

Описание грамматики языка задания грамматики

Воротников Андрей, Кожевникова Диана, Павлов Илья

Февраль 2023

1 РБНФ

TERMINALS:

```
name ::= '[\w\D][\w]*';
char_sequence ::= '[\W\S^']+';
string ::= '"(\\.|[^\\"'])*"'.
```

KEYS:

```
'TERMINALS'; 'KEYS'; 'NONTERMINALS'; 'AXIOM'; 'RULES'; 'ERRORS';
'.'; ':'; '::='; ';'; '(': ')'; '|'; '['; ']'; '{'; '}'; '#'.
```

NONTERMINALS:

```
GRAMMAR;
TERMINALS_BLOCK;
KEYS_BLOCK;
NONTERMINALS_BLOCK;
AXIOM_BLOCK;
ERROR_BLOCK;
RULES_BLOCK;
RULE;
RHS;
SEQUENCE;
BRACKETS;
OPTIONAL;
TSEITIN_ITERATION.
```

AXIOM: GRAMMAR.

ERRORS:

```
TERMINALS_BLOCK '.';
KEYS_BLOCK '.';
NONTERMINALS_BLOCK '.';
AXIOM_BLOCK '.';
ERROR_BLOCK '.';
```

```

RULES_BLOCK ' ';
RULE ' ;' | ' .';
RHS ' ;' | ' .';
SEQUENCE ' ;' | ' .';
BRACKETS ' ;' | ' .';
OPTIONAL ' ;' | ' .';
TSEITIN_ITERATION ' ;' | ' .'.

```

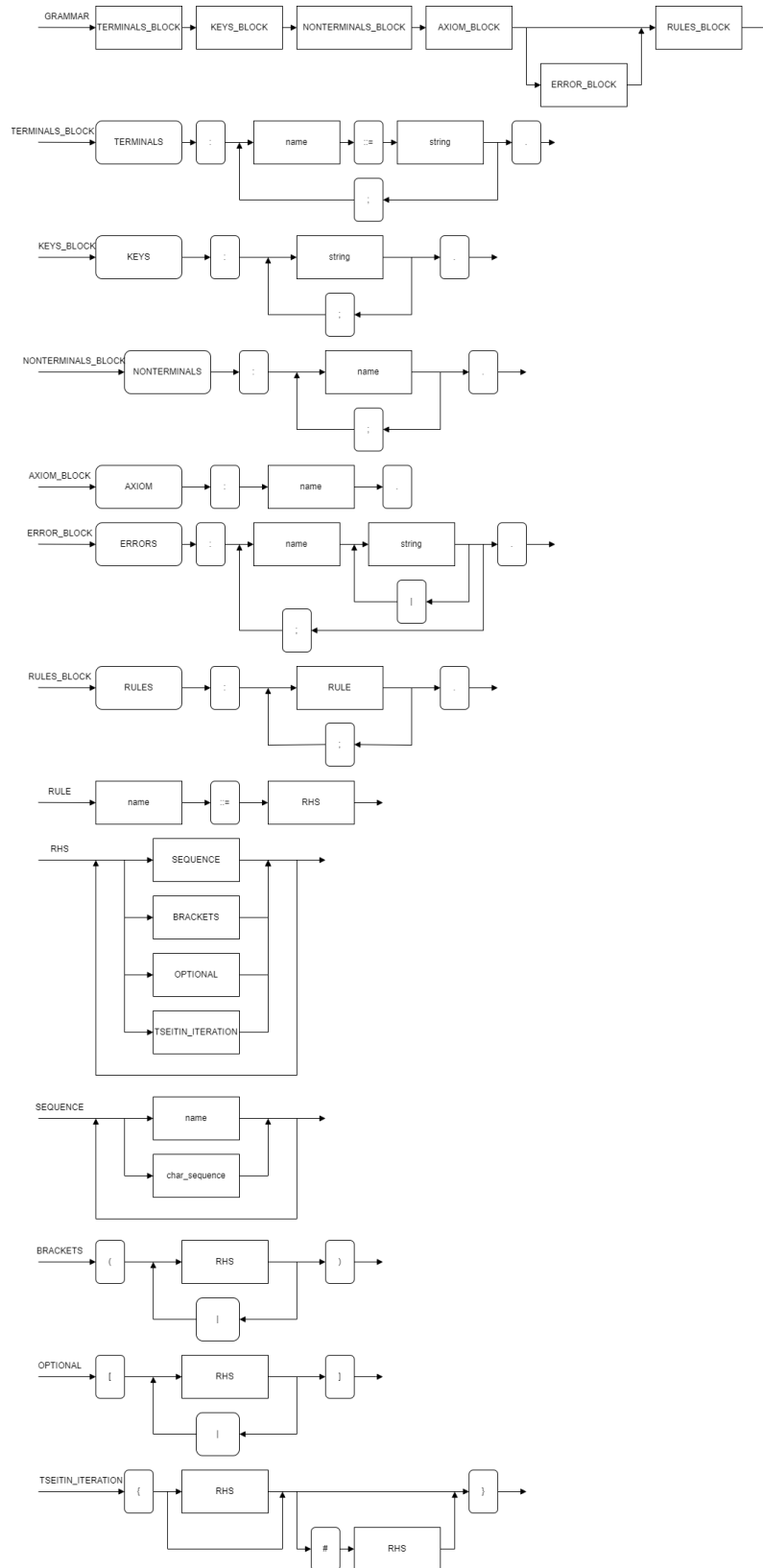
RULES:

```

GRAMMAR ::=
    TERMINALS_BLOCK KEYS_BLOCK NONTERMINALS_BLOCK
    AXIOM_BLOCK [ERROR_BLOCK] RULES_BLOCK;
TERMINALS_BLOCK ::= TERMINALS: {name ::= string # };.;
KEYS_BLOCK ::= KEYS: {string # };.;
NONTERMINALS_BLOCK ::= NONTERMINALS: {name # };.;
AXIOM_BLOCK ::= AXIOM: name.;
ERROR_BLOCK ::= ERRORS: {name {string # |} # };.;
RULES_BLOCK ::= RULES: {RULE # };.;
RULE ::= name ::= RHS;
RHS ::= {(SEQUENCE | BRACKETS | OPTIONAL | TSEITIN_ITERATION)};
SEQUENCE ::= {(name | char_sequence)};
BRACKETS ::= ({RHS # |});
OPTIONAL ::= [{RHS # |}];
TSEITIN_ITERATION ::= {[RHS] [# RHS]}.

```

2 Диаграммы Вирта



3 Метамоделъ

