Language for representing strata in QGis

Grammar

<program> -> tk_main tk_lparent tk_rparent tk_twoPoints tk_layer tk_ twoPoints

tk_literalString tk_semiColon <instructions>

< instructions > -> < instruction> tk_ semiColon <moreInstruction >

< instruction > -> <asignation> | <declaration> | <impresion>

<moreInstruction > -> e|<instructions>

<declaration> -> <kind><ids>

<kind> -> tk_qstring |tk_qinteger |tk_qlist|tk_qcolor|tk_qstrata

<ids> -> tk_identificator <moreId>

<moreId> -> tk_colon <ids> | e

<asignation> -> tk_identificator tk_asignation <value>

<value> -> tk_identificator | tk_literalInteger| tk_literalString |<color> |<strata> |<list>

<list> -> <valueList> <moreValueList>

<moreValueList > -> tk_colon <list>|e

<valueList> -> tk_identificator|tk_literalInteger

<color> -> tk_lparent <valueList> tk_colon <valueList> tk_colon <valueList> tk_rparent

<impresion> -> tk_paint tk_lparent <valuesImpresion> tk_rparent

<valuesImpresion> -> <valueImpresion> <moreValueImpresion>

< moreValueImpresion > -> tk_ colon < valuesImpresion >| e

< valueImpresion > -> tk_identificator| <strata>

<strata> -> tk_lkey tk_e_name tk_ twoPoints <valueName> tk_ colon tk_e_color

tk_twoPoints <valueColor> tk_colon tk_e_territories tk_ twoPoints <valueT> tk_rkey

<valueName> -> tk_identificator| tk_LiteralString

<valueColor> -> <color>| tk_identificator

<valueT> -> <list>| tk_identificator

Keywords Table

Lexeme	Token Kind
main	tk_main
paint	tk_paint
e_color	tk_e_color
e_name	tk_e_name
e_territories	tk_e_territories
qcolor	tk_qcolor
qlist	tk_qlist
qinteger	tk_qinteger
qstrata	tk_qstrata
qstring	tk_qstring
:	tk_twoPoints
;	tk_semiColon
(	tk_lparent
)	tk_rparent
{	tk_lkey
}	tk_rkey
,	tk_colon
error	tk_error
=	tk_asignation
‘[a-zA-Z]*[0-9]*’	tk_literalString
[0-9]+	tk_literalInteger
layer	tk_layer

Example:

```
main ():
layer: “layerName”;

# This is a comment from one line
# Variable declarations
qinteger t1, t2, t3, t4, t5, t5;
qstrata s1, s2;
qcolor color1, color2;
qlist l1, l2;
qstring n1, n2;

# Assignments to variables declared
t1=1;
t2=4;
t3=7;
t4=45;
t5=6;
l1= [t1, t2, t3, t4];
l2= [t5];
n1= “strata1”;
n2= “strata2”;
color1 = (255, 255, 0);
color2= (250, 45, 50);
s1= {e_name: n1,  e_color:  color1,  e_territories: l1};
s2= {e_ name: n2,  e_color:  color2,  e_territories: l2};

paint (s1,s2);
```