Bolt.new Instructions: HealthBridge Autonomy Slider Implementation

Overview

Build a **Data Sharing Autonomy Slider** component for HealthBridge - a privacy-first healthcare platform. This feature allows patients to control how much autonomy they delegate for sharing their health data with providers, labs, and third-party systems.

Core Requirements

1. Main Autonomy Slider Component

Create a React component with these 5 autonomy levels:

Level 0 - Manual Control (0%)

- Patient approves every data request individually
- No automation, full manual control
- Color: Red (🟥 #ef4444)

Level 1 - Guided Sharing (25%)

- System suggests sharing settings
- Patient reviews before applying
- Color: Orange (🟧 #f97316)

Level 2 - Rules-Based (50%)

- Patient sets conditional rules
- System applies rules automatically
- Color: Yellow (🟡 #eab308)

Level 3 - Trusted Autonomy (75%)

- Auto-shares based on trusted provider list
- Transparent logging of all actions
- Color: Light Green (🟢 #22c55e)

Level 4 - Full Delegation (100%)

- Predefined parties get automatic access
- Still maintains audit trails

- Color: Green (🟢 #16a34a)

2. UI/UX Specifications

Slider Design (Modern, Clean Aesthetic)

- **Track Design**: Sleek horizontal track with subtle gradient background (gray-100 to gray-200)

- **Step Indicators**: 5 distinct circular markers with smooth transitions

- **Active States**: Elegant glow effect around active level with subtle drop shadow

- **Color Progression**: Sophisticated color palette - red (🔴 #ef4444) → amber (🟠 #f59e0b) → yellow (🟡 #eab308) → emerald (🟢 #10b981) → green (🟢 #059669)

- **Typography**: Clean sans-serif (Inter or SF Pro) with appropriate weight hierarchy

- **Spacing**: Generous whitespace using 8px grid system

- **Visual Hierarchy**: Current level prominently displayed with larger text and subtle background card

- **Micro-interactions**: Smooth hover states, gentle spring animations on level changes

- **Glass morphism**: Subtle background blur effects on cards with semi-transparent backgrounds

Information Display (Premium Visual Design)

- **Card-based Layout**: Clean white cards with subtle shadows (shadow-sm to shadow-lg)

- **Current Level Display**: Large, prominent card with gradient background matching autonomy level

- **Icon System**: Consistent iconography using Lucide React icons with proper sizing (20px, 24px)

- **Expandable Sections**: Smooth accordion animations with chevron icons

- **Provider Cards**: Modern card design with avatar, name, specialty, and trust badge

- **Activity Summary**: Timeline-style layout with connecting lines and status indicators

- **Visual Feedback**: Subtle success/warning states with appropriate color coding

- **Typography Scale**: Clear hierarchy - headings (text-xl, font-semibold), body (text-base), captions (text-sm, text-gray-600)

- **Responsive Grid**: CSS Grid layout that adapts beautifully across screen sizes

Override Controls (Elegant Toggle Design)

- **Toggle Switches**: Custom-styled switches with smooth sliding animations

- **Sensitive Data Cards**: Individual cards for each data type with icons and clear labels

- **Visual States**:
  - **Enabled**: Emerald green background with white toggle circle
  - **Disabled**: Gray background with subtle transition
  - **Hover**: Gentle scale transform (scale-105) with smooth transition

- **Card Layout**: Grid of override cards with consistent spacing and alignment
- **Emergency Settings**: Distinctive red-accented card with shield icon
- **Status Indicators**: Small dot indicators showing current override status
- **Loading States**: Skeleton placeholders with subtle pulse animation
- **Accessibility**: Proper focus rings and keyboard navigation styling

3. Technical Implementation

State Management

```javascript
const [autonomyLevel, setAutonomyLevel] = useState(0);
const [trustedProviders, setTrustedProviders] = useState([]);
const [overrides, setOverrides] = useState({
  mentalHealth: true,
  geneticInfo: true,
  reproductiveHealth: false,
  substanceUse: true
});
```

Data Structure

```javascript
const autonomyConfig = {
  level: 0-4,
  trustedProviders: ['provider_id_1', 'provider_id_2'],
  overrides: {
    mentalHealth: boolean,
    geneticInfo: boolean,
    reproductiveHealth: boolean,
    substanceUse: boolean
  },
  emergencyAccess: {
    enabled: boolean,
    contacts: ['emergency_contact_id']
  }
};
```

4. Required Components

Main Components

1. **AutonomySlider** - Main slider interface

2. **LevelDescription** - Shows what each level means

3. **TrustedProvidersList** - Manage trusted providers

4. **OverrideSettings** - Sensitive data controls

5. **ActivityLog** - Recent sharing activities

6. **EmergencySettings** - Emergency access configuration

Supporting Components (Modern Design System)

1. **ProviderCard** - Clean card with circular avatar, provider info, and elegant trust toggle

2. **DataTypeToggle** - Beautiful custom toggle with smooth animations and clear labels

3. **ConfirmationModal** - Centered modal with backdrop blur, rounded corners, and clear action buttons

4. **AuditLogEntry** - Timeline-style entries with connecting lines and status badges

5. **LoadingStates** - Elegant skeleton components with subtle pulse animations

6. **EmptyStates** - Thoughtful illustrations and helpful messaging for empty data

7. **StatusBadge** - Rounded badges with appropriate color coding and subtle shadows

5. Key Features to Implement

Interactive Slider (Premium User Experience)

- **Smooth Transitions**: CSS transforms with easing functions (ease-in-out, spring animations)
- **Visual Feedback**:
  - **Hover**: Gentle scale and glow effects on interactive elements
  - **Active**: Immediate visual response with appropriate color changes
  - **Focus**: Clear focus rings for accessibility
- **Level Change Animation**: Smooth progress bar animation showing transition between levels
- **Confirmation Dialog**: Beautiful modal with subtle backdrop blur and modern button design
- **Keyboard Navigation**: Elegant focus indicators and intuitive arrow key controls
- **Touch Optimization**: Larger touch targets (44px minimum) with proper spacing
- **Haptic Feedback**: Subtle visual pulse effects mimicking haptic feedback
- **Progress Indicators**: Subtle progress dots showing completion status

Smart Defaults

- New users start at Level 0 (Manual)
- Guided onboarding to help users understand each level
- Contextual recommendations based on user behavior

Audit Trail (Clean Data Visualization)

- **Timeline Design**: Vertical timeline with connecting lines and status indicators
- **Entry Cards**: Clean white cards with subtle shadows and proper spacing
- **Status Badges**: Color-coded badges (success, warning, info) with rounded corners
- **Data Hierarchy**: Clear visual hierarchy with timestamps, actions, and details
- **Export Interface**: Modern dropdown with clean icons and proper typography
- **Filtering Controls**: Elegant filter chips with clear states and animations
- **Empty States**: Thoughtful empty state designs with helpful messaging
- **Pagination**: Clean pagination controls with proper spacing and states

Integration Points

- Connect with existing provider management
- Link to appointment booking system
- Integration with secure messaging
- Connection to My Health Record settings

6. Privacy & Security Features

Data Protection

- All settings encrypted at rest
- Changes require MFA verification for levels 3-4
- Time-limited access tokens
- Automatic access revocation capabilities

Compliance Features

- Privacy Act 1988 consent logging
- GDPR-style data portability
- Right to be forgotten implementation
- Regular consent renewal prompts

7. User Experience Flow

Initial Setup (Guided Onboarding Experience)

1. **Welcome Screen**: Clean hero section with modern illustration and clear value proposition
2. **Educational Overlay**: Beautiful step-by-step modal with progress indicators and smooth transitions

3. **Interactive Preview**: Real-time preview of slider changes with visual feedback

4. **Confirmation Flow**: Multi-step confirmation with clear visual progression

5. **Success Animation**: Delightful success state with subtle animations and positive messaging

6. **Progressive Disclosure**: Information revealed progressively to avoid overwhelming users

Ongoing Management (Dashboard Experience)

1. **Status Dashboard**: Clean card-based layout with current level prominently displayed

2. **Activity Summary**: Beautiful charts and visualizations showing sharing patterns

3. **Smart Notifications**: Elegant notification cards with appropriate urgency indicators

4. **Quick Actions**: Floating action buttons with smooth hover animations

5. **Settings Access**: Intuitive settings panel with organized sections and clear navigation

6. **Visual Feedback**: Immediate visual confirmation of changes with subtle animations

Emergency Scenarios

1. Emergency override bypasses autonomy settings

2. Logged and reported to patient afterward

3. Time-limited emergency access

4. Clear audit trail of emergency actions

8. Implementation Priority

Phase 1 (MVP)

- Basic 5-level slider component
- Level descriptions and UI
- Trusted providers list
- Basic override settings

Phase 2 (Enhanced)

- Activity logging and audit trails
- Advanced override controls
- Integration with existing systems
- Mobile responsiveness

Phase 3 (Advanced)

- AI-powered recommendations
- Advanced analytics

- Third-party integration APIs

- Compliance reporting tools

9. Testing Requirements

User Testing

- Test with different patient personas

- Accessibility testing (screen readers, keyboard navigation)

- Mobile device testing

- Edge case scenarios (emergency access, provider changes)

Technical Testing

- State management under different scenarios

- Performance with large provider lists

- Data encryption/decryption

- Integration with existing HealthBridge components

10. Code Quality Requirements

Standards

- TypeScript for type safety

- Tailwind CSS for styling

- React hooks for state management

- Proper error handling and loading states

Documentation

- Component documentation with examples

- API documentation for integration

- User guide for autonomy levels

- Privacy policy updates

Specific Bolt.new Commands (Design-Focused)

1. **Create the premium slider component:** "Create a React component called AutonomySlider with a beautiful 5-level horizontal slider using Tailwind CSS. Include a sleek track with gradient background, circular step indicators with glow effects, sophisticated color progression from red to green, and smooth spring animations. Use Inter font family and implement glass morphism effects on the current level display card."

2. **Build elegant level descriptions:** "Add a LevelDescription component with premium card-based design using white backgrounds, subtle shadows, and smooth accordion animations. Include Lucide React icons (Shield, Users, Settings, etc.) and implement a clear typography hierarchy with proper spacing using 8px grid system."

3. **Design the provider management interface:** "Create a TrustedProvidersList component with modern card layout featuring circular avatars, clean typography, and beautiful toggle switches. Include search functionality with elegant input styling, filter chips with smooth animations, and empty states with thoughtful messaging."

4. **Implement sophisticated override controls:** "Build OverrideSettings component with custom-styled toggle switches featuring smooth sliding animations, organized in a responsive grid layout. Each sensitive data type should have its own card with appropriate icons, clear labels, and elegant hover states with gentle scale transforms."

5. **Create the premium audit log:** "Develop an ActivityLog component with timeline-style design featuring connecting lines, status badges with rounded corners, and clean card layouts. Include filtering controls with elegant dropdown menus, export functionality, and beautiful empty states with helpful illustrations."

6. **Add confirmation modals and micro-interactions:** "Implement ConfirmationModal component with backdrop blur effects, rounded corners, and clear action buttons. Add smooth transitions throughout the application using CSS transforms and easing functions. Include loading states with skeleton components and pulse animations."

Design System Guidelines

Color Palette (Healthcare-Optimized)

- **Primary**: Blue (🔵 #3b82f6) - Trust and reliability
- **Success**: Emerald (🟢 #10b981) - Positive actions
- **Warning**: Amber (🟠 #f59e0b) - Attention needed
- **Error**: Red (🔴 #ef4444) - Critical actions
- **Neutral**: Slate grays (⬤ #64748b, ⬤ #94a3b8, ⬤ #cbd5e1)

Typography Scale

- **Display**: text-3xl, font-bold (32px)

- **Heading**: text-xl, font-semibold (20px)

- **Body**: text-base, font-normal (16px)

- **Caption**: text-sm, text-gray-600 (14px)

- **Small**: text-xs, text-gray-500 (12px)

Spacing System

- **Base unit**: 4px (Tailwind's default)

- **Component padding**: p-4, p-6, p-8

- **Section margins**: mb-6, mb-8, mb-12

- **Card spacing**: space-y-4, space-y-6

Animation Principles

- **Duration**: 200ms for micro-interactions, 300ms for transitions

- **Easing**: ease-in-out for most animations, spring for special effects

- **Transform**: scale(1.05) for hover, translateY(-2px) for cards

- **Opacity**: fade-in/out for modals and overlays

This enhanced design approach ensures HealthBridge's autonomy sliders feel premium, trustworthy, and aligned with modern healthcare application standards while maintaining accessibility and usability.