Application User Guide

1) **Kinect Menu**
2) **System Bar**
3) **Record Bar**
4) **Paint Screen**
5) **Edit Menu**
6) **Voice Command**

Kinect Menu
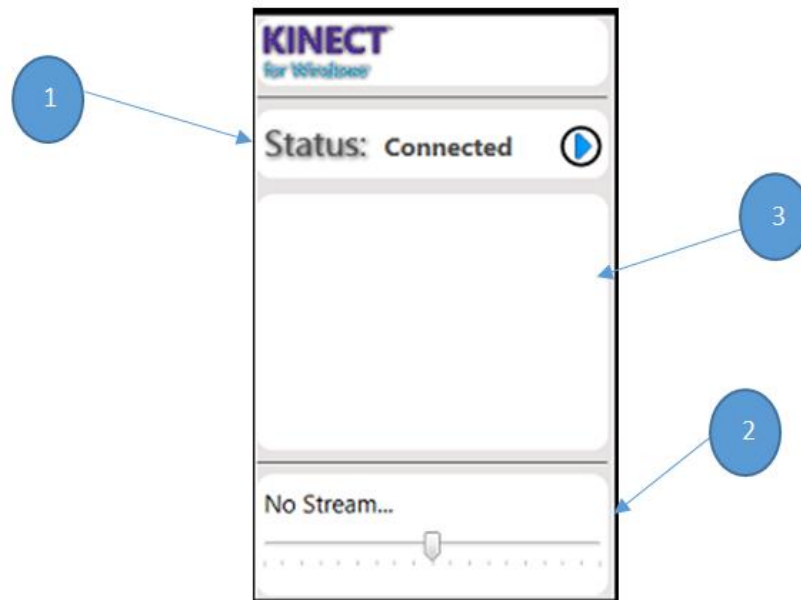
This is application control area, like you can see, it holds the Kinect icon and contains from 3 parts.
All Kinect control options are disabled, until the play button is pressed, powering the Kinect device.

1) **Status Bar**
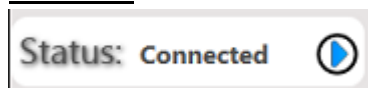
The blue play button is the connect button you need to press it, in order to power up the Kinect, after connection was established, it will be replaced with

And now the button gives you the option to stop Kinect streaming.

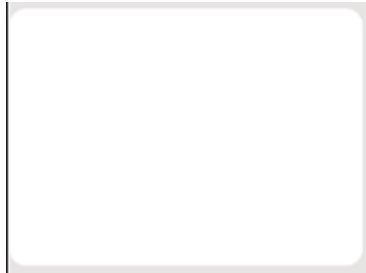Once device is connected, 'No stream' will be replaced by 'Streaming….'

** **"Connected"** – applies, that a Kinect device is plugged in to the USB port
The Record Bar is disabled till you press the connect button.

2) Tilt controller

Upon connection, Tilt bar will be enabled. Each stage of tilt moves the Kinect tilt motor 3 degree up or down according to the choice

3) Stream window

Blank in the beginning and changed ones the Kinect is connected

Video stream, in the stream you can see you movement and according to it decide what to do.

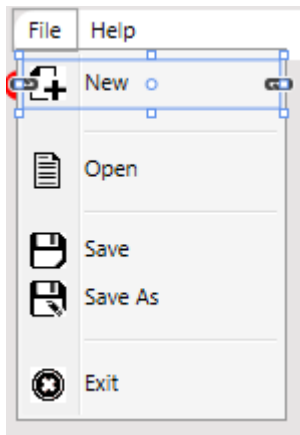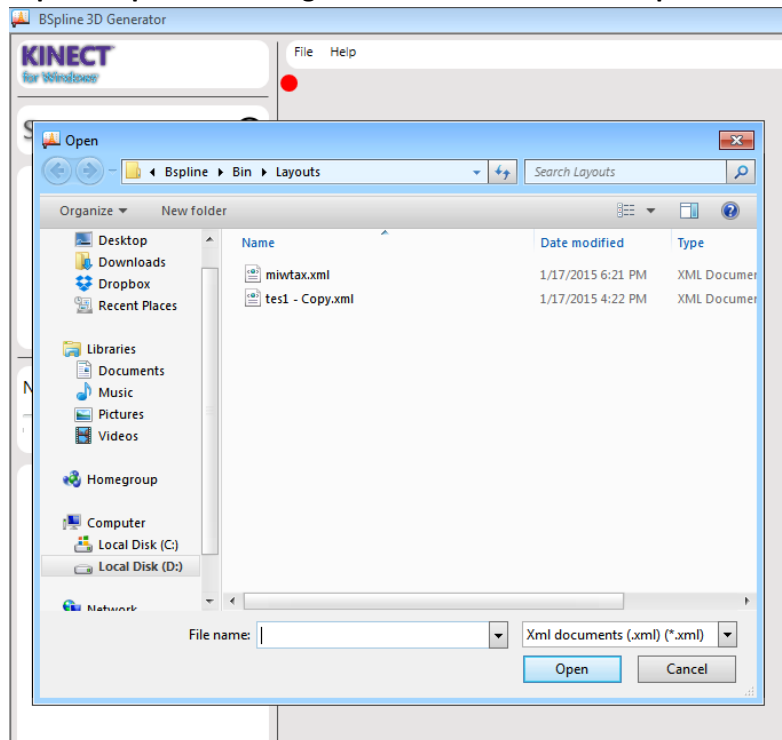After the connection, Kinect Bar supposed to look like follow:

System Bar

This System bar has two menu options

   1) **File** – manages all file related options

- **'New' – Clears the <u>Paint Window</u> and move it into record mode, controlled by <u>Record Bar</u>**
- **'Open' - Opens file dialog window in order to choose previous layouts from saved ones**

    And will give you the option to load only layout files of type XML. (System's data type)
    Open is always enabled because you can open existing layout in every step of the
    application.

- **'Save' and 'Save As' will open file dialog window**
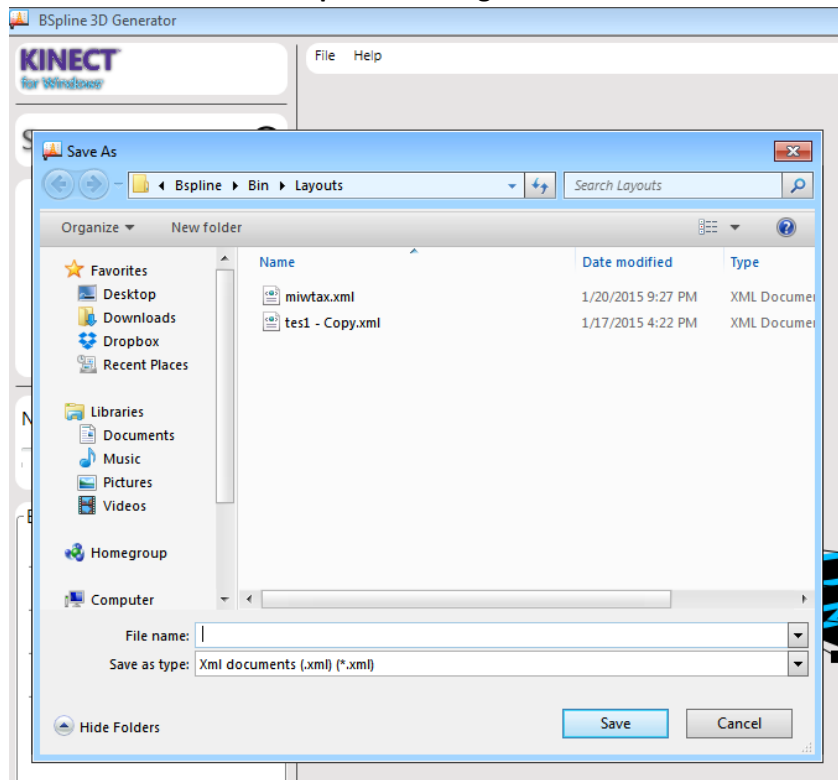
The save options, are disabled while you are in recording mode.

'Save As' will always open file dialog window and the possibility to create new file by typing new file name.

'Save' will open file dialog window <u>only</u> if the layout was never saved before, after saving the new layout save will always overwrites the last saved file.

- **'Exit' - Closes the application.**

Record Bar

Record button is shown in all stages, except while in editing mode.

After the Kinect is connected, the button will become enabled and can it to start recording your movement.


you can press the button both with the mouse or use voice commands (Voice command explained in the last chapter). After pressing, the button it will change to:
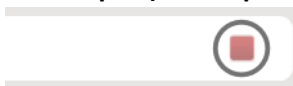
Which gives you the possibility to stop the recording, which also can be done by both pressing the button with the mouse or use Voice command (Voice command explained in the last chapter).

After pressing the stop button, program will stop recording and display the result in <u>Paint Window</u>,
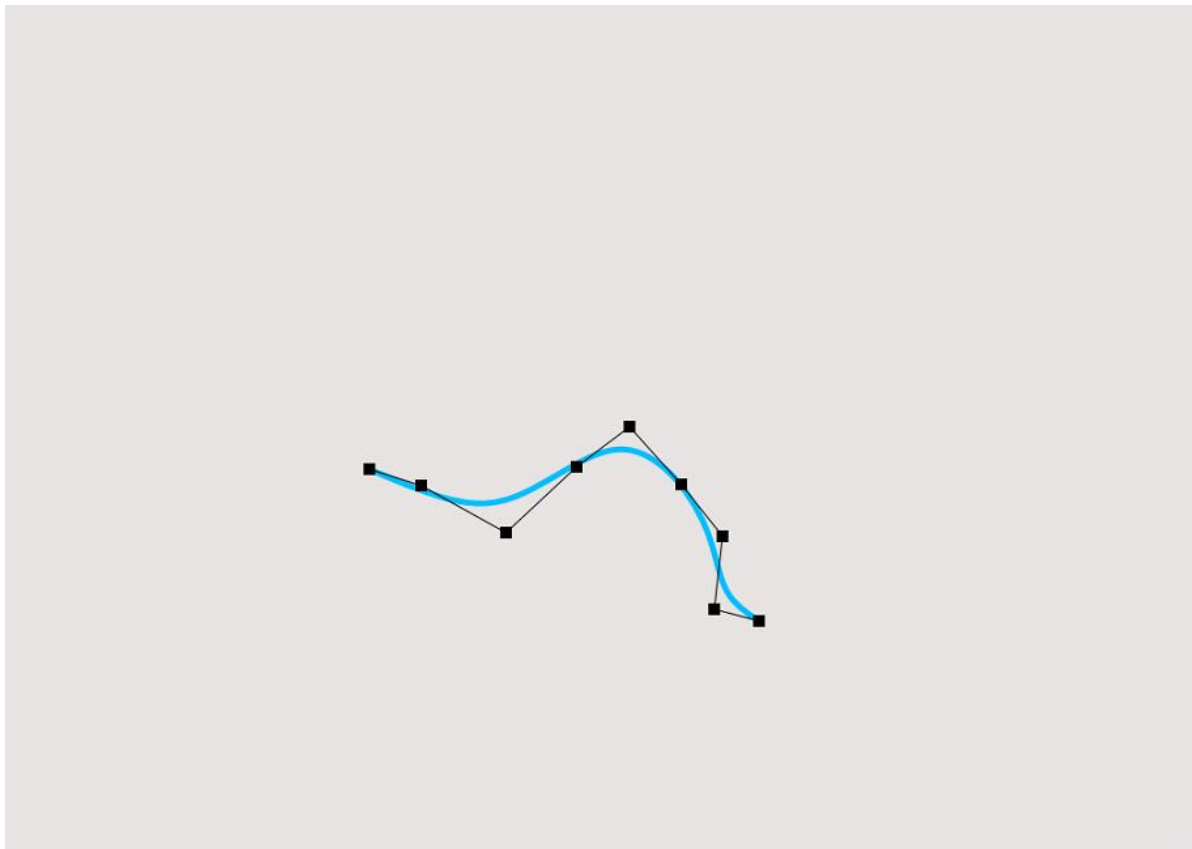From this point, the application moves from record-mode into editing-mode.
Example (Application editing-mode):
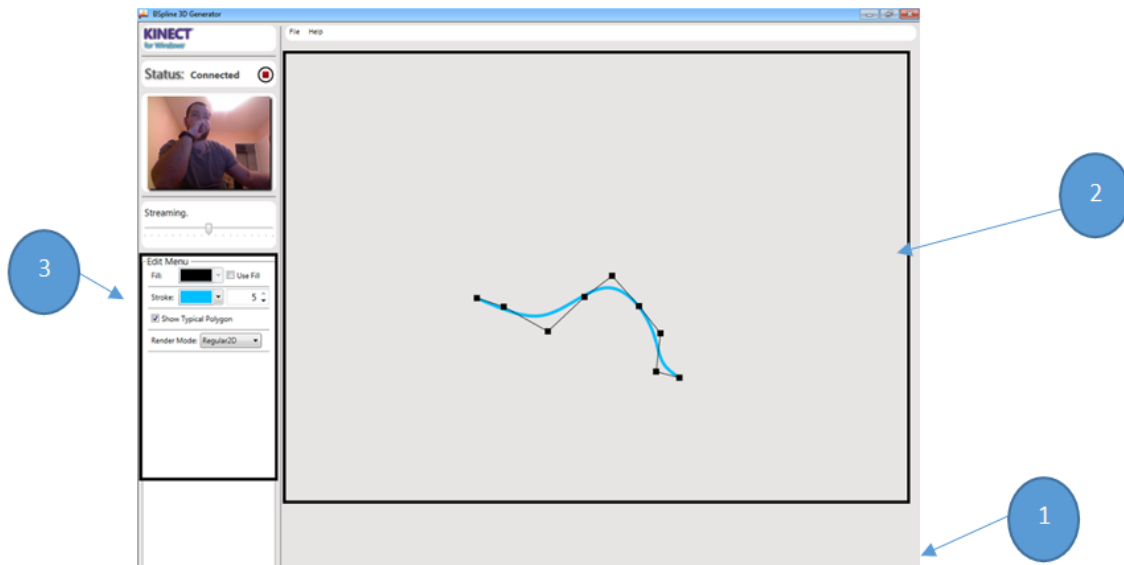
The changes which to look for after record is done:
1) Record bar is invisible
2) Paint Window is filled with gathered info from the Kinect
3) Edit Menu becomes visible

Paint Screen

Paint Screen, presents the data gathered from the Kinect, which can be manipulated.

The points connected with straight lines, those represent the typical polygon. You can make manipulate them by moving each point with the mouse and the layout will be recalculated and re-rendered accordingly.
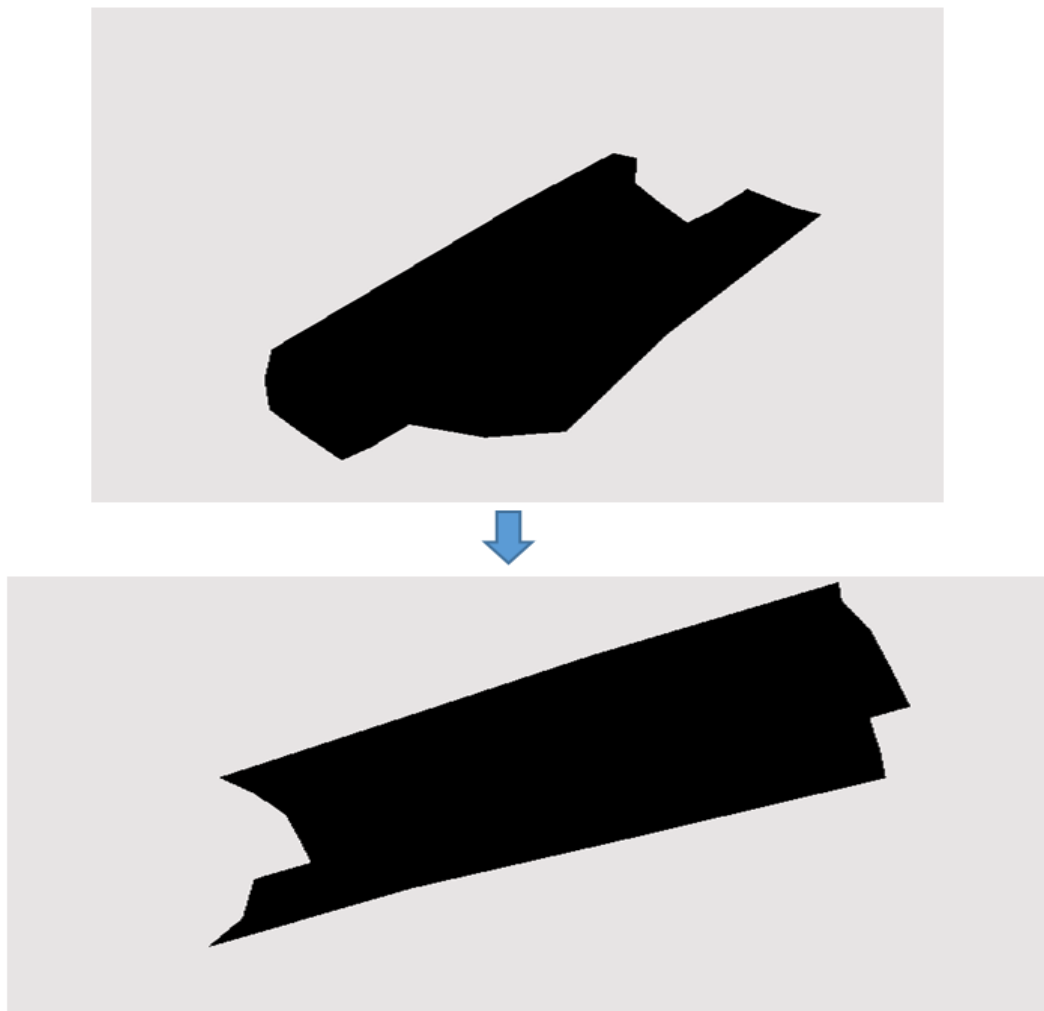
<u>**Example on 2D mode**</u>:
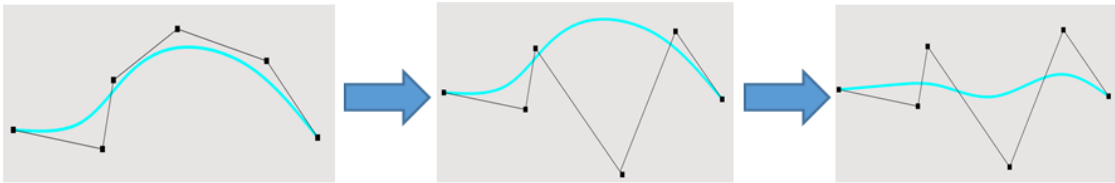
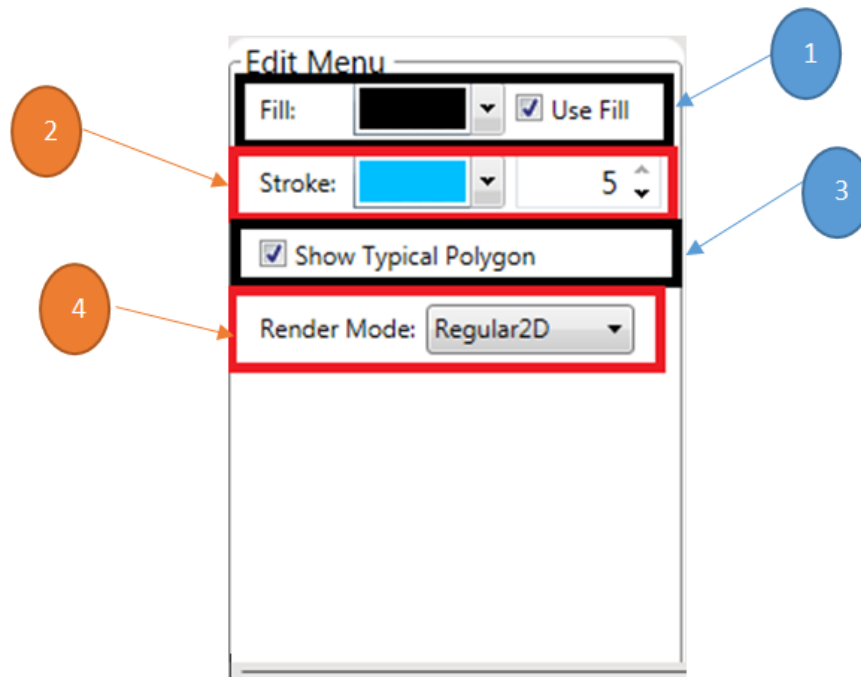As you can see, by moving one of the typical points to a new location, the layout updates itself accordingly.

The Paint Window also has the possibility of rotating the layout by holding the mouse on it while moving the mouse around.
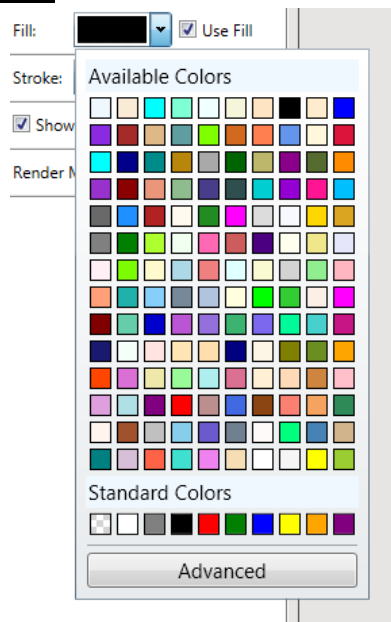
<u>**Example on 3D mode**</u>:

Edit Menu

Edit menu will be visible, only while in editing-mode.


The edit menu has 4 bars each one of them changes different part of the presented layout.
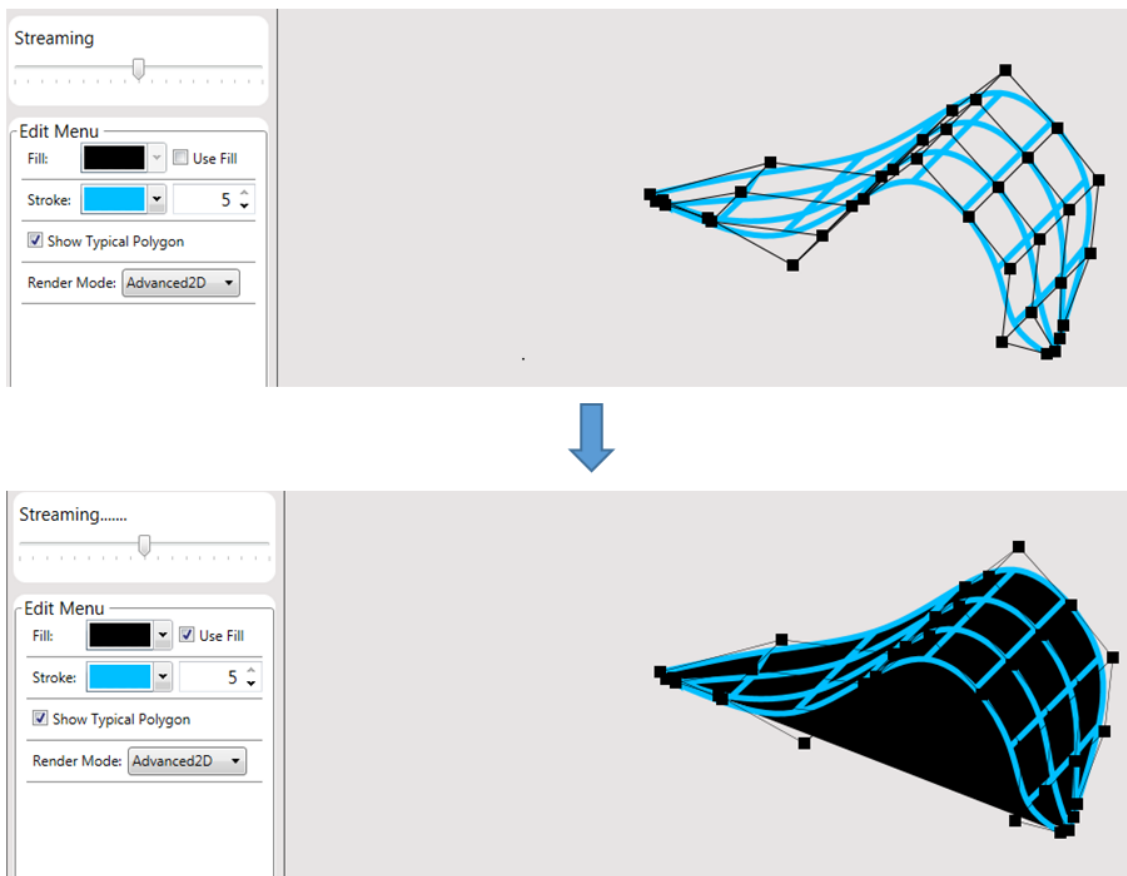
1) Fill bar

In order to fill the inner parts of the layout with specific color, you'll need to check the 'Use Fill' checkbox, which will enalbes the colors drop down menu and choose the wanted color.

You could choose an custom color by pressing the 'Advanced' button, which will change to the following:
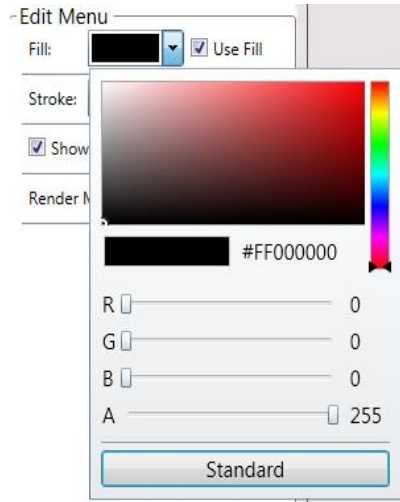
**Example of the fill: (paints the inner part of the layout in black)**

You see that it fill the surface in chosen color.

2) **Stroke Bar**
   This bar defines the size and color of the surface layout.
   The Stroke color dropdown menu is the same as the one used in the Fill color dropdown,
   The numeric control, controls the thickness of the surfces layout border and it moves between 0-5
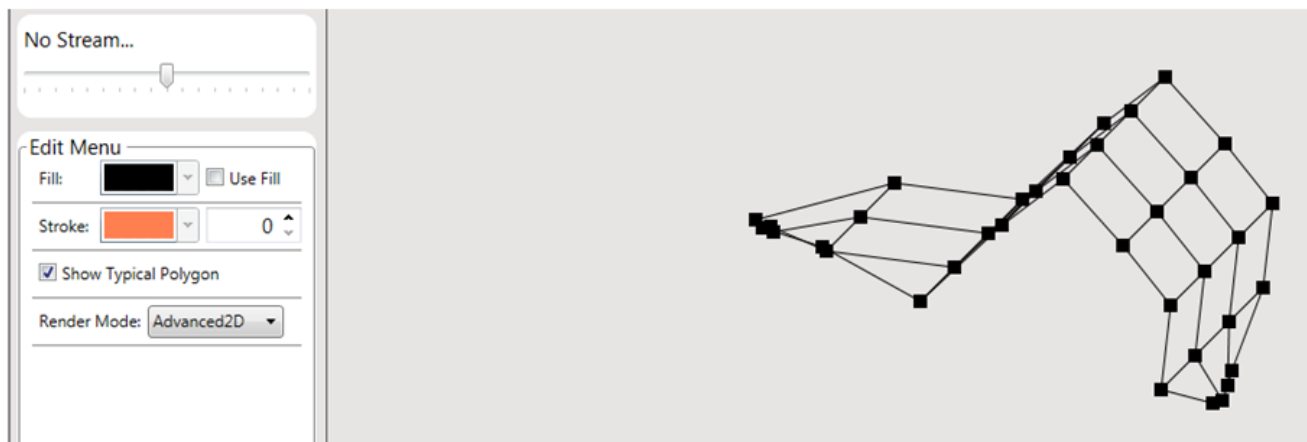   (where 0 is no stroke and 5 is widest stroke)
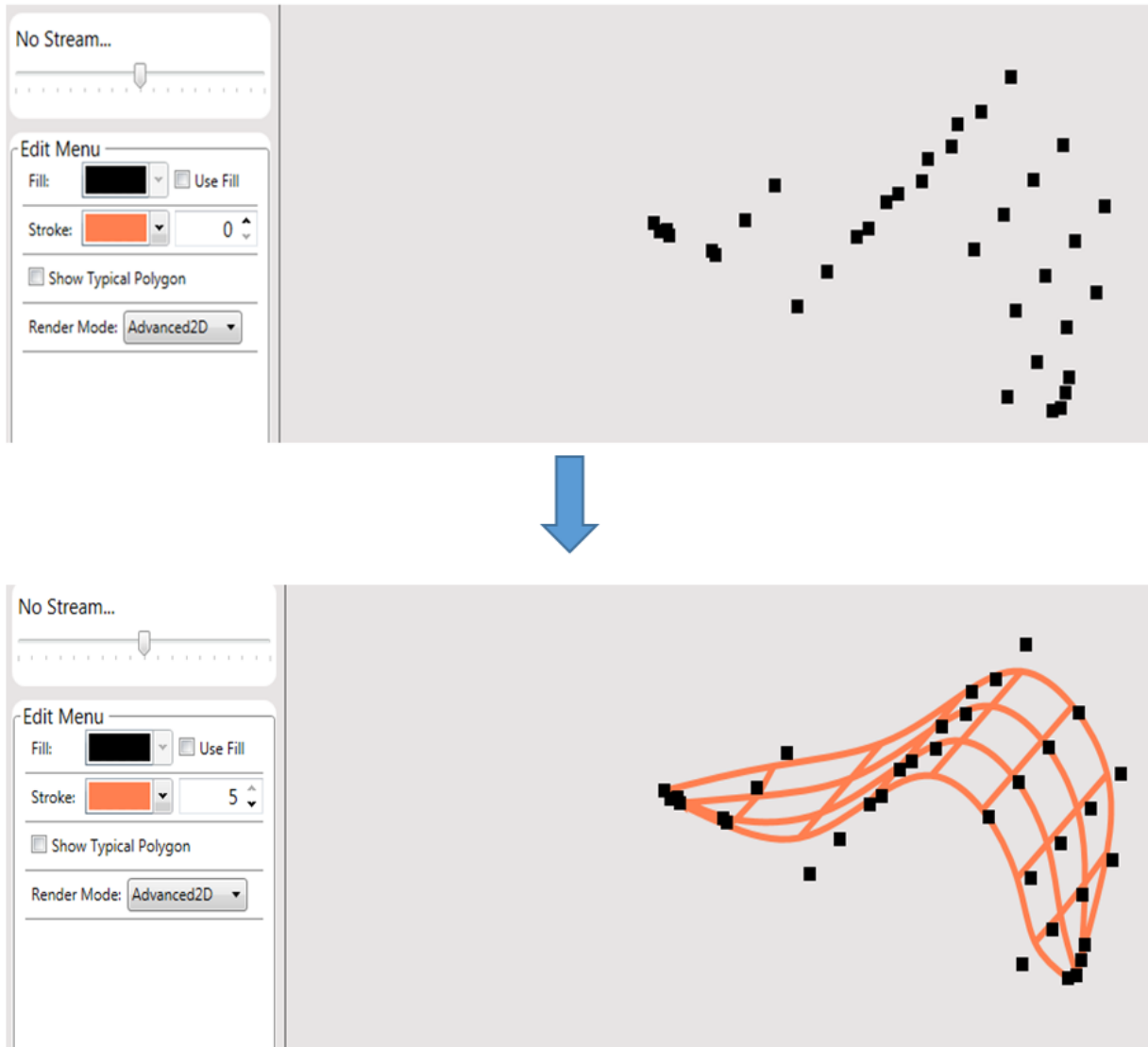
As you notice, we move the thickness of the border from 0 in the first screenshot to 5 in the second screenshot.
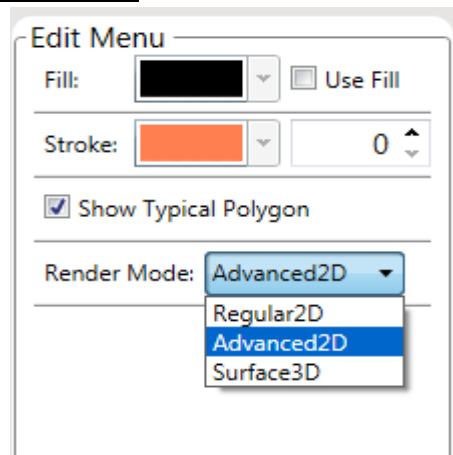The border was painted in Orange (upon our selection of the color dropdown menu)

3) **Typical Polygon check box**
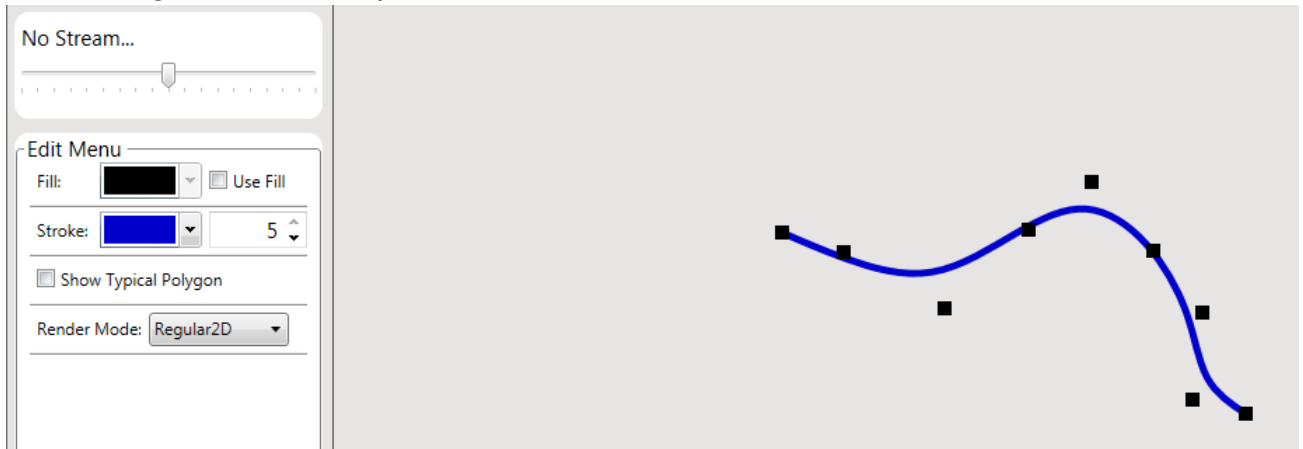   **If checked, the typical polygon will be draw across the layout.**

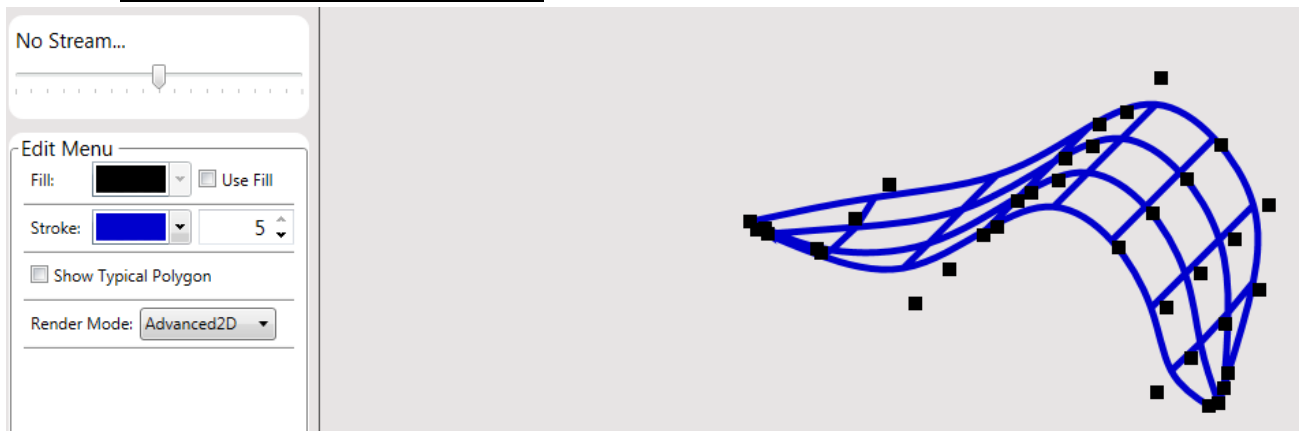4) **Render Mode**

Render mode have 3 options that you already saw in the previous examples

- **<u>Regular 2D – show layout in 2D</u>:**

- **<u>Advanced2D – show layout in 2.5D</u>:**

- **<u>Surface3D – show layout in 3D</u>:**

Voice Command

Voice command is a nice future that uses Kinect audio microphones and influences the application

Application has 3 supported voice commands:
1) **"Go"**
2) **"Stop"**
3) **"New"**

The first two commands are functional only in the record mode, which gives us an option to start/stop recording in a remote way.
- **"Go" command starts recording our body movement.**
- **"Stop" command stops recording and moves to editing-mode.**
- **"New" command, clear screen and moves from editing-mode to recording-mode**
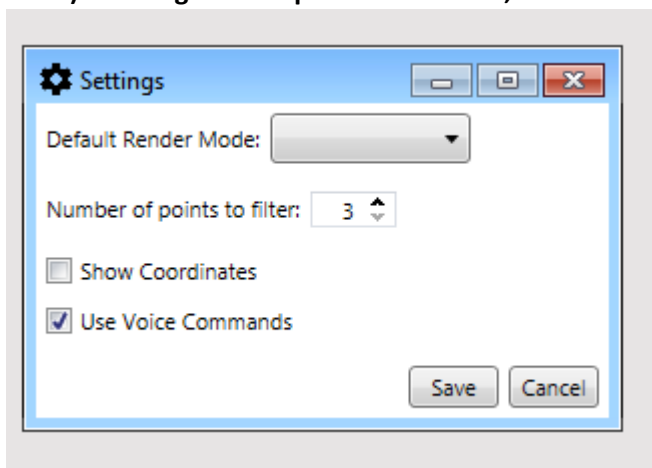
** Voice commands can be disabled from the settings (explained in next chapter)

Additional Help Menu
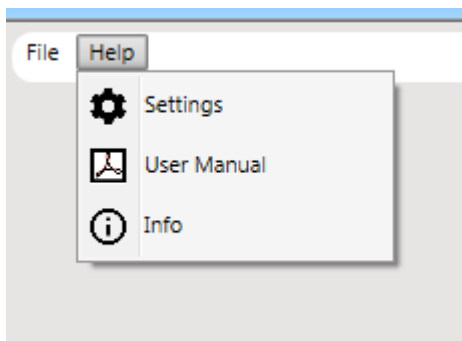
This menu contains advance option and help files.

1) **Settings – will open new window, which control default behavior of the application**

Settings window, gives as an opportunity to manipulate the application

    a.   **We can choose default render mode – it will represent only for new recorded layouts**

    b.   **Number of points to filter – filter the amount of point received from the Kinect every second (serves as a Noise-control).**

    c.   **Show coordinates- prompt "X,Y" coordinates received from the Kinect.**

X:0;Y:0   ◉

    d.   **Use Voice Command – Enable/ Disable the voice commands.**

2) **User Manual – will open window containing this user guide.**

3) **Info – will open window showing general information of the application.**