

tsPEG self-description grammar

This is the self-describing meta-grammar for *tsPEG* that is used for the bootstrapping process. This grammar is defined in terms of itself, *tsPEG* uses it to generate its input parser.

```

1  GRAM      := header=HDR? rules=RULEDEF+
2  HDR       := '----' content='((?!----)(.|\n))*' '----'
3  RULEDEF   := _ name=NAME _ ':=' _ rule=RULE _
4  RULE      := head=ALT tail=[_ '\|' _ alt=ALT]*
5              .list = ALT[] { return [this.head, ...this.tail.map((x) => x.alt)]; }
6  ALT       := matches=MATCHSPEC+ attrs=ATTR*
7  MATCHSPEC := _ named={name=NAME _ '=' _}? rule=POSTOP _
8  POSTOP    := pre=PREOP op='\+|\*|\?' '?'
9              .optional = boolean { return this.op !== null && this.op === '?' }
10 PREOP     := op='\&|!'? at=ATOM
11 ATOM      := name=NAME !'\s*:= '
12            | match=STRLIT
13            | '{' _ sub=RULE _ '}'
14 ATTR      := _ '.' name=NAME _ '=' _ type='^[^\\s\\{\\}]+ _ '\\{'
15            action = '([^\{\\}\\\\]|(\\\.))*'
16            '\\}'
17 NAME      := '[a-zA-Z_]+'
18 STRLIT    := '\\' val = '([^\ ']|(\\\.))*' '\\'
19 _         := '\s*'

```

Figure A.1: *tsPEG* meta-grammar definition