# **Dynamic Tab Header Component**

A React component that provides a dynamic tab management system with overflow handling, horizontal scrolling, and persistent storage.

# 🚀 Features

- Dynamic Tab Creation: Add unlimited tabs with the "+" button
- Overflow Management: First 20 tabs visible, additional tabs in dropdown
- Horizontal Scrolling: Smooth scrolling for visible tabs when more than 9 tabs
- Tab Editing: Double-click tab titles for inline editing
- Persistent Storage: Tabs and active state saved in localStorage
- Responsive Design: Optimized for desktop, tablet, and mobile
- Accessibility: Full keyboard navigation and ARIA support

# Core Logic

#### **Tab State Management**

const [tabs, setTabs] = useState([...]); // Tab array with id, title, isEditing
const [activeTab, setActiveTab] = useState(1); // Currently selected tab ID
const [isDropdownOpen, setIsDropdownOpen] = useState(false); // Dropdown state

### **Overflow Logic**

```
// Split tabs into visible (first 20) and overflow const visibleTabs = React.useMemo(() => tabs.slice(0, 20), [tabs]); const overflowTabs = React.useMemo(() => tabs.slice(20), [tabs]); const hasOverflow = React.useMemo(() => tabs.length > 20, [tabs.length]);
```

## **Auto-Scroll Implementation**

```
const scrollToActiveTab = useCallback((tabId) => {
  const tabIndex = visibleTabs.findIndex(tab => tab.id === tabId);
  if (tabIndex !== -1 && visibleTabsRef.current) {
    const tabElement = visibleTabsRef.current.children[tabIndex];
    // Center the active tab in the scrollable container
    const scrollLeft = tabLeft - (containerWidth / 2) + (tabWidth / 2);
    visibleTabsRef.current.scrollTo({ left: scrollLeft, behavior: 'smooth' });
  }
}, [tabs]);
```

#### **Dropdown State Management**

```
const removeTab = useCallback((tabld) => {
 const wasInOverflow = tabs.length > 20 && tabs.findIndex(tab => tab.id === tabld)
>= 20;
 // Force dropdown re-render when removing overflow tabs
 if (wasInOverflow && isDropdownOpen) {
  setIsDropdownOpen(false);
  setTimeout(() => {
   if (updatedTabs.length > 20) setIsDropdownOpen(true);
  }, 50);
 }
}, [tabs, isDropdownOpen]);
```

#### 🮨 Key Components

#### **Visible Tabs Container**

- Displays first 20 tabs horizontally
- Horizontal scrolling with custom scrollbar
- Auto-scroll to active tab functionality

#### **Overflow Dropdown**

- Appears when more than 20 tabs exist
- Shows tabs 21+ in scrollable dropdown
- Force re-render on tab removal to prevent stale data

#### **Persistence Layer**

- localStorage integration for tabs and active state
- Automatic save on state changes
- Restore on component mount

# Responsive Breakpoints

- Desktop: Full tab width (120px-200px)
- Tablet (768px): Medium tabs (100px-150px)
- Mobile (480px): Compact tabs (80px-120px)

# **Interactions**

Action	Result
Click tab	Activate tab
Double-click title	Edit mode
Click × button	Remove tab
Click + button	Add new tab
Click button	Toggle dropdown
Escape key	Cancel editing
Enter key	Save title

## **Screenshots**











