

# Design System Assignment

**Focus Areas:** Color System · UI Components

**Tech Stack:** React · TypeScript · TailwindCSS (or styled-components) · Storybook

## What You'll Do

Build a small, scalable design system that showcases your ability to create **enterprise-grade, reusable UI components** using React and TypeScript. You'll document them using Storybook and structure the project with scalability in mind.

## Objectives

We're evaluating your ability to:

- Design and implement a robust **token-based color system**
- Build **accessible, responsive**, and **reusable** UI components
- Apply **interaction states** and **behavioral logic**
- Document clearly with **Storybook** for developer usability

## Foundational Requirement: Color System

Create a comprehensive token-based color system tailored for B2B/enterprise UI needs:

**Include:**

- Primary, Secondary, Tertiary colors
- Neutral palette (greys, white, borders, backgrounds)
- Semantic colors: Success, Info, Warning, Error
- Surface/Background layering
- Support for **light & dark theme**
- WCAG-compliant contrast ratios

**Requirements:**

- Use **CSS variables** or **theme utilities**

- Document usage in **Storybook** with:
  - Token naming conventions
  - Example applications
  - Accessibility considerations

## **Choose 2 of 5 Components to Build (Fully Functional)**

Build **minimum two** of the following UI components. Ensure it is responsive, accessible, and adheres to best practices in state management, interaction handling, and reusability.

### **Option 1: Advanced Data Table**

- Sortable columns with arrow indicators
- Hoverable rows with subtle elevation
- Loading skeleton states
- Pagination controls
- Checkbox selection (including indeterminate state)
- Expandable rows (with smooth animations)
- Filter dropdowns in column headers
- Mobile responsiveness (stacked layout on small screens)

### **Option 2: Multi-Step Wizard Form**

- Progress indicator with step numbers/icons
- Step titles with checkmarks for completed steps
- Animated transitions between steps
- Navigation (Next, Previous, Skip)
- Validation and error handling
- Async loading states
- Responsive layout
- Optional steps support

### **Option 3: Advanced File Upload**

- Drag & drop zone with feedback
- File preview thumbnails (images/docs)
- Upload progress bars per file
- Error states for failed validations
- Retry, remove all, and bulk actions
- Optional image compression preview

- Mobile camera input support



#### **Option 4: Dynamic Form Builder**

- Grid-based responsive layout
- Real-time field validation feedback
- Conditional rendering of fields
- Grouping of fields with section headers
- Progress indicator based on form completion
- Auto-save indicator during changes
- Error summary panel at top of form
- Mobile-optimized input types (e.g., date, tel, number)



#### **Option 5: Advanced Modal System**

- Multiple animation types (fade, scale, slide-in)
- Optional backdrop blur effect
- Configurable modal sizes (small, medium, fullscreen)
- Support for stacked modals
- Drawer-style variant (slide from left/right)
- Loading states with built-in spinner overlay
- Keyboard navigation (ESC to close, tab-trapping)



### **Storybook Documentation Checklist**

For **each component**, include a detailed Storybook entry with:

- ✓ Component name & description
- ✓ Props & API definitions (with TypeScript types)
- ✓ Use cases & real-world examples
- ✓ Anatomy/structure breakdown
- ✓ States & variants
- ✓ Interaction behavior
- ✓ Accessibility notes (ARIA roles, keyboard nav, focus)
- ✓ Theming and responsiveness handling
- ✓ Best practices, do's & don'ts



### **Project Structure**

- Each component in its **own module/folder**
- Use **TypeScript interfaces** for props
- Follow scalable, reusable component patterns
- Apply best practices in file structure, naming, and styling

## **Submission Guidelines**

Please submit the following:

1. **GitHub Repository**
  - Clear folder structure
  - README with setup instructions
  - Description of your approach
2. **Storybook Preview Link**
  - Use [Chromatic](#) or [Vercel](#) to deploy
3. **GIFs or Screenshots** (optional but recommended)
  - Showcase interactive states or animations