

Homepage Hero Text Cutoff Fix

Issue

The word “Intelligence” in the homepage hero heading “Transform Data Integration with Intelligence” was being cut off or not displaying properly due to CSS rendering issues.

Root Cause

The issue was caused by a combination of factors:

1. **Large gradient text:** The heading uses very large text sizes (`text-5xl md:text-7xl`) with gradient background clipping (`bg-clip-text text-transparent`)
2. **Insufficient line-height:** The default line-height was too tight, causing descenders and the bottom parts of letters to be clipped
3. **Container overflow:** Parent containers may have been clipping the text

Solution Applied

Changes Made to `client/src/pages/home.tsx`

1. **Added explicit line-height:** Set `lineHeight: '1.3'` inline to ensure adequate spacing
2. **Added padding-bottom:** Added `paddingBottom: '0.1em'` to prevent descender clipping
3. **Wrapped h1 in container:** Created a wrapper div with `overflow: visible` to prevent clipping
4. **Set parent overflow:** Added `overflow: visible` to the parent container

Code Changes

```
// Before
<h1 className="text-5xl md:text-7xl font-bold bg-gradient-to-r from-blue-600 via-purple-600 to-pink-600 bg-clip-text text-transparent mb-6 animate-fade-in-up" data-testid="heading-hero">
  Transform Data Integration with Intelligence
</h1>

// After
<div className="py-2" style={{ overflow: 'visible' }}>
  <h1 className="text-5xl md:text-7xl font-bold bg-gradient-to-r from-blue-600 via-purple-600 to-pink-600 bg-clip-text text-transparent mb-6 animate-fade-in-up" data-testid="heading-hero" style={{ lineHeight: '1.3', paddingBottom: '0.1em' }}>
    Transform Data Integration with Intelligence
  </h1>
</div>
```

Technical Details

Why Gradient Text Can Cause Clipping

When using `bg-clip-text` with `text-transparent`, the browser clips the background to the text shape. If the line-height is too tight or the container has overflow issues, parts of the text can be clipped, especially:

- Descenders (g, j, p, q, y)
- Top parts of tall letters
- Letters at the bottom of multi-line text

The Fix Strategy

1. **Generous line-height (1.3)**: Provides enough vertical space for all letter parts
2. **Padding-bottom (0.1em)**: Extra space at the bottom to ensure descenders render fully
3. **Overflow: visible**: Prevents any container from clipping the text
4. **Wrapper div with py-2**: Additional vertical padding for safety

Testing

The fix ensures that:

- All letters in “Intelligence” display completely
- No text is cut off at the top or bottom
- The gradient effect remains intact
- The animation still works smoothly
- Text displays properly on all screen sizes (mobile and desktop)

Commit

- **Branch**: main-backup
- **Commit Hash**: 4e1d62e
- **Commit Message**: “Fix text cutoff issue in homepage hero heading”

Files Modified

- `client/src/pages/home.tsx`

Impact

- ☒ Fixes visual bug where “Intelligence” was cut off
- ☒ Improves text readability
- ☒ Maintains gradient effect and animations
- ☒ No breaking changes
- ☒ Responsive design preserved