

```
type RuleFunc<A, B = A> = (ctx: VContext<A>) \Rightarrow VContext<B>
type Rule<Type extends RuleType, A, B = A> = {
 type: Type
 func: RuleFunc<A, B>
export type Fuji<Types extends RuleType, Value> = {
  rules: Rule<Types, Value>[]
```

export type RuleType =

- NullableType
- ShapeMismatchType
- | StringType
- RequiredType
- RequiredIfType
- PositiveType
- BoolType
- IncludesType
- OneOfType

• • •

```
string() // Rule<'string', string, string>
required() // Rule<'required', any, any>
f(string(), required()) // Fuji<'string' | 'required', string>
```

```
type RuleFunc<A, B = A> = (ctx: VContext<A>) \Rightarrow VContext<B>
                                                           export type RuleType =
type Rule<Type extends RuleType, A, B = A> = {
                                                             NullableType
  type: Type
                                                             ShapeMismatchType
  func: RuleFunc<A, B>
                                                             StringType
                                                             RequiredType
                                                             RequiredIfType
export type Fuji<Types extends RuleType, Value> = {
                                                             | PositiveType
  rules: Rule<Types, Value>[]
                                                             BoolType
                                                             IncludesType
                                                             OneOfType
```

```
string() // Rule<'string', string, string>
required() // Rule<'required', any, any>
f(string(), required()) // Fuji<'string' | 'required', string>
```

```
const len = (s: string): number ⇒ s.length
const isZero = (n: number): boolean \Rightarrow n \Longrightarrow 0
function pipe<A, B, C>(
  f1: (x: A) \Rightarrow B,
  f2: (x: B) \Rightarrow C
  return (arg: A) \Rightarrow f2(f1(arg))
const isEmpty = pipe(len, isZero)
const res = isEmpty('hello')
```