1 Inroduction

2 Objects types to Extention of Parser

Description of new types.

2.1 New individual Objects

We describe ogbjects which we want to put in extended vertion of Benchmark file format in the following table. The first column lists the nonterminal symbol. The second column lists grammar rules where several alternative choise are listed below each other. The third column gives a description of the object.

Type	syntax	description
Cicle_2	Circle_2 (Point_2,Rational)	Radius could be rational
Circular_arc_point	Circular_arc_point(Point_2)	.....
Circular_arc_2	Circular_arc_2(Circle_2)	Define a circle intersecting c in the 2 vertical tangent points.
	Circular_arc_2(Circle_2, LineSegment,BOOLEN, LineSegment,BOOLEN)	.....
	Circular_arc_2(Circle_2, Circle_2,BOOLEN, Circle_2,BOOLEN)	.....
	Circular_arc_2(Point_2, Point_2, Point_2)	Circle_2(begin, middle, end). middle is not necessarily on the arc
	Circular_arc_2(Point_2, Point_2, Rational)	Circular_arc_2(begin, middle, bulge).
Line_arc_2	Line_arc_2(LineSegment, Circle_2,BOOLEN, Circle_2,BOOLEN)	....
	Line_arc_2(LineSegment, LineSegment, LineSegment)	....
	Line_arc_2(LineSegment, Circular_arc_point, Circular_arc_point)	....
	Line_arc_2(Point_2, Point_2),	....

3 Extention of the Parser

In following we describe neccessery changes to add our new tokens and rules to the parser. First, we describe new Benchmark Visitor functions. Second, we explain how to make changes in Parsers source to make possible parsing our new objects.

3.1 New Benchmark Visitos functions

In the following table are listed functions that are not exist in the Benchamrk_visitor class but it is necessary for us to add this function to new version of Benchmark_visitor class. The statements in curly braces {...} are function calls to the visitor. There are always a pair of functions that enclose the parsing parameters.

Object	grammar rule with visitor function

Circle_2	Circle_2{begin_circle_2();}
	(Point_2,Rational)
	{end_circle_2();}

Circular_arc_point	Circular_Arc_Point{begin_circular_arc_poin();}
	(Point_2)
	{end_circular_arc_poin();}

Circular_arc_2	Circular_arc_2 {begin_Circular_arc_2();}
	(Point_2,Point_2,Point_2)
	{end_Circular_arc_2();}
	Circular_arc_2{begin_Circular_arc_2();}
	(Point_2,Point_2,Rational)
	{end_Circular_arc_2();}

Line_arc_2	LineSegment_2{begin_line_segment_2();}
	(Point_2,Point_2)
	{end_line_segment_2();}

3.2 Extending of Parser by new types

Here we describe how to add new tokens and rules to the parser.