Jigged - Design System

Overview

Jigged uses Material-UI (MUI) v5+ as the component library, following Material Design 3 principles with a **single dark gradient theme** that tested exceptionally well with manufacturing users ("pretty fucking awesome" feedback).

Theme Philosophy: Static, professional dark gradient theme optimized for manufacturing environments. No light/dark mode toggle - one polished theme that works everywhere.

Brand Identity

The Gradient (Core Brand Element)

The deep gradient background is Jigged's visual signature and must be present on all pages:

```
background: radial-gradient(circle at top left, #111439 0%, #4682B4 100%);
```

- **Deep Indigo (#111439)** at top-left - professional, industrial depth
- **Steel Blue (#4682B4)** at bottom-right - precision, trust, manufacturing
- **Direction:** Radial from top-left creates subtle movement without distraction

Why this gradient works:

- Excellent contrast for white text in bright shop floor lighting
- Professional industrial aesthetic (machined metal feel)
- Distinctive brand identity
- Works on tablets, phones, and desktop monitors
- Tested and validated with target users

Supporting Brand Colors

- **Steel Blue:** `#4682B4` - Primary brand color for CTAs, links, accents

- **Deep Indigo:** `#111439` - Foundation color, card backgrounds

- **Neutral Gray:** `#B0B3B8` - Secondary text, disabled states

MUI Theme Configuration

Single Dark Theme

```
import { createTheme } from '@mui/material/styles';

const jiggedTheme = createTheme({
  palette: {
    mode: 'dark',
    primary: {
      main: '#4682B4',     // Steel Blue
      light: '#5a96c9',    // Hover state
      dark: '#3a6f9a',     // Pressed state
      contrastText: '#fff',
    },
    secondary: {
      main: '#B0B3B8',     // Neutral Gray
      light: '#c5c7cc',
      dark: '#9a9da1',
    },
    background: {
      default: '#0a0e1a',   // Very dark for gradient overlay
      paper: 'rgba(26, 31, 74, 0.6)',  // Semi-transparent cards on gradient
    },
    text: {
      primary: '#ffffff',
      secondary: '#B0B3B8',
    },
    success: { main: '#10b981' },  // Completed jobs
    warning: { main: '#f59e0b' },  // Approaching deadlines
```

```
    error: { main: '#ef4444' },    // Overdue, errors
    info: { main: '#3b82f6' },    // Informational
  },
  typography: {
    fontFamily: '-apple-system, BlinkMacSystemFont, "Segoe UI", Roboto, "Hel
vetica Neue", sans-serif',
    h1: {
      fontSize: '2.5rem',
      fontWeight: 700,
      lineHeight: 1.2,
      color: '#ffffff',
    },
    h2: {
      fontSize: '2rem',
      fontWeight: 600,
      lineHeight: 1.3,
      color: '#ffffff',
    },
    h3: {
      fontSize: '1.75rem',
      fontWeight: 600,
      lineHeight: 1.3,
      color: '#ffffff',
    },
    h4: {
      fontSize: '1.5rem',
      fontWeight: 600,
      lineHeight: 1.4,
      color: '#ffffff',
    },
    h5: {
      fontSize: '1.25rem',
      fontWeight: 600,
      lineHeight: 1.4,
      color: '#ffffff',
    },
```

```
    h6: {
     fontSize: '1rem',
     fontWeight: 600,
     lineHeight: 1.5,
     color: '#ffffff',
    },
    body1: {
     fontSize: '1rem',
     lineHeight: 1.6,
     color: '#ffffff',
    },
    body2: {
     fontSize: '0.875rem',
     lineHeight: 1.5,
     color: '#B0B3B8',
    },
    button: {
     textTransform: 'none',
     fontWeight: 500,
    },
   },
   shape: {
    borderRadius: 8,
   },
   components: {
    MuiButton: {
     styleOverrides: {
      root: {
       textTransform: 'none',
       fontWeight: 500,
       padding: '10px 20px',
      },
      sizeLarge: {
       padding: '12px 24px',
       fontSize: '1rem',
      },
```

```
      },
    },
    MuiTextField: {
      defaultProps: {
        variant: 'outlined',
      },
    },
    MuiCard: {
      styleOverrides: {
        root: {
          backgroundColor: 'rgba(26, 31, 74, 0.6)',
          backdropFilter: 'blur(10px)',
          boxShadow: '0 4px 6px rgba(0, 0, 0, 0.3)',
        },
      },
    },
    MuiPaper: {
      styleOverrides: {
        root: {
          backgroundImage: 'none',
        },
      },
    },
  },
});


export default jiggedTheme;
```

Design Principles

1. Professional, Not Trendy

Must appeal to 50-60 year old shop owners. Avoid flashy animations or overly modern aesthetics. Focus on clarity and function.

2. Industrial Aesthetic

Evoke machined metal, precision manufacturing. The gradient suggests depth and professionalism. Colors should feel substantial, not playful.

3. Readable in Bright Environments

Shop floors have bright fluorescent lighting (500-1000 lux). White text on dark gradient provides excellent contrast in these conditions.

4. No Theme Toggle

Single static theme. No light/dark mode switching. One polished, professional theme that works everywhere.

5. Material Design Compliance

Follow Material Design 3 guidelines for consistency, accessibility, and familiar interaction patterns.

Component Usage Guidelines

Buttons

Primary Actions (work order creation, approvals):

```
<Button variant="contained" color="primary" size="large">
  Create Work Order
</Button>
```

Secondary Actions (cancel, back):

```
<Button variant="outlined" color="primary">
  Cancel
</Button>
```

Tertiary Actions (less important options):

```
<Button variant="text" color="primary">
  Skip
</Button>
```

Text Fields

```
<TextField
  fullWidth
  label="Work Order Number"
  variant="outlined"
  margin="normal"
/>
```

Cards

```
<Card elevation={3}>
  <CardContent>
    <Typography variant="h6" gutterBottom>
      Work Order #1234
    </Typography>
    <Typography variant="body2" color="text.secondary">
      Customer: Acme Corp
    </Typography>
  </CardContent>
</Card>
```

Status Badges

```
<Chip
  label="In Progress"
  color="info"
  size="small"
/>
```

```
<Chip
  label="Complete"
  color="success"
  size="small"
/>

<Chip
  label="Overdue"
  color="error"
  size="small"
/>
```

Typography Scale

- **h1**: 2.5rem (40px) - Page titles

- **h2**: 2rem (32px) - Section headings

- **h3**: 1.75rem (28px) - Subsection headings

- **h4**: 1.5rem (24px) - Card titles

- **h5**: 1.25rem (20px) - Component headings

- **h6**: 1rem (16px) - Small headings

- **body1**: 1rem (16px) - Primary body text

- **body2**: 0.875rem (14px) - Secondary body text

- **caption**: 0.75rem (12px) - Captions, helper text

Spacing System

MUI uses an 8px base spacing unit accessed via `theme.spacing(n)` :

- `spacing(1)` = 8px

- `spacing(2)` = 16px

- `spacing(3)` = 24px

- `spacing(4)` = 32px

- `spacing(6)` = 48px

- `spacing(8)` = 64px

Common usage:

```
<Box sx={{ p: 3 }}>  {/* 24px padding on all sides */}
<Box sx={{ mb: 2 }}>  {/* 16px margin bottom */}
<Box sx={{ px: 4, py: 2 }}>  {/* 32px horizontal, 16px vertical padding */}
```

Color Palette

Status Colors

- **Success / Complete**: `#10b981` - Work orders finished, quality passed

- **Warning / Pending**: `#f59e0b` - Approaching deadlines, needs attention

- **Error / Overdue**: `#ef4444` - Late jobs, critical issues

- **Info / In Progress**: `#3b82f6` - Active work, informational notices

Work Order Status Colors

```
const statusColors = {
  requested: 'default',    // Gray
  approved: 'info',        // Blue
  in_progress: 'primary',   // Steel Blue
  quality_checked: 'info',  // Blue
  shipped: 'success',      // Green
  delivered: 'success',    // Green
  invoiced: 'warning',     // Amber
  complete: 'success',     // Green
  overdue: 'error',        // Red
};
```

Elevation System

MUI provides elevation levels from 0-24:

- **0**: Flat elements (buttons in their default state)

- **1**: Slightly raised cards

- **2**: Standard cards

- **3**: Emphasized cards (auth pages, important forms)

- **4**: App bar, navigation

- **8**: Floating action buttons

- **16**: Modals

- **24**: Full-screen dialogs

Usage:

```
<Card elevation={2}>  {/* Standard card */}
<Card elevation={3}>  {/* Emphasized card */}
<AppBar elevation={4}>  {/* Navigation bar */}
```

Accessibility

WCAG 2.1 Level A Compliance

Color Contrast:

- White text (#ffffff) on dark gradient background exceeds 7:1 ratio

- All status colors tested for sufficient contrast

- Secondary text (#B0B3B8) meets minimum 4.5:1 ratio

Keyboard Navigation:

- All interactive elements are keyboard accessible

- Focus indicators are visible

- Logical tab order throughout

Touch Targets:

- Minimum 48px × 48px for all interactive elements (MUI default)

- Adequate spacing between touch targets

Screen Reader Support:

- Semantic HTML via MUI components

- ARIA labels where needed

- Proper heading hierarchy

Implementation Example

App-Level Theme Setup (Next.js)

```
// src/app/layout.tsx
'use client';

import { ThemeProvider } from '@mui/material/styles';
import { CssBaseline, Box } from '@mui/material';
import jiggedTheme from '@/lib/theme';

export default function RootLayout({
  children,
}: {
  children: React.ReactNode;
}) {
  return (
    <html lang="en">
      <body>
        <ThemeProvider theme={jiggedTheme}>
          <CssBaseline />
          <Box
            sx={{{
```

```
        minHeight: '100vh',
        background: 'radial-gradient(circle at top left, #111439 0%, #4682B4 1
00%)',
        backgroundAttachment: 'fixed',
      }}
    >
      {children}
    </Box>
  </ThemeProvider>
</body>
</html>
);
}
```

Component Example

```
import { Card, CardContent, Typography, Button, Chip, Box } from '@mui/mate
rial';

function WorkOrderCard({ workOrder }) {
  return (
    <Card elevation={3} sx={{ mb: 2 }}>
      <CardContent>
        <Box sx={{ display: 'flex', justifyContent: 'space-between', alignItems: 'c
enter', mb: 2 }}>
          <Typography variant="h6">
            WO-{workOrder.id}
          </Typography>
          <Chip
            label={workOrder.status}
            color={statusColors[workOrder.status]}
            size="small"
          />
        </Box>
```

```
      <Typography variant="body2" color="text.secondary" gutterBottom>
        Customer: {workOrder.customer}
      </Typography>

      <Typography variant="body2" color="text.secondary">
        Due: {workOrder.dueDate}
      </Typography>

      <Box sx={{ mt: 3 }}>
        <Button variant="contained" fullWidth>
          View Details
        </Button>
      </Box>
    </CardContent>
  </Card>
  );
}
```

Do's and Don'ts

✅ Do:

- Use MUI components exclusively - no plain HTML elements

- Use the `sx` prop for styling - no external CSS files

- Use theme spacing: `sx={{ p: 3 }}` not `sx={{ padding: '24px' }}`

- Use theme colors: `color="primary"` not `sx={{ color: '#4682B4' }}`

- Apply the radial gradient background to all pages

- Use semi-transparent cards (backdrop-filter: blur) on gradient

- Test readability in bright lighting conditions

❌ Don't:

- Mix plain HTML with MUI components

- Write custom CSS files

- Hardcode pixel values - use theme spacing

- Hardcode colors - use theme palette

- Add light/dark mode toggle

- Use flat backgrounds - gradient is brand identity

- Use `textTransform: 'uppercase'` on buttons (already set to 'none')

- Use overly playful or trendy styling

Mobile Considerations

Shop Floor Requirements

1. **Large Touch Targets**: All buttons, inputs minimum 48px height (MUI default)

2. **Readable Text**: Minimum 16px font size for body text

3. **Gradient Performance**: Use `background-attachment: fixed` to prevent repainting

4. **QR Code Scanning**: Large scanning area, clear instructions

5. **Landscape Support**: Work order details should work in landscape

Mobile-Specific Components

```
// Bottom navigation for mobile
import { BottomNavigation, BottomNavigationAction } from '@mui/material';
import WorkIcon from '@mui/icons-material/Work';
import InventoryIcon from '@mui/icons-material/Inventory';

<BottomNavigation>
  <BottomNavigationAction label="Work Orders" icon={<WorkIcon />} />
  <BottomNavigationAction label="Inventory" icon={<InventoryIcon />} />
</BottomNavigation>
```

Resources

- [Material-UI Documentation](#)

- [Material Design 3 Guidelines](#)

- [MUI Component API](#)

- [CSS Gradients Guide](#)

Last Updated: December 28, 2025