

CJJ Postscript Library
Design Documentation
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This project is a library that interfaces with C++11 in order to provide functionality for drawing postscript objects.

To create an object, you create an object of the correct class, which you can then manipulate via member functions. Finally, you call the draw function, providing the x,y coordinates to specify where on the page to place the object. The draw function returns the postscript code in the form of a string, to enable you to easily output or manipulate

Standard member functions:

void rotate(int x): x is the degrees to rotate by. Note: Only 90' increments are supported.

void scale(int x, int y): scales the shape by the given value in the appropriate plane. X is horizontal, Y is vertical. Note: Negative scales will result in flipping the object along that plane.

std::string draw(int x,int y): outputs the adjusted object at the specified location.

Currently available objects:

Circle(double radius)

Polygon(int sides, double sideLength): A polygon of the specified number of sides, with a segment length.

Rectangle(double width, double height): A rectangle of the specified dimensions.

Square(double sideLength): A square of the specified size

Trapezoid(double bottomLength, double topLength, double height): Draws a trapezoid

Triangle(double sideLength): Draws a equilateral triangle

Smiley(double radius) : A smiley with specified radius.

Example:

```
Circle myCircle(72);
```

```
myCircle.scale(2,1); //Creates a oval that's twice as wide as it is tall
```

```
myPSSString = myCircle.draw(144,144); //Draw it.
```

```
cout << myCircle.draw(144,144) << endl; //Output the code to the screen
```