

# Instructions for Using the Program

## 1. Steps required before use

- In the folder "Bezier's Polar," I have included all the necessary materials for using the program.
- After downloading the archived file, extract everything into a new folder of your choice. Then click on the "Bezier's Polar" file with the .exe extension.
- If you wish to open the program code and run it through the Visual Studio 2022 compiler, open the file named "Bezier's Polar.sln".

## 2. Working with the program

- Once you start the program, a window will appear with buttons and a visualized polygon with 3 control points and a Bézier curve.
- You can move a given control point by using the left mouse button.
- Button "Preset 1": Displays a polygon with 3 control points and a Bézier curve (the default figure).
- Button "Preset 2": Displays a polygon with 4 control points and a Bézier curve.
- Button "Preset 3": Displays a polygon with 5 control points and a Bézier curve.
- Button "Add Control Point": Adds a new control point to the polygon (its default coordinates are (0.5, 0.5), but you can choose other coordinates by entering them in the point's field or using the mouse).
- Button "Remove Last Control Point": Removes the last added control point (the point at the bottom of the point list).
- Button "Show Polar": Displays the Bézier polar according to the value of  $t_1$  (initially set to 0.5). If you want to hide the polar, click this button again.
- Slider "Values of  $t_1$ ": Sets the value of  $t_1$  and interactively changes the Bézier polar according to this value.
- List of control points: Each point displays its coordinates. The first field is the x-coordinate, and the second is the y-coordinate.
- The control panel can be enlarged or minimized.

- To exit the program, simply close the window.