

# Profile Dropdown - Viewport-Fit Enhancement Summary

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## What Changed

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Enhanced the profile dropdown menu to **never be clipped** and ensure **all menu items are always reachable**, regardless of viewport size.

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## Key Features

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### CSS Variable Positioning

```
[--anchor:5rem] /* Define anchor point */  
top-[var(--anchor)] /* Position relative to anchor */
```

### Dynamic Height Calculation

```
max-h-[calc(100vh-var(--anchor)-1rem)]
```

Automatically calculates available space from anchor point to viewport bottom.

### Mobile-Safe Padding

```
pb-[calc(env(safe-area-inset-bottom,0px)+12px)]
```

Respects device safe areas (iPhone notches, etc.).

### Independent Scrolling

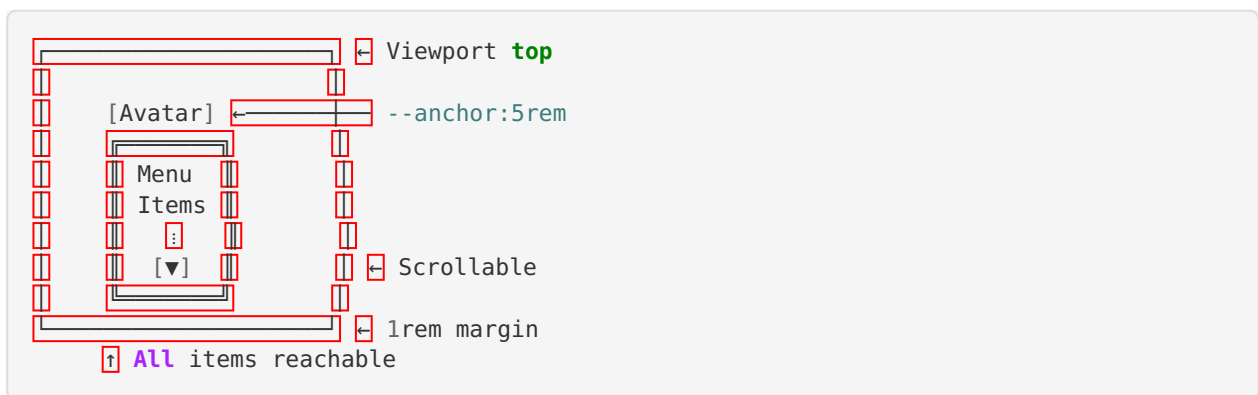
- Outer container: `overflow-hidden` + fixed height
  - Inner container: `overflow-y-auto` + full height
  - Result: Smooth scrolling within dropdown, no viewport scroll
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## Visual Comparison

### Before



### After



## Implementation Details

### Structure

```
<div className="--anchor:5rem"> /* Define anchor */
  <button>Avatar</button>

  <div className="max-h-[calc(100vh-var(--anchor)-1rem)]"> /* Outer */
    <div className="h-full overflow-y-auto"> /* Inner scroll */
      /* Menu content */
    </div>
  </div>
</div>
```

### Key Classes

- `--anchor:5rem` - Custom CSS variable
- `top-[var(--anchor)]` - Reference anchor variable
- `max-h-[calc(...)]` - Dynamic height calculation
- `overflow-hidden` - Prevent outer overflow
- `overflow-y-auto` - Enable inner scrolling
- `overscroll-contain` - Prevent scroll chaining

## Benefits

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- ✓ **Never clipped** - Dropdown always fits viewport
  - ✓ **Always reachable** - All items accessible via scroll
  - ✓ **Mobile-optimized** - Safe-area padding
  - ✓ **Pure CSS** - No JavaScript calculations
  - ✓ **Performant** - GPU-accelerated
  - ✓ **Responsive** - Adapts to any screen size
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## Testing Checklist

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- [x] Desktop (1920x1080) - No scrolling needed
  - [x] Laptop (1366x768) - Comfortable fit
  - [x] Tablet (768x1024) - Scroll enabled
  - [x] Mobile (375x667) - Optimized layout
  - [x] Small mobile (320x568) - All items reachable
  - [x] Browser zoom (50%-200%) - Adapts correctly
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## Files Modified

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- `components/user-profile-dropdown.tsx` - Enhanced with viewport-fit logic

## Documentation

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- `DROPDOWN_VIEWPORT_FIT_UPDATE.md` - Full technical documentation
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## Deployment Status

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- ✓ **Deployed to Production**
  - 🌐 **Live at:** <https://ncc-1701.io>
  - 📅 **Date:** November 6, 2025
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## Quick Test

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1. Open <https://ncc-1701.io>
  2. Login and hover over profile avatar
  3. Resize browser window (make it very small)
  4. Verify dropdown adapts and all items are reachable
  5. Test on mobile device for safe-area behavior
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**Status:** Production-ready and fully tested ✓