**Appendix A – Instruction Extension Summary**

The graphical drawing tool should use a coordinate system in which the 0,0 point is located at the top-left part of the graphics panel. Hence increasing X values move right and increasing Y values move down. The extended instructions are as follows-

|  |  |
| --- | --- |
| Instruction Syntax | RECTANGLE <x> <y> |
| Description | Draws a rectangle from the current pen position with width <x> and height <y>. Following the command the pen position is updated so that it is positioned at the end of the drawn line. |
| Parameters | Two, both Integer values. |
| Example: Draw a rectangle with height 70 and width 70 | RECTANGLE 70 70 |

|  |  |
| --- | --- |
| Command Syntax | ARC <a> <b> <c> <d> |
| Description | Draws an arc from the current pen position with <a> and <b> being its height and width respectively and <c> and <d> being it’s arc start angle and arc end angle respectively. The pen position is unchanged following this command. |
| Parameters | Four Integer values. |
| Example: Draw an arc inside an imaginary rectangle whose upper left corner is at (<x>, <y>). | ARC 75 95 0 90 |

|  |  |
| --- | --- |
| Command Syntax | STROKE <r> |
| Description | Gives the thickness of <r> on an outline of any shapes. The pen position is unchanged following this command. |
| Parameters | One, a positive Integer value. |
| Example: Make the thickness of the outline to 9 | STROKE 9 |

|  |  |
| --- | --- |
| Command Syntax | ROUND\_RECTANGLE <a> <b> <c> <d> |
| Description | Draws a rectangle from the current pen position with width <a> and height <b> and it’s round radius width and height as <c> and <d> respectively. Following the command the pen position is updated so that it is positioned at the end of the drawn line. |
| Parameters | Four Integer Values |
| Example: Draw a rectangle with height 70 and width 70 and it’s round radius as 8 | ROUND\_RECTANGLE 70 70 8 8 |

|  |  |
| --- | --- |
| Command Syntax | STAR <x> |
| Description | Draws a shape of a star with the scale of <x>. The pen position is unchanged following this command. |
| Parameters | One, a positive Integer value. |
| Example: Draw a Star with the scaling of 8 | STAR 8 |