 14%`	Popover backgrounds	Same as card
`--popover-foreground`	`210 40% 96%`	Popover text	Same as foreground
`--primary`	`190 95% 55%`	Primary brand color	Bright cyan/turquoise
`--primary-foreground`	`222 47% 11%`	Text on primary	Dark background color
`--secondary`	`222 47% 16%`	Secondary elements	Slightly lighter gray
`--secondary-foreground`	`210 40% 96%`	Secondary text	Light gray
`--muted`	`222 47% 16%`	Muted backgrounds	Same as secondary
`--muted-foreground`	`215 20% 65%`	Muted text	Medium gray
`--accent`	`190 95% 55%`	Accent color	Same as primary
`--accent-foreground`	`222 47% 11%`	Accent text	Dark background
`--destructive`	`0 80% 65%`	Error/danger color	Red
`--destructive-foreground`	`210 40% 96%`	Error text	Light gray
`--border`	`222 47% 16%`	Border color	Same as secondary
`--input`	`222 47% 16%`	Input backgrounds	Same as secondary
`--ring`	`190 95% 55%`	Focus rings	Same as primary
`--success`	`140 60% 55%`	Success color	Green
`--warning`	`45 100% 70%`	Warning color	Yellow

Tailwind Configuration

The Tailwind config (`tailwind.config.ts`) extends the default theme with custom colors that reference the CSS variables:

```
colors: {
  background: 'hsl(var(--background))',
  foreground: 'hsl(var(--foreground))',
  card: {
    DEFAULT: 'hsl(var(--card))',
    foreground: 'hsl(var(--card-foreground))',
  },
  // ... (all other variables mapped similarly)
  chart: {
    '1': 'hsl(var(--chart-1))',
    '2': 'hsl(var(--chart-2))',
    '3': 'hsl(var(--chart-3))',
    '4': 'hsl(var(--chart-4))',
    '5': 'hsl(var(--chart-5))',
  },
}
```

Direct Hex Color Values

These hex colors are used directly in component styling:

Hex Color	RGB Equivalent	Usage	Location
#0B1426	rgb(11, 20, 38)	Modal backgrounds	`trade-confirmation-modal.tsx` , `trade-entry-modal.tsx`
#1E293B	rgb(30, 41, 59)	Card backgrounds, hover states	`trade-confirmation-modal.tsx` , `trade-entry-modal.tsx`
#334155	rgb(51, 65, 85)	Borders, separators	`trade-confirmation-modal.tsx` , `trade-entry-modal.tsx`

Special Color Effects

Gradients

1. **Text Gradient** (defined in `globals.css`):
   ```css
   .text-gradient {
     background: linear-gradient(135deg, hsl(var(--primary)), hsl(var(--accent)));
     -webkit-background-clip: text;
     -webkit-text-fill-color: transparent;
   }
   ```

2. **Glass Effect** (defined in `globals.css`):
   ```css
   .glass-effect {
     backdrop-filter: blur(16px);
     background: rgba(255, 255, 255, 0.1);
   }
   ```

3. **Account Tier Gradients** (in `account-tier-badge.tsx`):
   - Admin: `bg-gradient-to-r from-purple-500 to-pink-500`
   - Pro: `bg-gradient-to-r from-blue-500 to-cyan-500`

Most Frequently Used Color Classes

Based on usage analysis, the most common color classes are:

Class	Usage Count	Purpose
`text-white`	23+	White text on dark backgrounds
`text-muted-foreground`	22+	Secondary/muted text
`text-gray-300`	22+	Light gray text
`text-gray-400`	13+	Medium gray text
`text-primary`	8+	Primary brand color text
`bg-muted`	8+	Muted background areas
`text-accent-foreground`	7+	Text on accent backgrounds
`bg-accent`	7+	Accent background areas

Color Usage by Component Type

Backgrounds

- **Main App**: `bg-background` (CSS variable)
- **Cards**: `bg-card`, `bg-[#1E293B]` (direct hex)
- **Modals**: `bg-[#0B1426]` (direct hex)
- **Inputs**: `bg-input` (CSS variable)

Text Colors

- **Primary Text**: `text-foreground`, `text-white`
- **Secondary Text**: `text-muted-foreground`, `text-gray-300`, `text-gray-400`
- **Brand Text**: `text-primary`
- **Success/Error**: `success-color`, `error-color` (custom classes)

Borders

- **Standard Borders**: `border-border` (CSS variable)
- **Card Borders**: `border-[#334155]` (direct hex)
- **Input Borders**: `border-input` (CSS variable)

Interactive Elements

- **Buttons**: Use primary, secondary, and destructive color schemes
- **Hover States**: Often use `hover:bg-[#1E293B]` or `hover:bg-accent`
- **Focus States**: Use `ring` color for focus indicators

File Locations Summary

Primary Color Definitions

- **CSS Variables**: `app/globals.css` (lines 7-26)
- **Tailwind Config**: `tailwind.config.ts` (lines 23-61)

Component-Specific Colors

- **Trade Modals**: `components/trade-confirmation-modal.tsx`, `components/trade-entry-modal.tsx`
- **Account Badges**: `components/account-tier-badge.tsx`
- **Charts**: `components/price-chart.tsx` (uses success/destructive variables)

Utility Classes

- **Custom Classes**: `app/globals.css` (lines 60-104)
- **Animation Classes**: `app/globals.css` (lines 44-49)

Theme System

The application uses `next-themes` for theme management, with the theme provider configured in `components/theme-provider.tsx`. The current implementation appears to use a single dark theme, but the infrastructure supports multiple themes.

Recommendations

1. **Consistency**: Most colors follow the CSS variable system, but some components use direct hex values. Consider migrating all colors to use CSS variables for better maintainability.

2. **Documentation**: The three direct hex colors (`#0B1426`, `#1E293B`, `#334155`) could be added as CSS variables for better semantic naming.

3. **Chart Colors**: The chart color variables (`--chart-1` through `--chart-5`) are defined in Tailwind config but their actual HSL values are not set in the CSS variables.

4. **Color Accessibility**: Ensure all color combinations meet WCAG accessibility guidelines for contrast ratios.