

Markdown to PDF Converter

This is a demonstration of the markdown to PDF converter with support for various technical documentation features.

Features

- **Math formulas** using KaTeX
- **Mermaid diagrams** for flowcharts and diagrams
- **Syntax highlighting** for code blocks
- **GitHub Flavored Markdown** features like tables and strikethrough

Math Formulas

Here's an inline math formula: $E = mc^2$

And here's a display formula:

$$\int_{-\infty}^{\infty} e^{-x^2} dx = \sqrt{\pi}$$

Complex formula with matrices:

$$\begin{pmatrix} a & b \\ c & d \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} ax + by \\ cx + dy \end{pmatrix}$$

Formula in code-blocks:

$price = \max(unitPrice, 1e18) collateralAmount = \frac{nusdAmount \times 10^{decimals}}{price}$

Code Blocks with Syntax Highlighting

JavaScript

```
function fibonacci(n) {
  if (n <= 1) return n;
  return fibonacci(n - 1) + fibonacci(n - 2);
}
```

```
console.log(fibonacci(10)); // Output: 55
```

Python

```
def quick_sort(arr):
    if len(arr) <= 1:
        return arr

    pivot = arr[len(arr) // 2]
    left = [x for x in arr if x < pivot]
    middle = [x for x in arr if x == pivot]
    right = [x for x in arr if x > pivot]

    return quick_sort(left) + middle + quick_sort(right)
```

```
# Example usage
numbers = [64, 34, 25, 12, 22, 11, 90]
print(quick_sort(numbers))
```

SQL

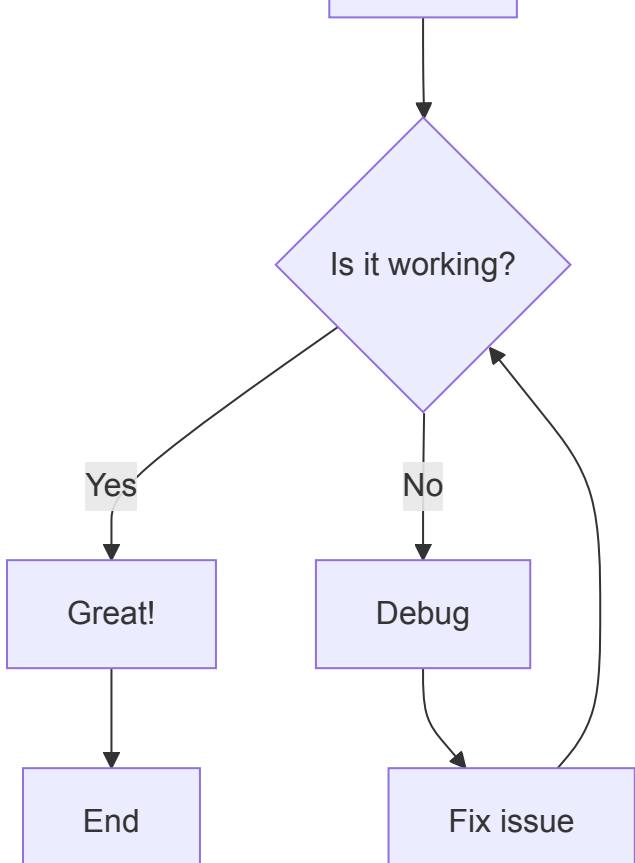
```
SELECT
    users.name,
    COUNT(orders.id) as order_count,
    SUM(orders.total) as total_spent
FROM
    users
LEFT JOIN orders ON users.id = orders.user_id
WHERE users.created_at >= '2023-01-01'
GROUP BY users.id, users.name
HAVING COUNT(orders.id) > 5
ORDER BY total_spent DESC;
```

Tables

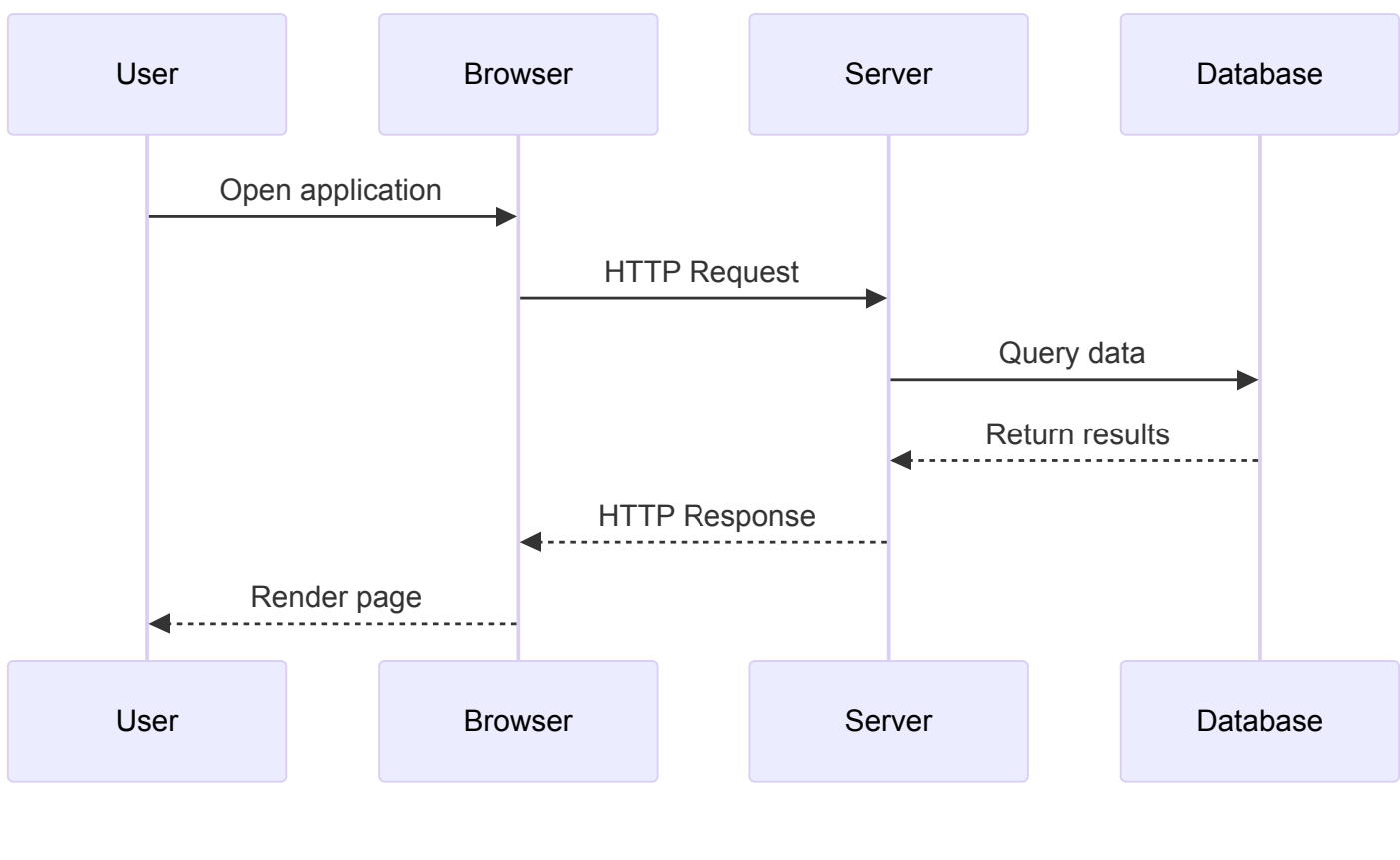
Language	Paradigm	First Appeared	Popular Use Cases
JavaScript	Multi-paradigm	1995	Web development, Node.js
Python	Multi-paradigm	1991	Data science, AI, Web
Rust	Systems	2010	Systems programming
Go	Procedural	2009	Cloud services, APIs

Mermaid Diagrams

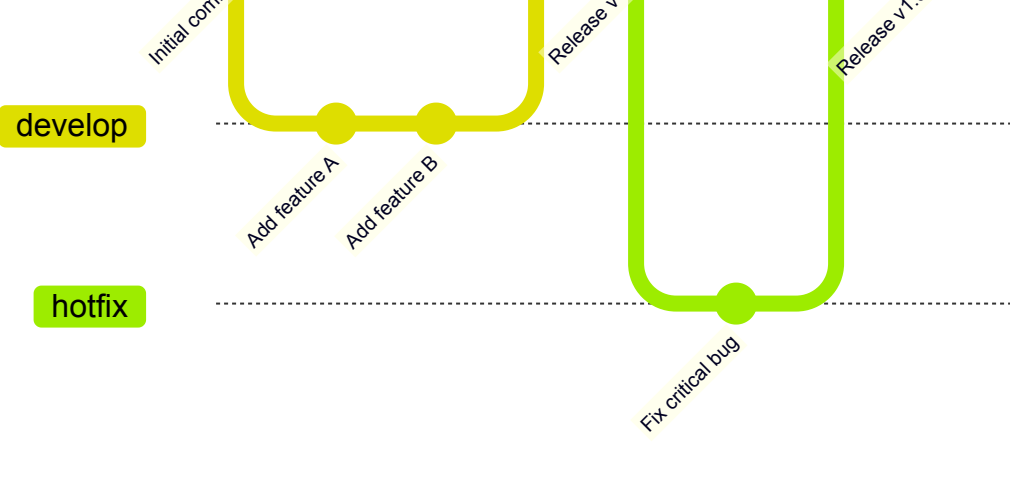
Flowchart



Sequence Diagram



Git Flow Diagram



GitHub Flavored Markdown Features

Task Lists

- ☒ Set up project structure
- ☒ Implement markdown processing
- ☒ Add PDF generation
- ☐ Add tests
- ☐ Create documentation
- ☐ Publish to npm

Strikethrough

This text is ~~strikethrough~~.

Blockquotes

"The best way to predict the future is to create it."

— Peter Drucker

Links and Images

Check out the [GitHub repository](#) for more information.

Advanced Features

Nested Lists

1. First level
 - Second level item 1
 - Second level item 2
 - Third level item
 - Another third level item
2. Another first level item
 1. Numbered second level
 2. Another numbered item

Code with Line Numbers

```
#!/bin/bash
set -e

# Install dependencies
npm install

# Build the project
npm run build

# Run tests
npm test

# Deploy to production
npm run deploy
```

This document demonstrates the various features supported by the Markdown to PDF converter. The output should maintain proper formatting, syntax highlighting, mathematical notation, and diagram rendering.