OPEN ORIENTED
凹 凸 实 验 室

Joi入门

By 伟哥

目录

1. Joi介绍

2. Joi用法

3. Joi自定义扩展

4. Browser兼容

Joi介绍

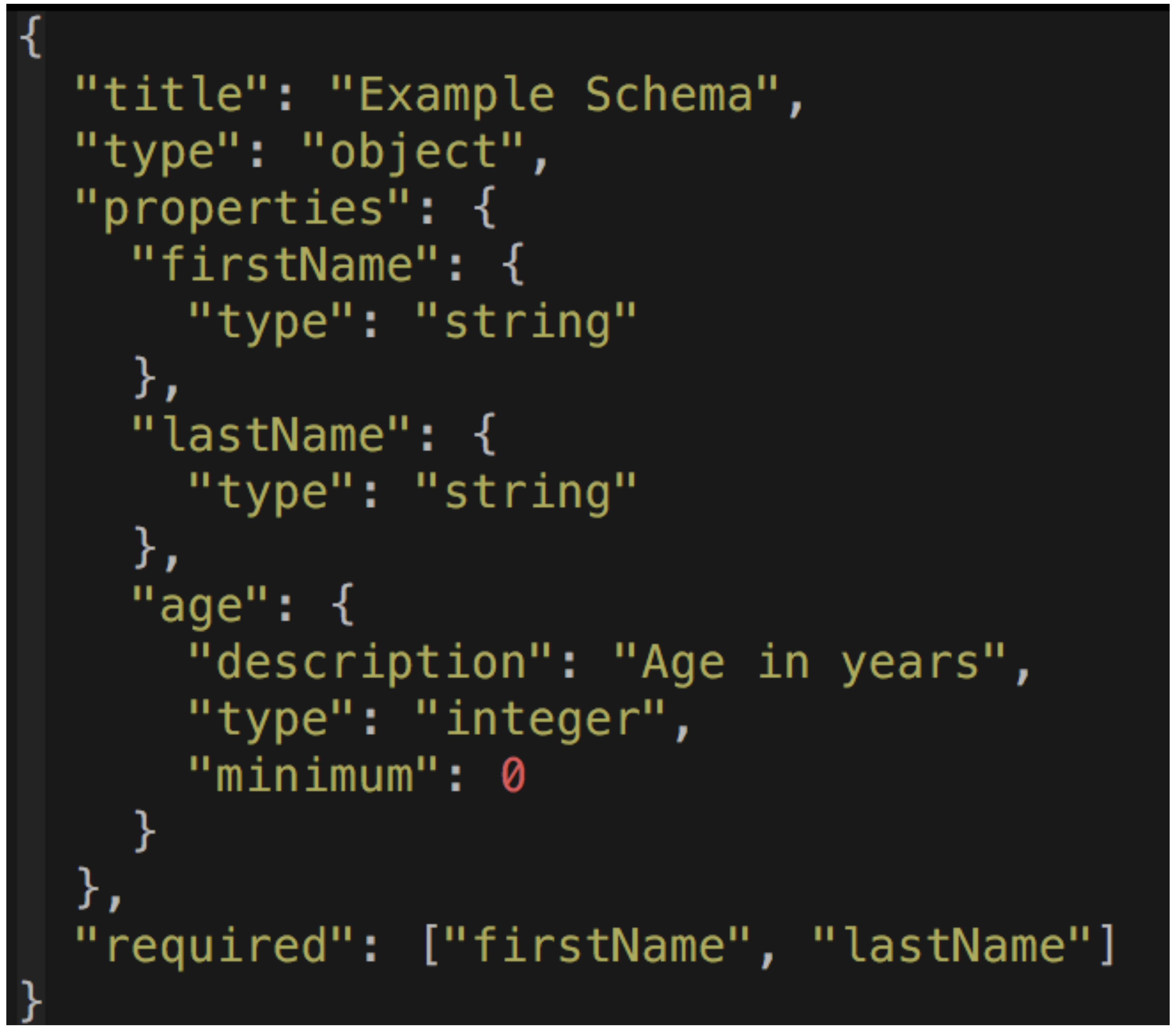
Joi是hapi自带的数据校验模块:

1. 有很多内建方法，如 email, url, mix, max 等

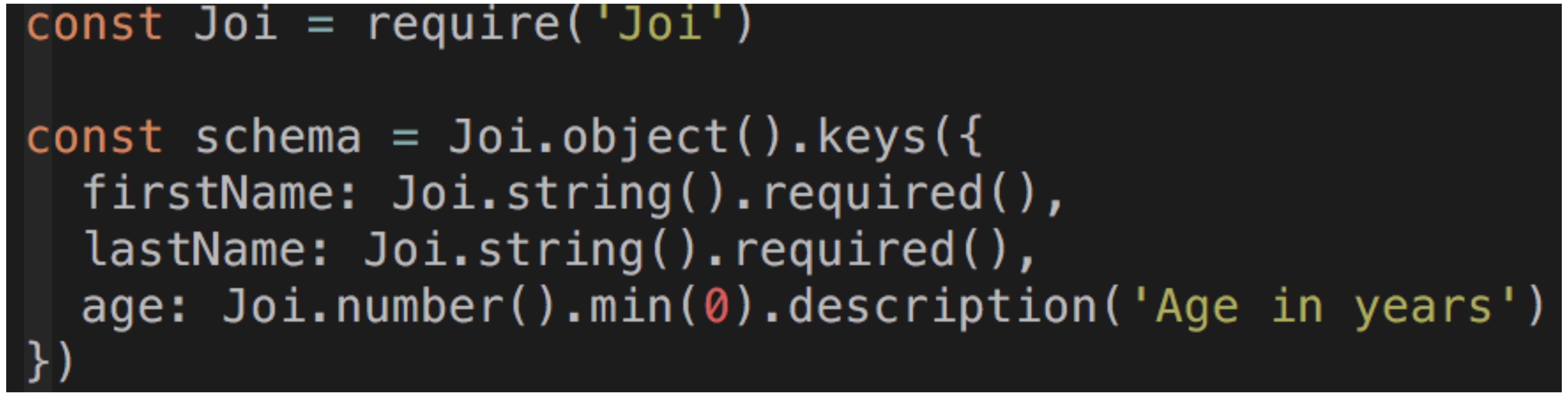
2. 有完备的类型转换，可以将数据转换到合法的数据类型，例如字符串形式的数字和日期

3. 支持嵌套和引用，可以构建出更复杂的 Schema

Joi介绍



```
{
  "title": "Example Schema",
  "type": "object",
  "properties": {
    "firstName": {
      "type": "string"
    },
    "lastName": {
      "type": "string"
    },
    "age": {
      "description": "Age in years",
      "type": "integer",
      "minimum": 0
    }
  },
  "required": ["firstName", "lastName"]
}
```

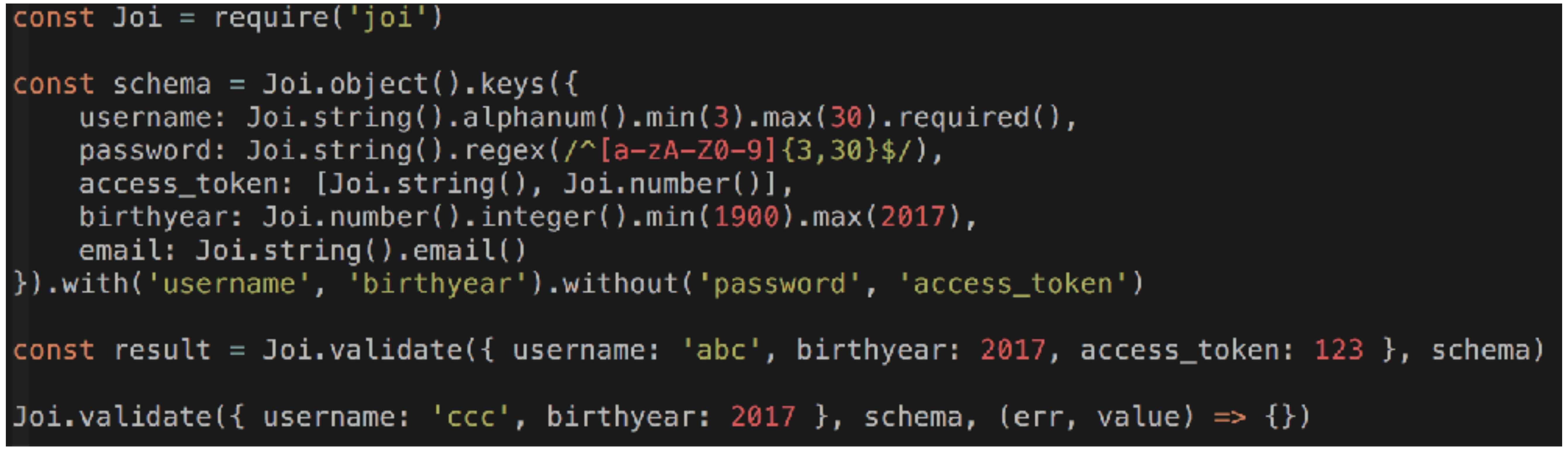


```
const Joi = require('Joi')

const schema = Joi.object().keys({
  firstName: Joi.string().required(),
  lastName: Joi.string().required(),
  age: Joi.number().min(0).description('Age in years')
})
```

Joi用法

1. 定义schema

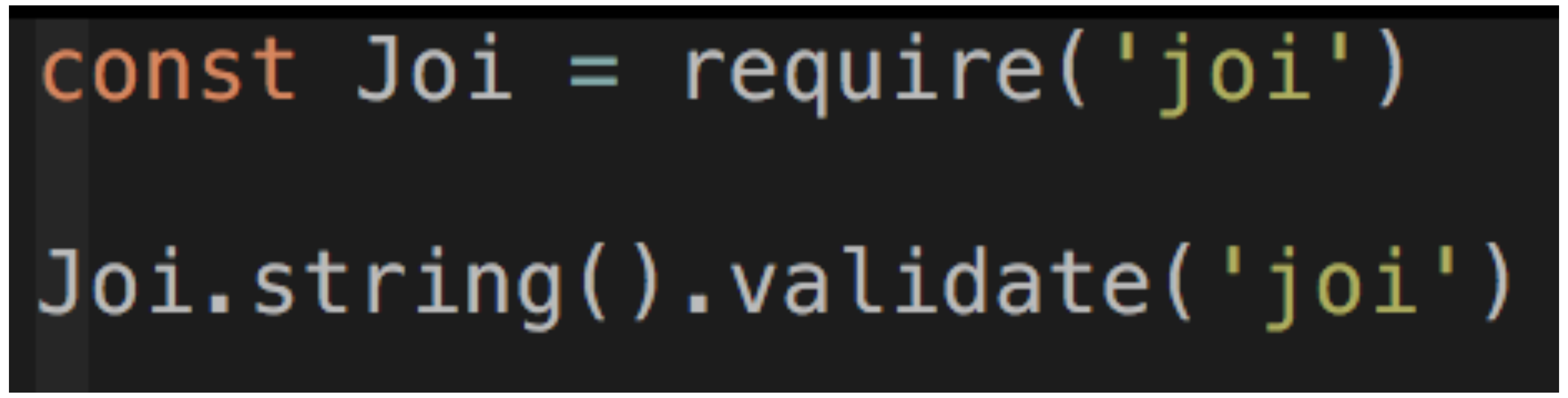
2. 使用Joi.validate校验数据



```
const Joi = require('joi')

const schema = Joi.object().keys({
    username: Joi.string().alphanum().min(3).max(30).required(),
    password: Joi.string().regex(/^[a-zA-Z0-9]{3,30}$/),
    access_token: [Joi.string(), Joi.number()],
    birthyear: Joi.number().integer().min(1900).max(2017),
    email: Joi.string().email()
}).with('username', 'birthyear').without('password', 'access_token')

const result = Joi.validate({ username: 'abc', birthyear: 2017, access_token: 123 }, schema)

Joi.validate({ username: 'ccc', birthyear: 2017 }, schema, (err, value) => {})
```

Joi语法

单独调用



```
const Joi = require('joi')

Joi.string().validate('joi')
```

Joi语法

Joi.any

Joi.object

Joi.string

Joi.array

Joi.boolean

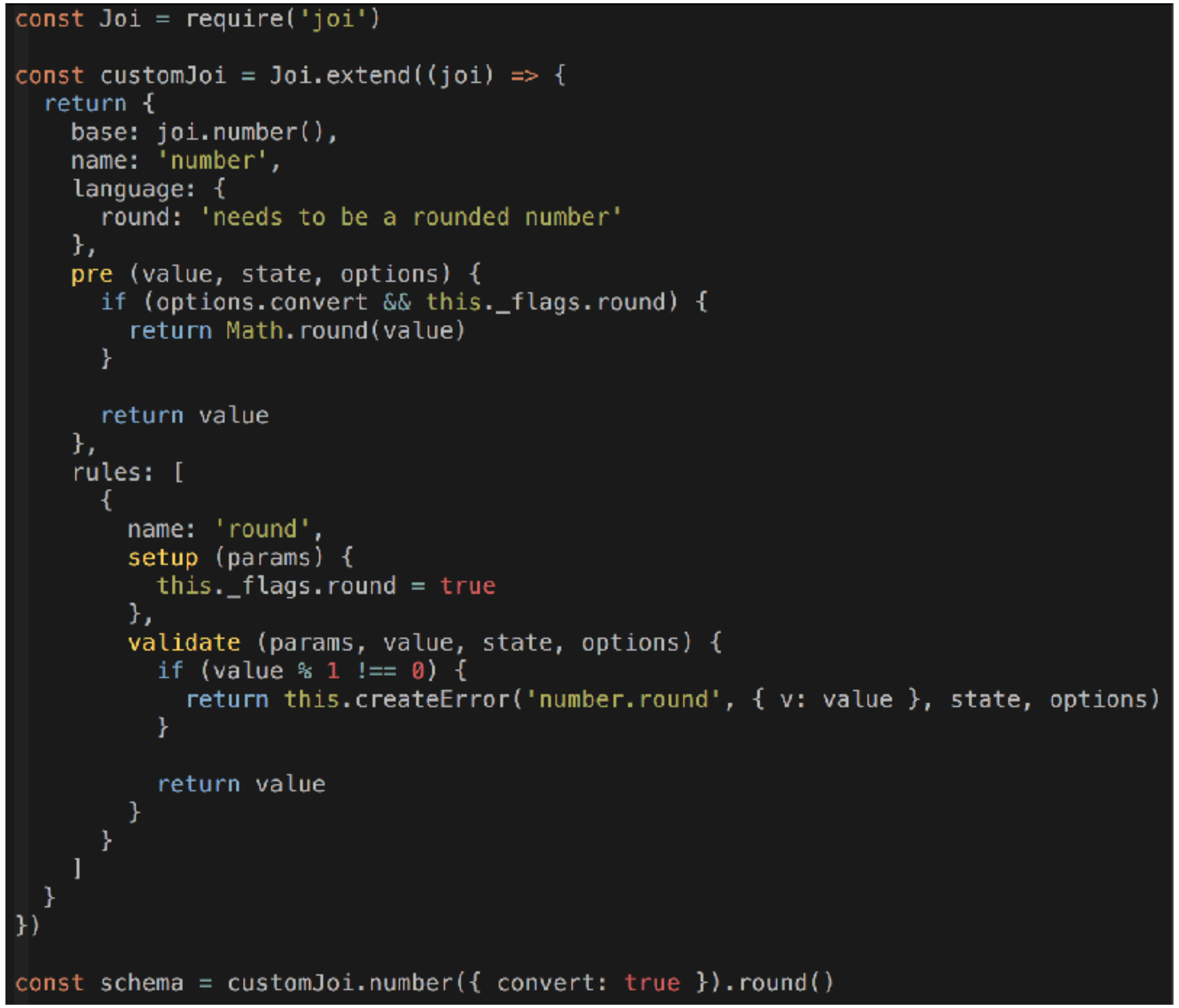
Joi.date

Joi.func

Joi.number

Joi扩展

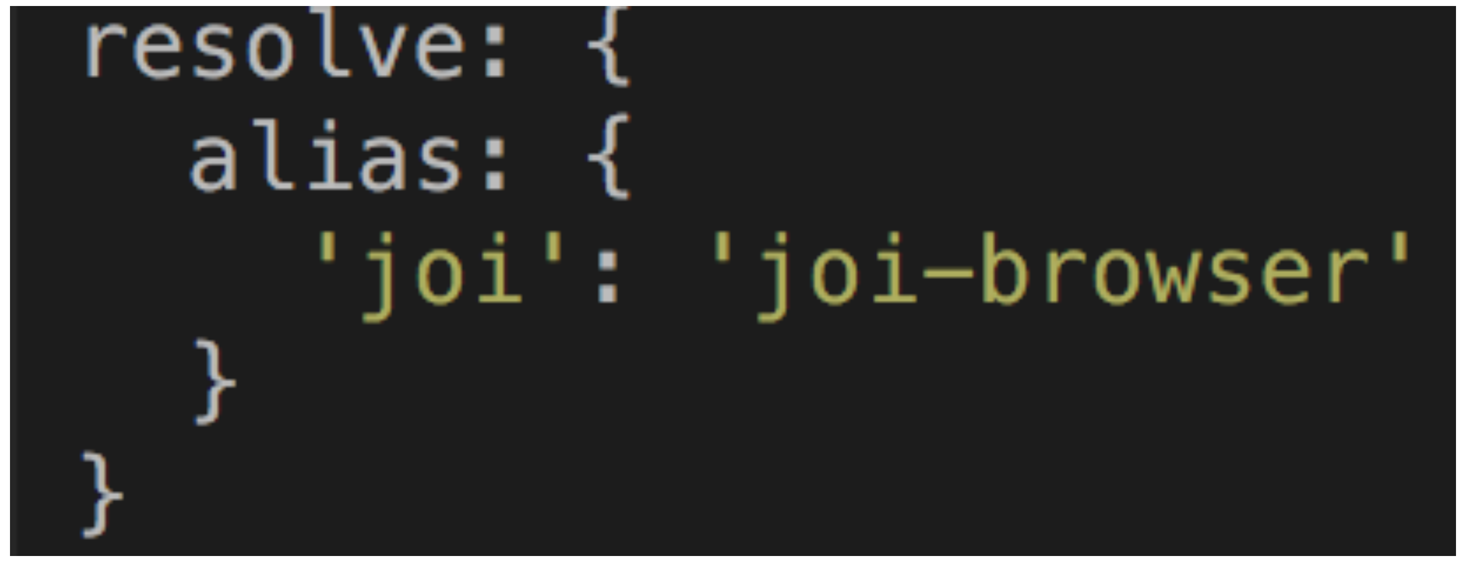
采用Joi.extend



```
const Joi = require('joi')

const customJoi = Joi.extend((joi) => {
  return {
    base: joi.number(),
    name: 'number',
    language: {
      round: 'needs to be a rounded number'
    },
    pre (value, state, options) {
      if (options.convert && this._flags.round) {
        return Math.round(value)
      }

      return value
    },
    rules: [
      {
        name: 'round',
        setup (params) {
          this._flags.round = true
        },
        validate (params, value, state, options) {
          if (value % 1 !== 0) {
            return this.createError('number.round', { v: value }, state, options)
          }

          return value
        }
      }
    ]
  }
})

const schema = customJoi.number({ convert: true }).round()
```

Browser兼容

npm install joi-browser



```
resolve: {
  alias: {
    'joi': 'joi-browser'
  }
}
```

优点：前后端共用同一份校验规则

缺点：体积有点大，压缩后137KB，gz后37KB

推荐：内部一些系统、工具可以使用

THANKS

FOR YOUR WATCHING

OPEN ORIENTED

凹凸实验室