

# React Component Development Assignment

**Focus Area:** UI Components

**Tech Stack:** React · TypeScript · TailwindCSS · Storybook

## Task

Build **two React components** in 2 days using React, TypeScript and modern patterns. You'll document them using Storybook and structure the project with scalability in mind.

## Component 1: InputField

Create a flexible input component with validation states.

### Features:

- Text input with label, placeholder, helper text, error message
- States: disabled, invalid, loading
- Variants: filled, outlined, ghost
- Sizes: small, medium, large
- Optional: clear button, password toggle
- Optional: Support for **light & dark theme**

### Props:

```
interface InputFieldProps {  
  value?: string;  
  onChange?: (e: React.ChangeEvent<HTMLInputElement>) => void;  
  label?: string;  
  placeholder?: string;  
  helperText?: string;  
  errorMessage?: string;  
  disabled?: boolean;  
  invalid?: boolean;  
  variant?: 'filled' | 'outlined' | 'ghost';  
  size?: 'sm' | 'md' | 'lg';  
}
```

## Component 2: DataTable

Create a data table with basic functionality.

### Features:

- Display tabular data
- Column sorting
- Row selection (single/multiple)
- Loading state
- Empty state

### Props:

```
interface DataTableProps<T> {  
  data: T[];  
  columns: Column<T>[];  
  loading?: boolean;  
  selectable?: boolean;  
  onRowSelect?: (selectedRows: T[]) => void;  
}
```

```
interface Column<T> {  
  key: string;  
  title: string;  
  dataIndex: keyof T;  
  sortable?: boolean;  
}
```

## Requirements

- TypeScript with proper typing
- Responsive design
- Basic accessibility (ARIA labels)
- Clean, modern styling
- Include basic test

## Deliverables

- Two working components

- Simple demo/example usage
- Basic documentation



## **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