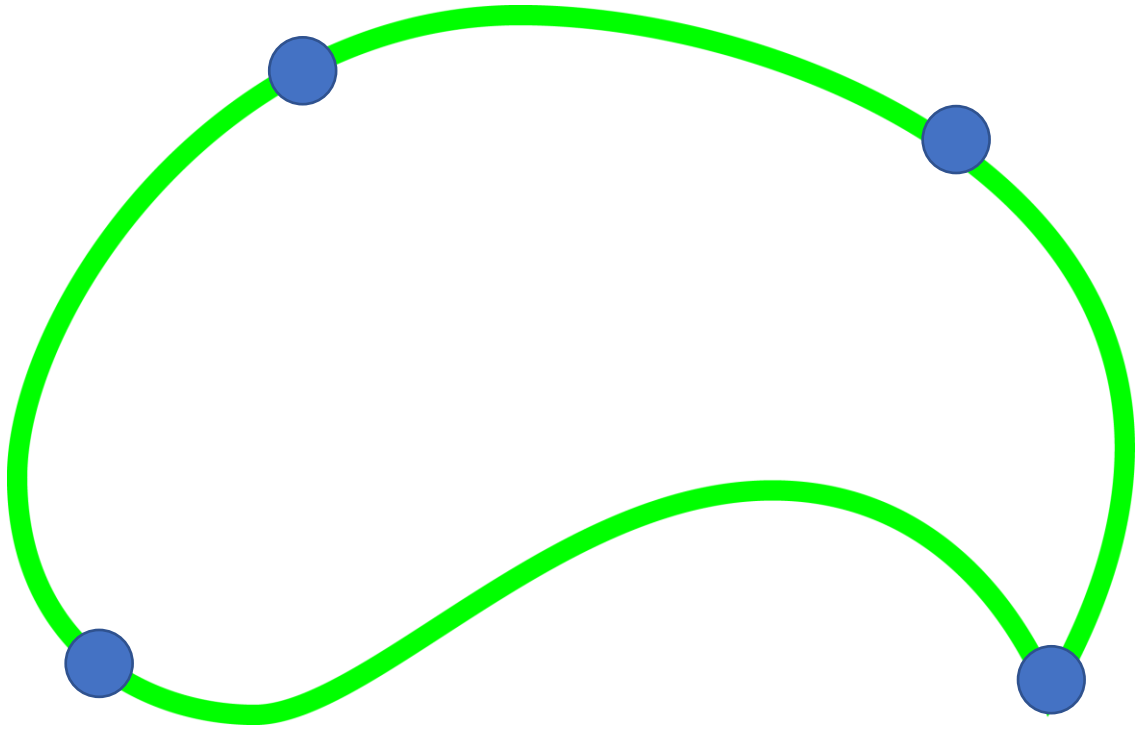
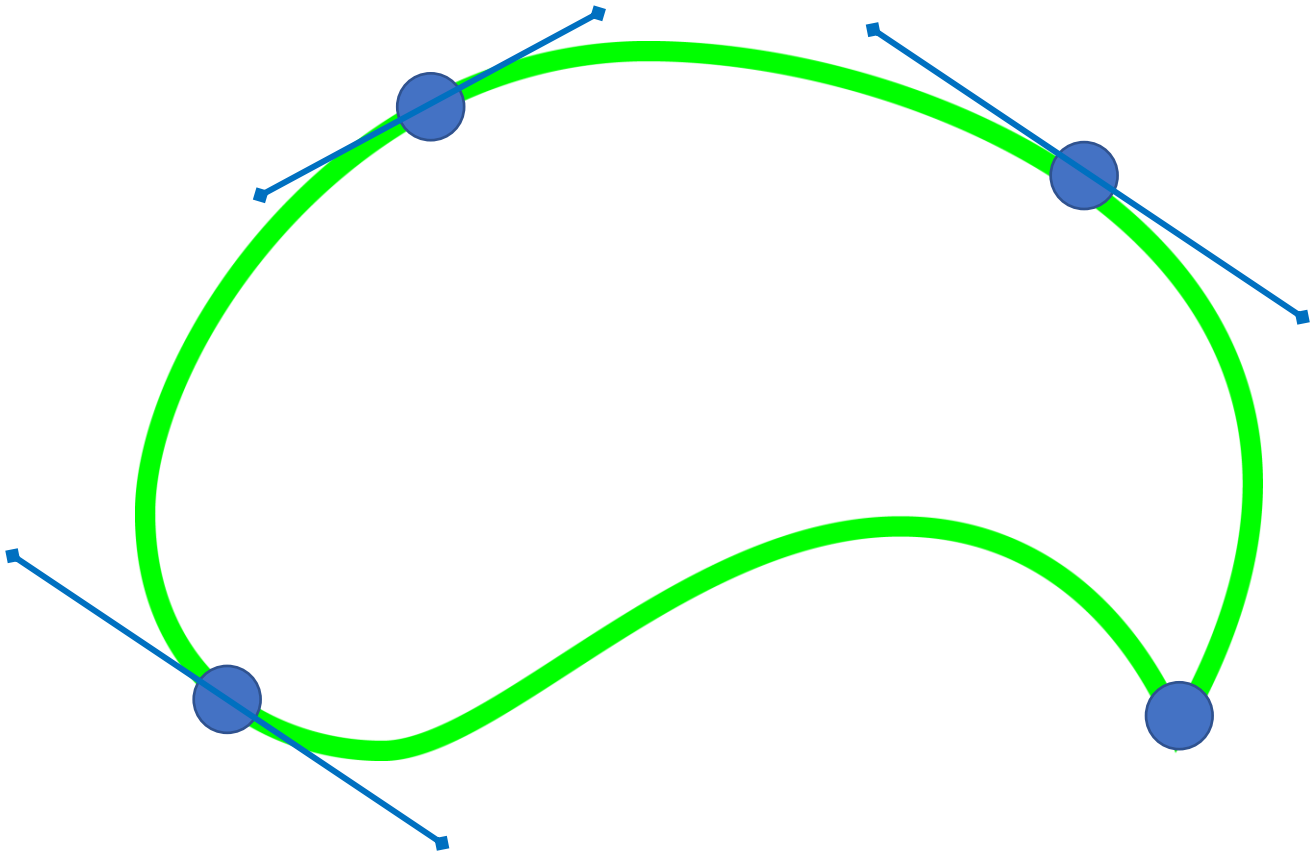
Bezier Curve

Bezier Curve



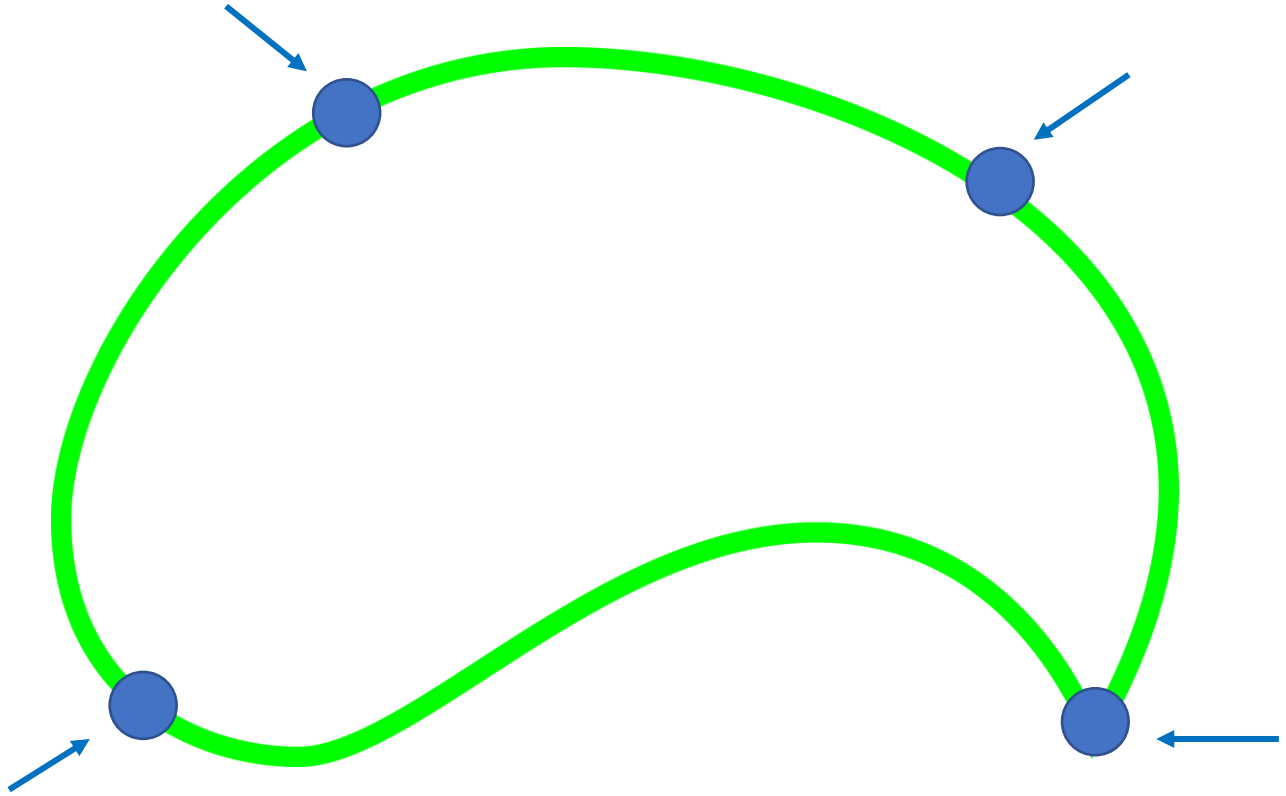
Vector shapes are made up of series of point

Bezier Curve



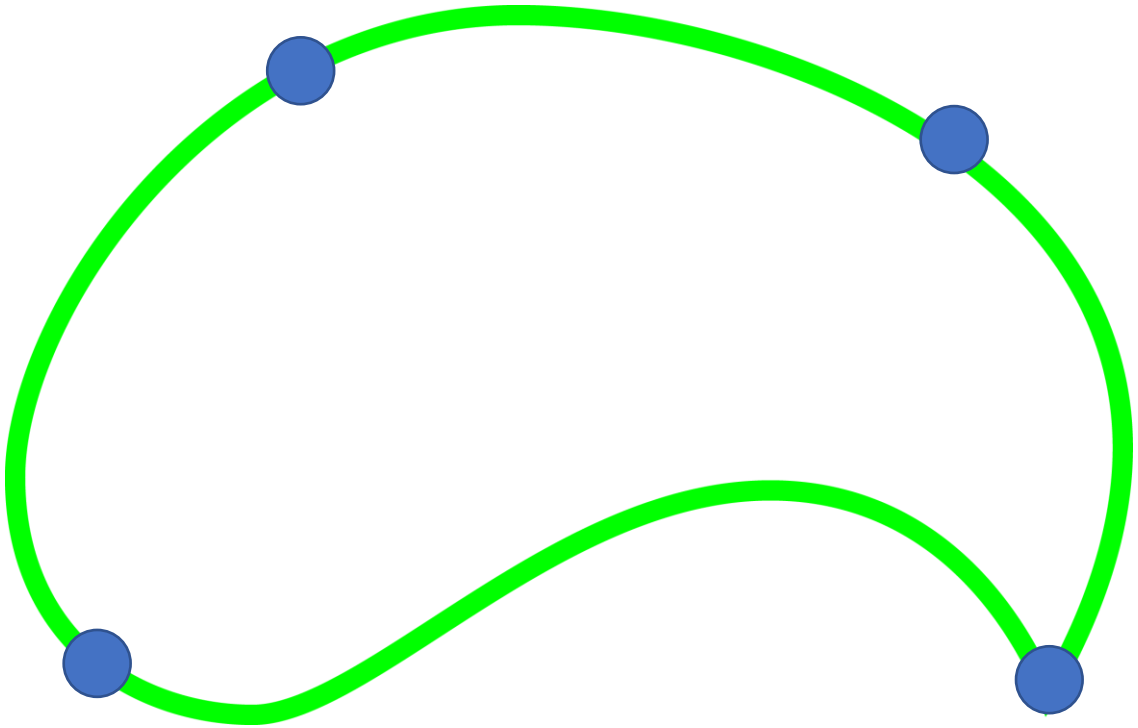
Some of these points cause the shape to curve

Bezier Curve



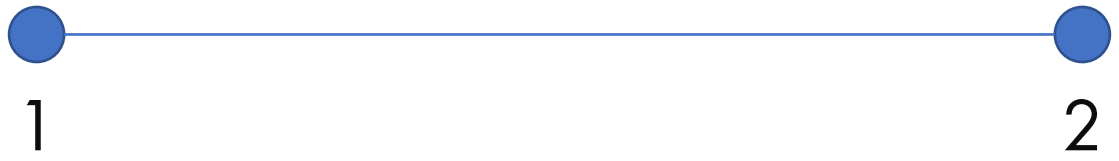
A Bezier curve is defined by control points

Bezier Curve



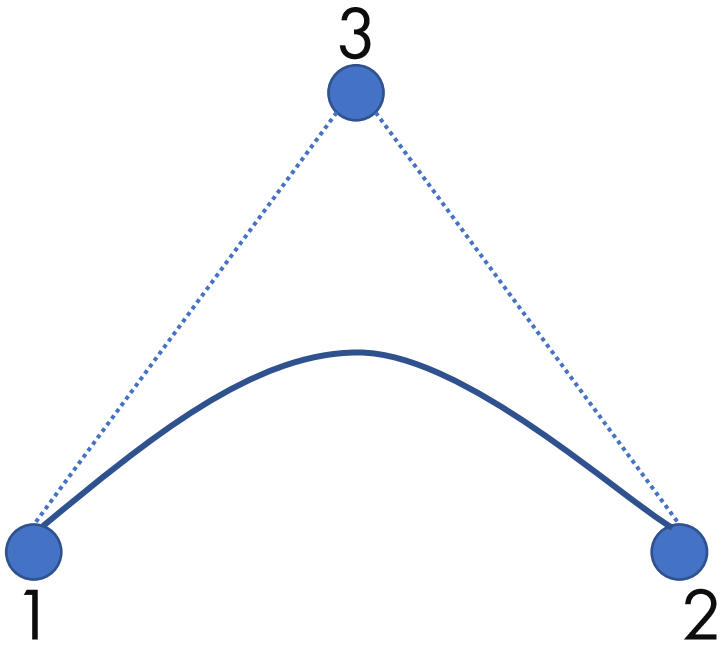
Number of control points varies as per type of a curve

Bezier Curve



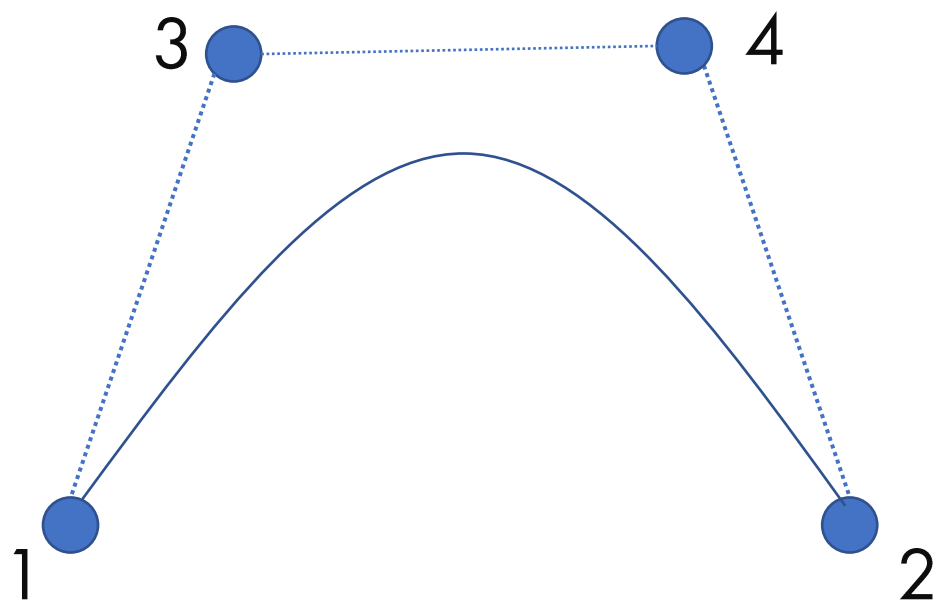
Linear curve

Bezier Curve



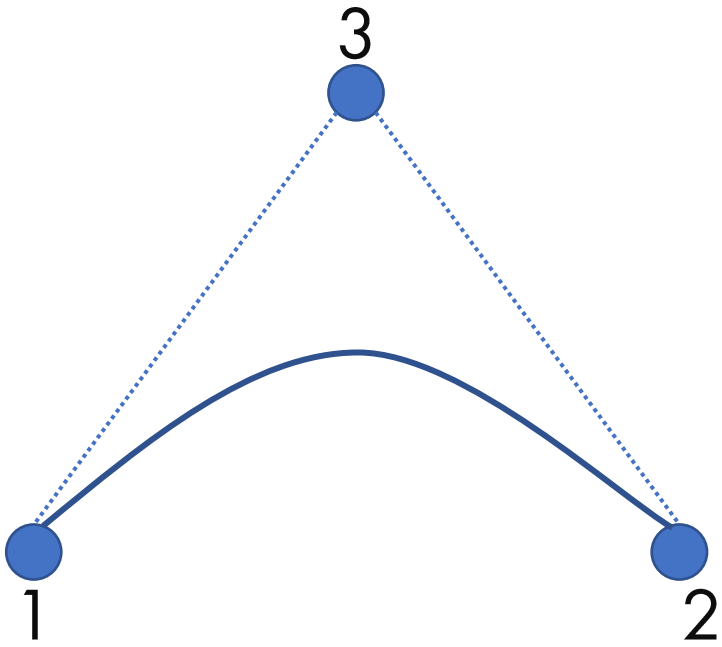
Quadratic curve

Bezier Curve



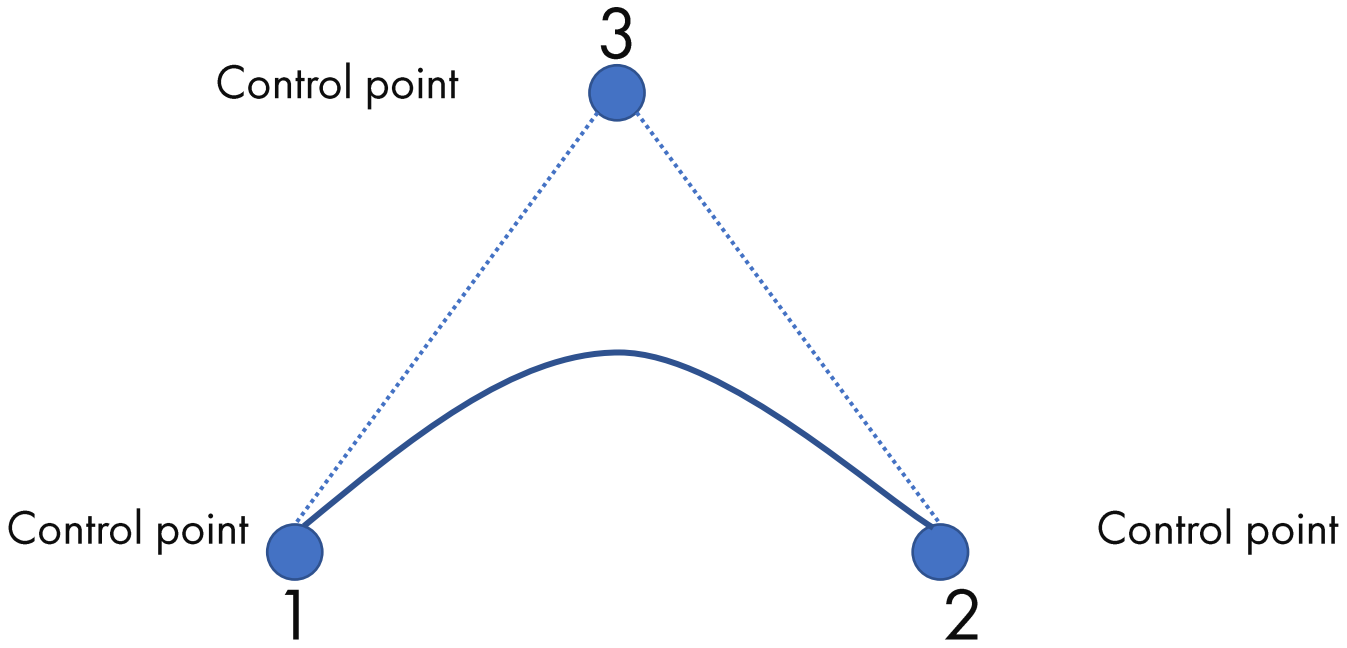
Cubic curve

Bezier Curve



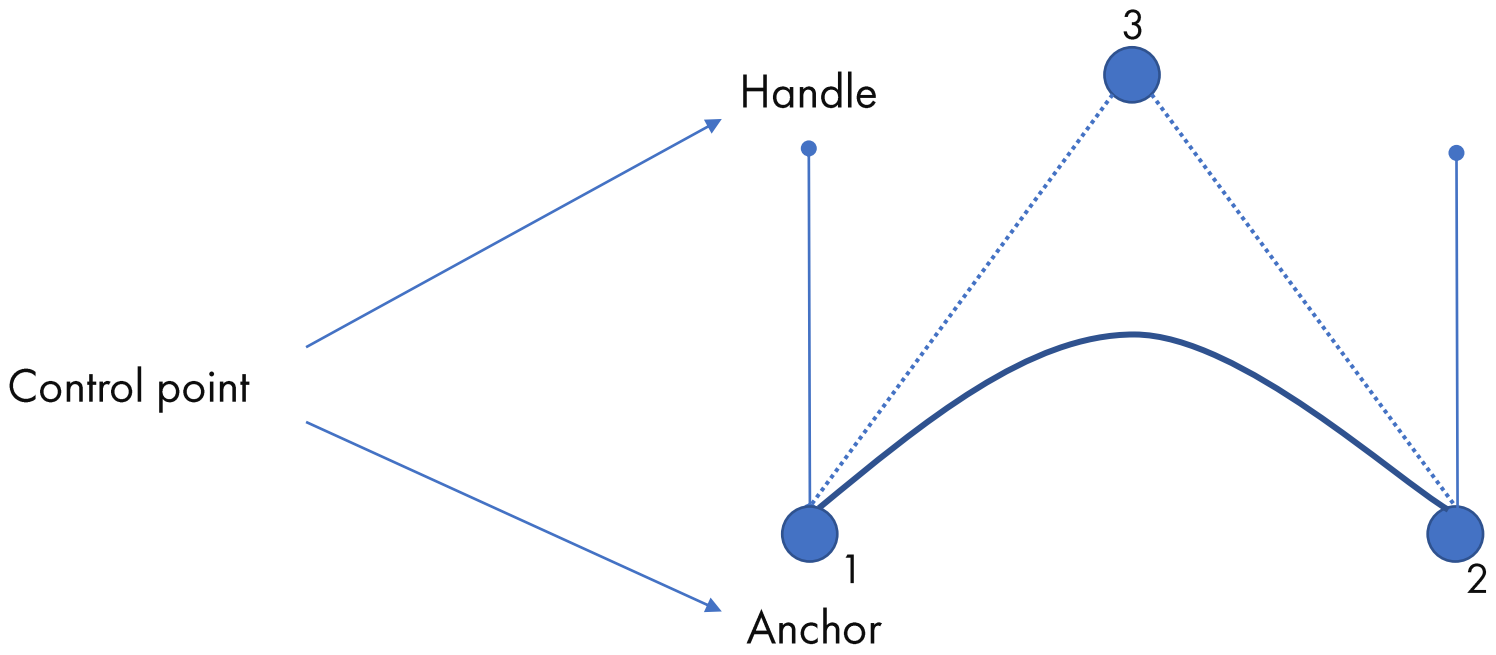
Control polygon

Bezier Curve



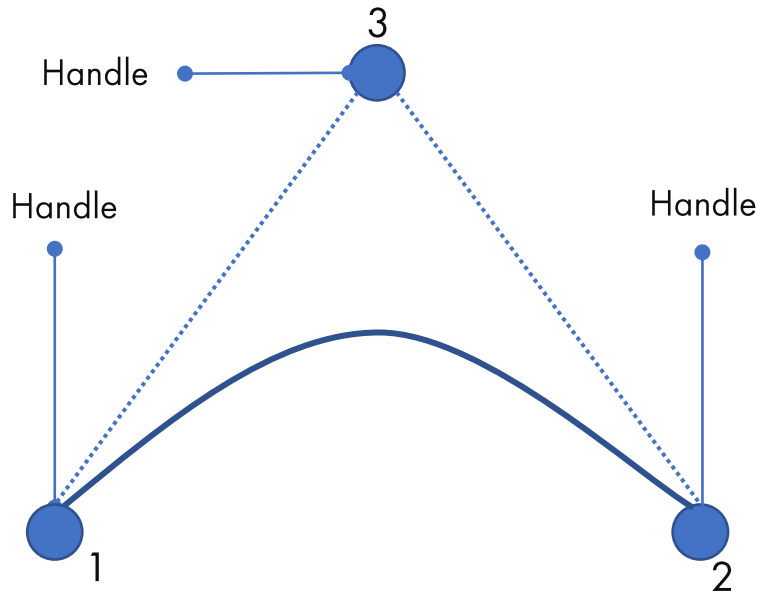
Terms control point is used for all the positions of the Bezier curve

Bezier Curve



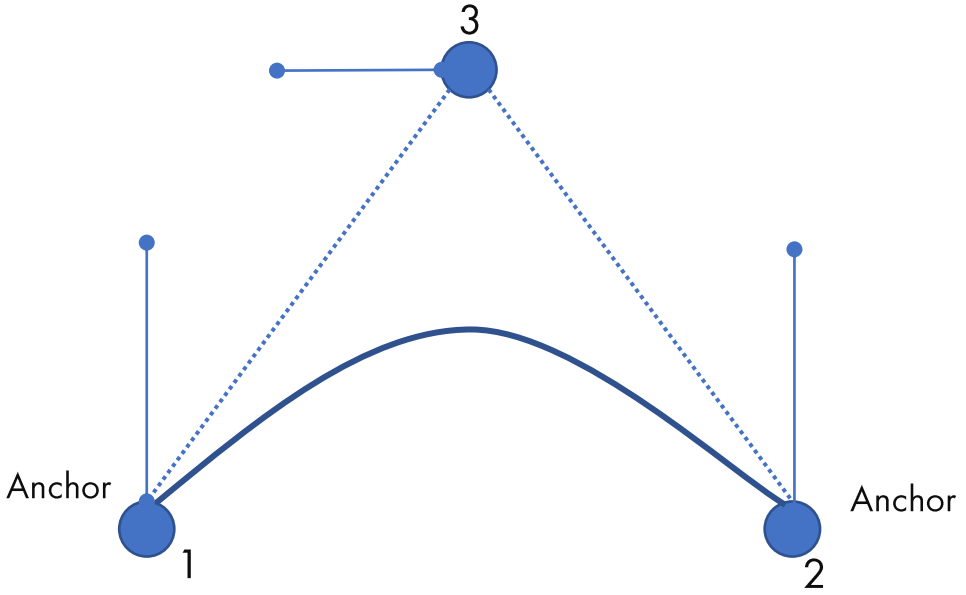
Control point is made up of handles and anchors

Bezier Curve



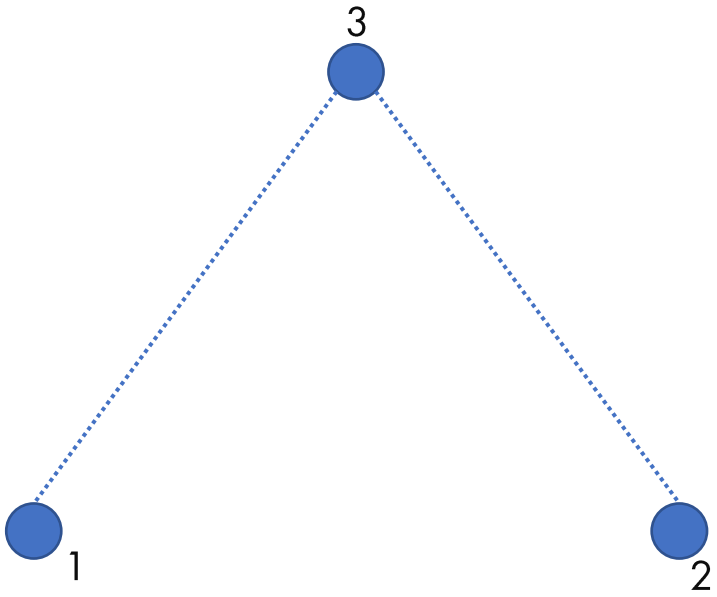
Positions used to influence the curvature are called handles

Bezier Curve



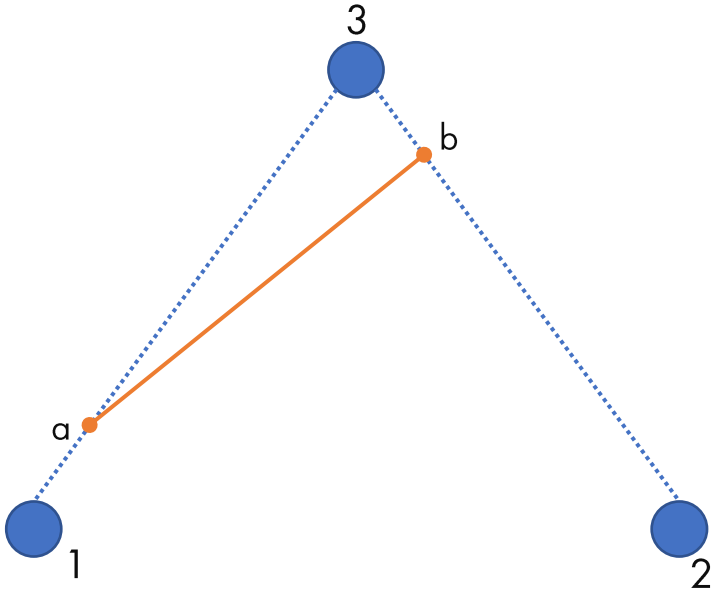
Anchors describe the start and end position of the curve

Bezier Curve



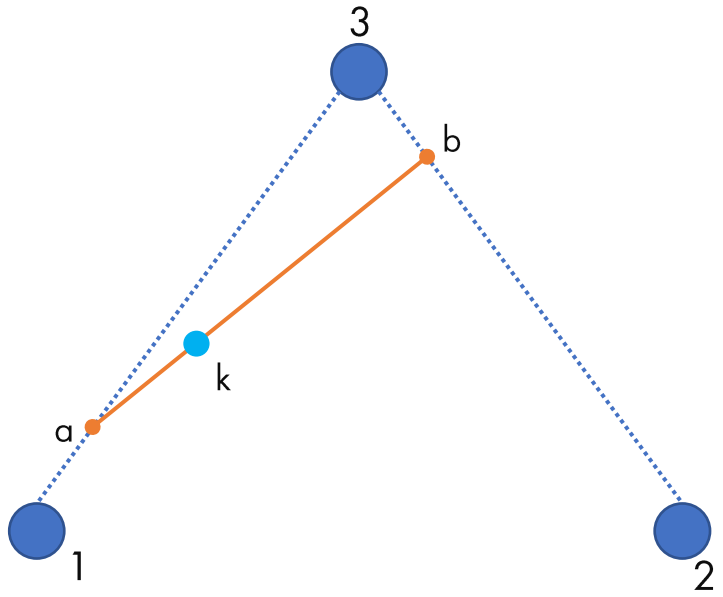
Interpolate along each leg of polygon

Bezier Curve



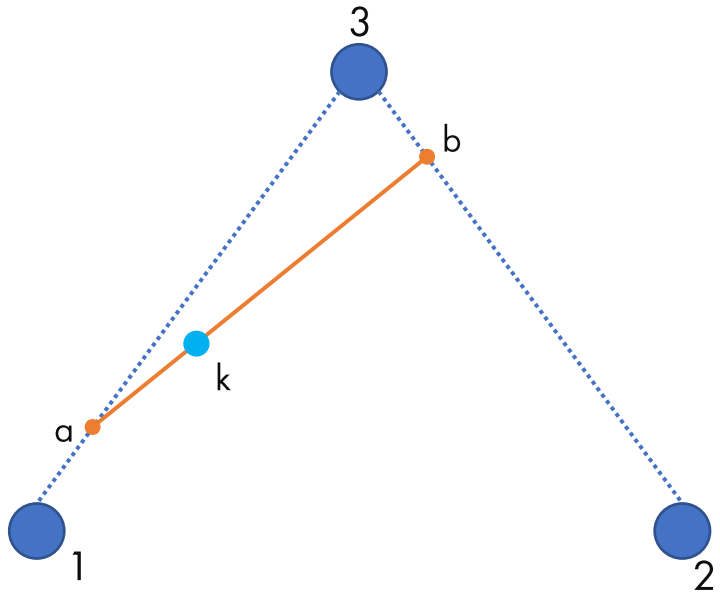
Draw a line between points a and b

Bezier Curve



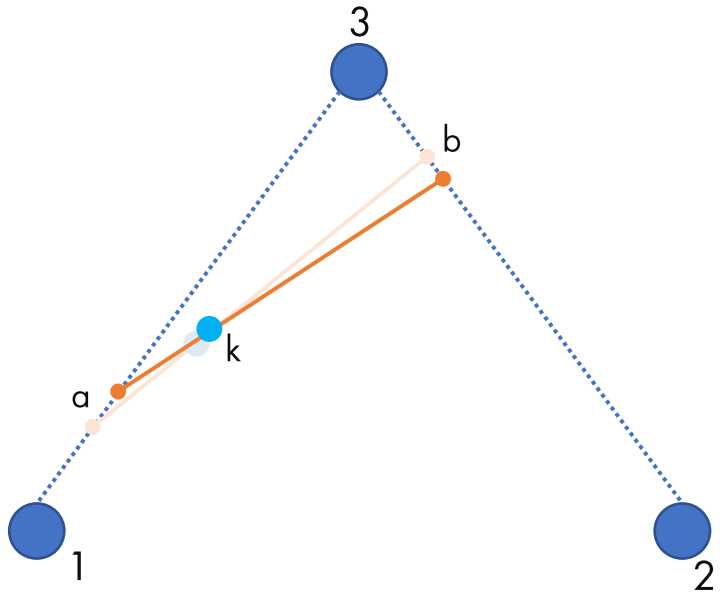
K is the point that will define curve

Bezier Curve

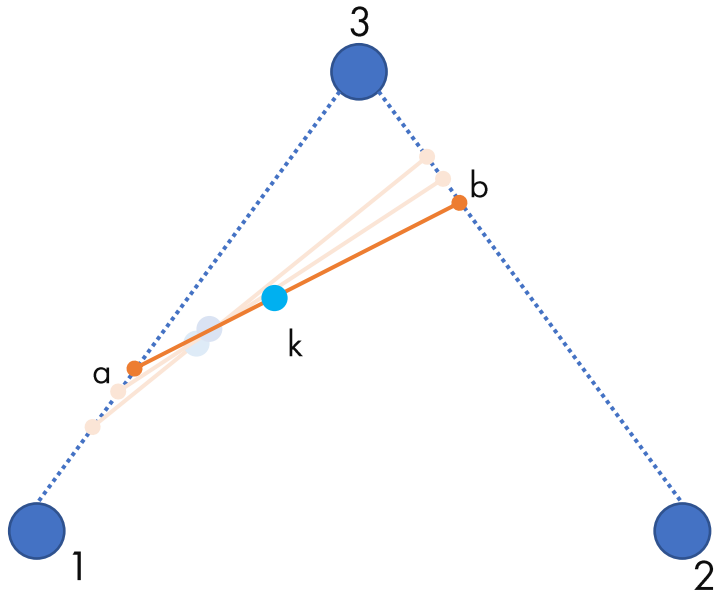


Points a and b will interpolate along the blue line point k will interpolate along the orange line

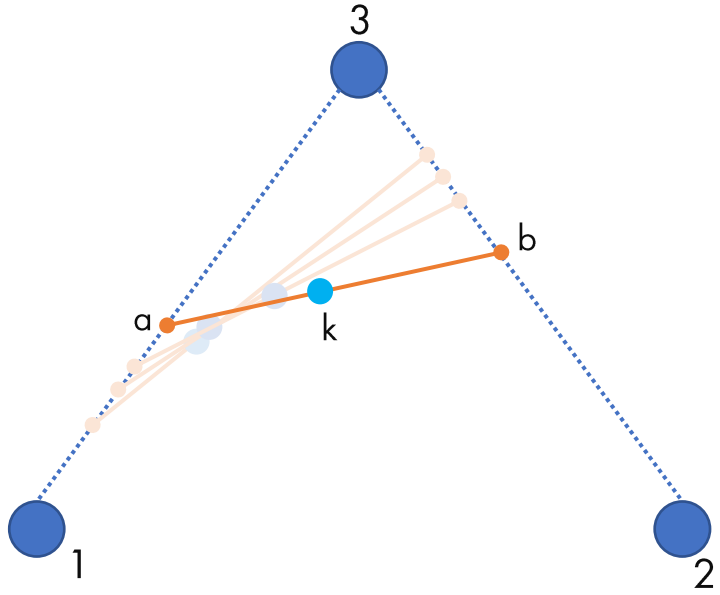
Bezier Curve



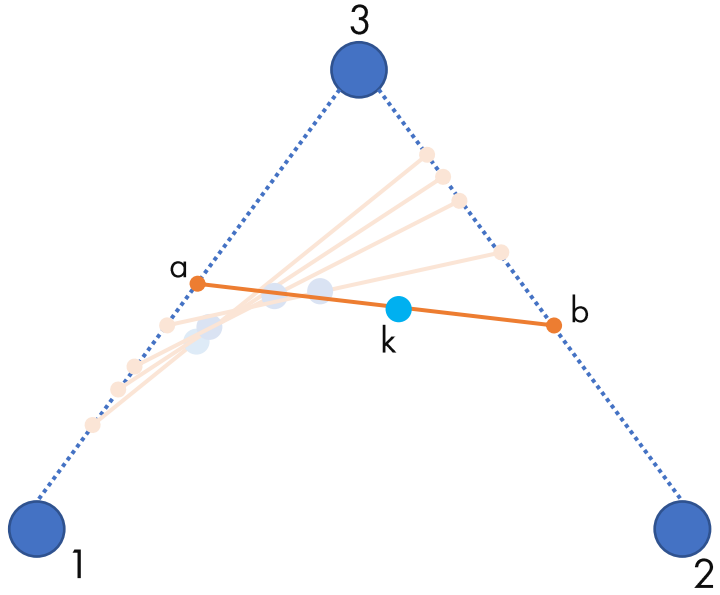
Bezier Curve



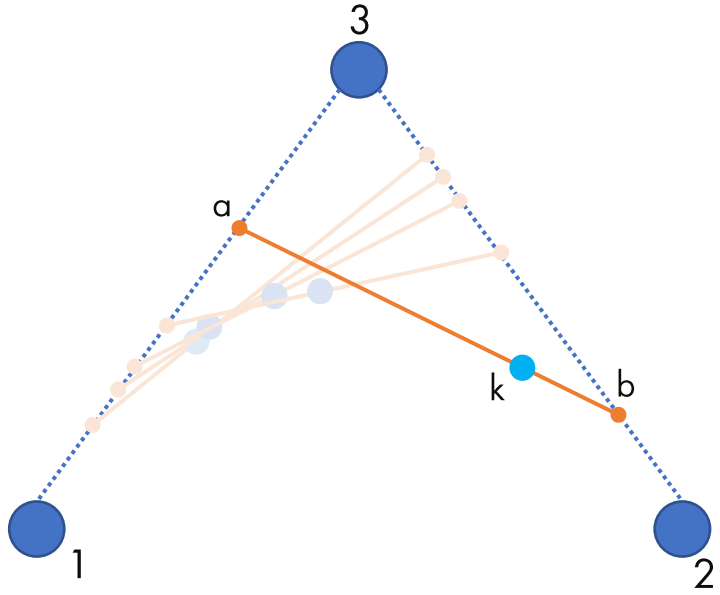
Bezier Curve



Bezier Curve

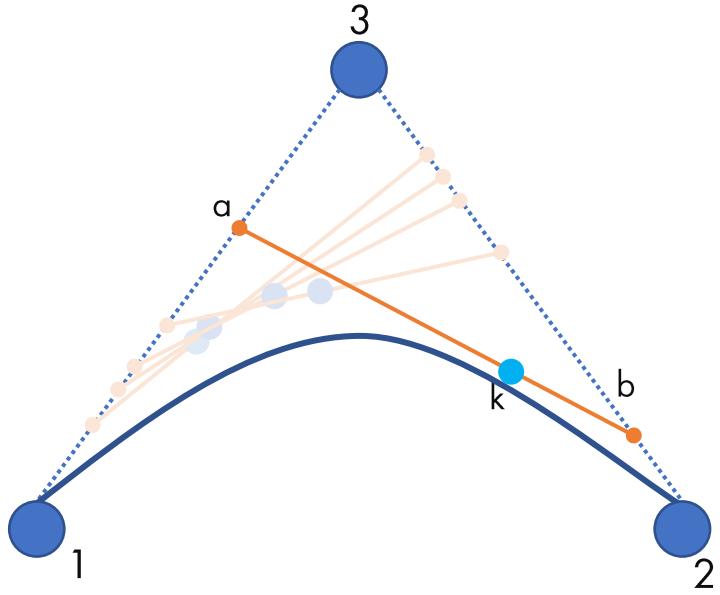


Bezier Curve



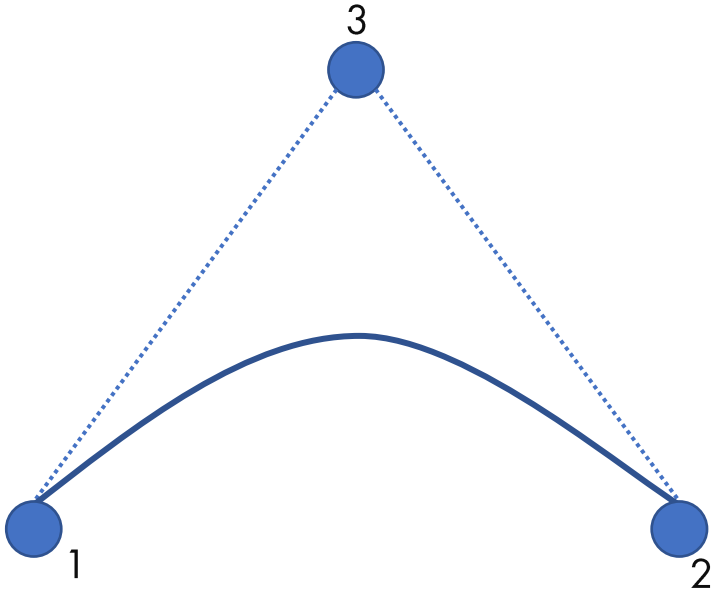
Point k traces out the curve in space

Bezier Curve



Point k traces out the curve in space

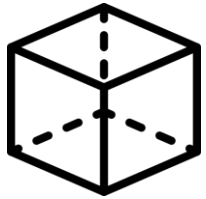
Bezier Curve



Result is a smooth curve

Use of Bezier Curves

Computer graphic, vector graphic



Modelling, animation, typography

Web development