1 多语言代码高亮测试

本文档用于测试 MD2LaTeX 改进版的多语言代码高亮功能。

1.1 JavaScript 代码

```javascript
function greet(name) {
    console.log(`Hello, ${name}!`);
    return `Welcome, ${name}`;
}


const user = "World";
greet(user);
```

1.2 TypeScript 代码

```typescript
interface User {
    name: string;
    age: number;
}

function createUser(name: string, age: number): User {
    return { name, age };
}

const user: User = createUser("Alice", 30);
```

1.3 Go 代码

```go
package main

import "fmt"

func main() {
    name := "World"
    fmt.Printf("Hello, %s!\n", name)
}
```

1.4 Rust 代码

```rust
fn main() {
    let name = "World";
    println!("Hello, {}!", name);
}

struct User {
    name: String,
    age: u32,
}
```

1.5 Vue.js 代码

```vue
<template>
  <div class="hello">
    <h1>{{ msg }}</h1>
  </div>
</template>

<script>
export default {
  name: 'HelloWorld',
  props: {
    msg: String
  }
}
</script>
```

1.6 YAML 配置

```yaml
name: test-project
version: 1.0.0
dependencies:
  - express
  - mongoose
  - dotenv
scripts:
  start: node index.js
```

```
9    test: jest
```

1.7 JSON 数据

```
1  {
2    "name": "John Doe",
3    "age": 30,
4    "city": "New York",
5    "skills": ["JavaScript", "Python", "Go"],
6    "active": true
7  }
```

1.8 Dockerfile

```
1  FROM node:16-alpine
2  WORKDIR /app
3  COPY package*.json ./
4  RUN npm install
5  COPY . .
6  EXPOSE 3000
7  CMD ["npm", "start"]
```

1.9 PowerShell 脚本

```
1  $name = "World"
2  Write-Host "Hello, $name!"
3
4  Get-Process | Where-Object {$_.CPU -gt 100} | Select-Object Name, CPU
```

1.10 Kotlin 代码

```
1  fun main() {
2      val name = "World"
3      println("Hello, $name!")
4  }
5
6  data class User(val name: String, val age: Int)
```

1.11 Swift 代码

```swift
1  import Foundation
2
3  func greet(name: String) {
4      print("Hello, \(name)!")
5  }
6
7  let name = "World"
8  greet(name: name)
```

1.12 测试总结

这个文档包含了多种现代编程语言的代码示例，用于验证 MD2LaTeX 改进版的语言映射功能：

所有这些语言都应该能够正确映射并生成可编译的 LaTeX 代码。