IFJ projekt dokumentace

**Tým xzajic22, varianta TRP**

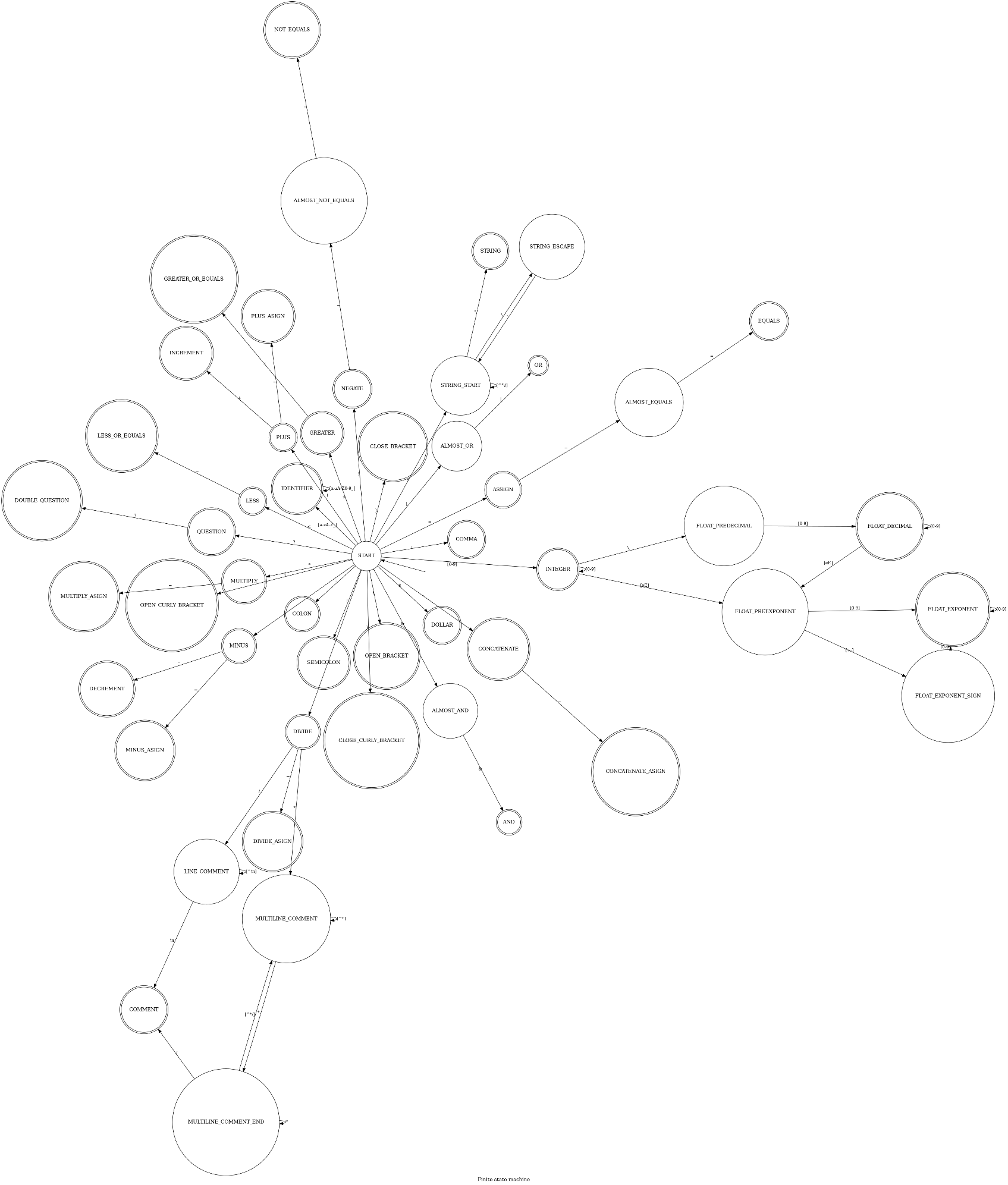
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# Gramatika

program -> START STATEMENT\_LIST\_MAIN .

START -> <?php declare(strict\_types=1); .

STATEMENT\_LIST\_MAIN -> EPSILON .

STATEMENT\_LIST\_MAIN -> STATEMENT\_IF STATEMENT\_LIST\_MAIN .

STATEMENT\_LIST\_MAIN -> STATEMENT\_EXPRESSION; STATEMENT\_LIST\_MAIN .

STATEMENT\_LIST\_MAIN -> STATEMENT\_WHILE STATEMENT\_LIST\_MAIN .

STATEMENT\_LIST\_MAIN -> STATEMENT\_FOR STATEMENT\_LIST\_MAIN .

STATEMENT\_LIST\_MAIN -> STATEMENT\_RETURN STATEMENT\_LIST\_MAIN .

STATEMENT\_LIST\_MAIN -> STATEMENT\_BREAK STATEMENT\_LIST\_MAIN .

STATEMENT\_LIST\_MAIN -> STATEMENT\_CONTINUE STATEMENT\_LIST\_MAIN .

STATEMENT\_LIST\_MAIN -> STATEMENT\_FUNCTION STATEMENT\_LIST\_MAIN .

STATEMENT\_IF -> if( STATEMENT\_EXPRESSION ){ STATEMENT\_LIST } STATEMENT\_IF2 .

STATEMENT\_IF2 -> EPSILON .

STATEMENT\_IF2 -> elseif( STATEMENT\_EXPRESSION ){ STATEMENT\_LIST } STATEMENT\_IF2 .

STATEMENT\_IF2 -> STATEMENT\_IF3 .

STATEMENT\_IF3 -> else{ STATEMENT\_LIST } .

STATEMENT\_WHILE -> while( STATEMENT\_EXPRESSION ){ STATEMENT\_LIST } .

STATEMENT\_BREAK -> break STATEMENT\_BREAK2 .

STATEMENT\_BREAK2 -> CONSTANT\_INTEGER .

STATEMENT\_CONTINUE -> continue STATEMENT\_CONTINUE2 .

STATEMENT\_CONTINUE2 -> CONSTANT\_INTEGER .

STATEMENT\_FOR -> for( STATEMENT\_FOR2, STATEMENT\_FOR2, STATEMENT\_FOR2 ){ STATEMENT\_LIST } .

STATEMENT\_FOR2 -> STATEMENT\_EXPRESSION .

STATEMENT\_FOR2 -> EPSILON .

STATEMENT\_LIST -> EPSILON .

STATEMENT\_LIST -> STATEMENT\_IF STATEMENT\_LIST .

STATEMENT\_LIST -> STATEMENT\_EXPRESSION ; STATEMENT\_LIST .

STATEMENT\_LIST -> STATEMENT\_WHILE STATEMENT\_LIST .

STATEMENT\_LIST -> STATEMENT\_RETURN STATEMENT\_LIST .

STATEMENT\_RETURN -> return STATEMENT\_RETURN2 .

STATEMENT\_RETURN2 -> STATEMENT\_EXPRESSION; .

STATEMENT\_RETURN2 -> ; .

STATEMENT\_FUNCTION -> function IDENTIFIER( FUNCTION\_PARAMETER\_LIST ): RETURN\_TYPE { STATEMENT\_LIST STATEMENT\_RETURN } .

FUNCTION\_PARAMETER\_LIST -> TERM\_TYPE IDENTIFIER FUNCTION\_PARAMETER\_LIST2 .

FUNCTION\_PARAMETER\_LIST2 -> EPSILON .

FUNCTION\_PARAMETER\_LIST2 -> ,TERM\_TYPE IDENTIFIER FUNCTION\_PARAMETER\_LIST2 .

STATEMENT\_EXPRESSION -> EXPRESSION\_FUNCTION\_CALL .

EXPRESSION\_FUNCTION\_CALL -> IDENTIFIER( PARAMETER\_LIST ) .

PARAMETER\_LIST -> STATEMENT\_EXPRESSION PARAMETER\_LIST2 .

PARAMETER\_LIST2 -> EPSILON .

PARAMETER\_LIST2 -> ,STATEMENT\_EXPRESSION PARAMETER\_LIST2 .

STATEMENT\_EXPRESSION -> EXPRESSION\_CONSTANT .

EXPRESSION\_CONSTANT -> CONSTANT\_INTEGER .

EXPRESSION\_CONSTANT -> CONSTANT\_FLOAT .

EXPRESSION\_CONSTANT -> CONSTANT\_STRING .

EXPRESSION\_CONSTANT -> EXPRESSION\_CONSTANT\_BOOL .

STATEMENT\_EXPRESSION -> EXPRESSION\_VARIABLE .

EXPRESSION\_VARIABLE -> $ IDENTIFIER .

STATEMENT\_EXPRESSION -> EXPRESSION\_UNARY\_OPERATOR .

EXPRESSION\_UNARY\_OPERATOR -> UNARY\_OPERATOR STATEMENT\_EXPRESSION .

STATEMENT\_EXPRESSION -> EXPRESSION\_BINARY\_OPERATOR .

EXPRESSION\_BINARY\_OPERATOR -> STATEMENT\_EXPRESSION BINARY\_OPERATOR STATEMENT\_EXPRESSION .

EPSILON -> .

# Množina FIRST

* Terminal\_expression
  + CONSTANT\_INTEGER
  + IDENTIFIER
  + CONSTANT\_FLOAT
  + CONSTANT\_STRING
  + CONSTANT\_BOOL
  + (
  + $
* Expression
  + CONSTANT\_INTEGER
  + IDENTIFIER
  + CONSTANT\_FLOAT
  + CONSTANT\_STRING
  + CONSTANT\_BOOL
  + (
  + $
  + UNARY\_OPERATOR
* Statement
  + TOKEN\_IF
  + TOKEN\_WHILE
  + TOKEN\_RETURN
  + TOKEN\_FOR
  + TOKEN\_BREAK
  + TOKEN\_CONTINUE
  + TOKEN\_OPEN\_BRACKET
  + Expression
* Statement list main
  + STATEMENT\_EXPRESSION
  + if
  + while
  + for
  + return
  + function
* Statement list
  + if
  + while
  + break
  + CONSTANT\_INTEGER
  + continue
  + return
  + IDENTIFIER
  + CONSTANT\_FLOAT
  + CONSTANT\_STRING
  + CONSTANT\_BOOL
  + (
  + $
  + UNARY\_OPERATOR