DocStruct Stress Test

Comprehensive PDF Feature Test

February 26, 2026

1 Mixed Content Overview

This document is designed to **stress test** the *DocStruct* pipeline with: colored text, underlined text, and different fonts.

1.1 Mathematical Equations

Inline math: $E = mc^2$, $\alpha + \beta = \gamma$, $\int_0^\infty e^{-x^2}\,dx = \frac{\sqrt{\pi}}{2}$

Display equations with colors:

$$f(x) = \sum_{n=0}^{\infty} \frac{x^n}{n!} = e^x \tag{1}$$

$$\nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t}, \quad \nabla \cdot \mathbf{B} = 0 \tag{2}$$

Matrix equation:

$$\begin{bmatrix} a & b \\ c & d \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 1 \\ 0 \end{bmatrix}$$

1.2 Tables with Colors

Feature	Value	Unit
Temperature	23.5	°C
Pressure	101.3	kPa
Humidity	65	%
Voltage	220	V

Table 1: Measurement data with colored rows

1.3 Lists and Enumerations

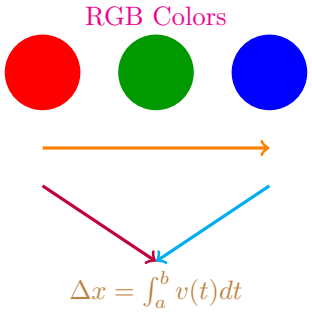
Unordered list:

- Red item with $\pi \approx 3.14159$
- Blue item with $\sqrt{2} \approx 1.414$
- Green item with $\phi = \frac{1+\sqrt{5}}{2}$

Ordered list:

1. First: $\lim_{n\to\infty}(1+\frac{1}{n})^n = e$
2. Second: $\sum_{n=1}^{\infty} \frac{1}{n^2} = \frac{\pi^2}{6}$
3. Third: $\int_{-\infty}^{\infty} e^{-x^2}\,dx = \sqrt{\pi}$

1.4 Graphics and Diagrams



1.5 Special Characters and Symbols

Greek: $\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \lambda, \mu, \nu, \xi, \pi, \rho, \sigma, \tau, \phi, \chi, \psi, \omega$
Math operators: $\sum, \prod, \int, \oint, \nabla, \partial, \infty, \forall, \exists, \in, \notin, \subset, \supset$
Arrows: $\leftarrow, \rightarrow, \Leftarrow, \Rightarrow, \leftrightarrow, \Leftrightarrow, \uparrow, \downarrow$
Comparison: $\leq, \geq, \neq, \approx, \equiv, \sim, \propto$

1.6 Complex Equation Block

$$\frac{\partial u}{\partial t} = \alpha \frac{\partial^2 u}{\partial x^2} \quad \text{(Heat equation)} \tag{3}$$

$$\nabla^2 \psi = \frac{1}{c^2} \frac{\partial^2 \psi}{\partial t^2} \quad \text{(Wave equation)} \tag{4}$$

$$i\hbar \frac{\partial}{\partial t} \Psi = \hat{H} \Psi \quad \text{(Schrödinger equation)} \tag{5}$$

1.7 Hyperlinks

Visit DocStruct GitHub for more information.

1.8 Code Blocks

Python example with syntax and indentation:

```
def factorial(n):
    """Calculate factorial recursively"""
    if n <= 1:
        return 1
    return n * factorial(n - 1)

# Test the function
print(f"5! = {factorial(5)}")  # Output: 120
```

Rust example:

```
fn main() {
    let numbers = vec![1, 2, 3, 4, 5];
    let sum: i32 = numbers.iter().sum();
    println!("Sum: {}", sum);
}
```

End of Stress Test
This document contains: tables, equations, colors, graphics, lists, symbols, and hyperlinks.