

## # KeyPolarNav

a program that allows you to use your mouse/keyboard using your keyboard based on the idea of using some kind of keys to polar coordinates projected on the screen

### Function 1:

Click: Ctrl + Fn + a

j: for single left click

Ctrl + j: for double left click

k: for middle click

l: for right click

(you can single or double click)

### Function 2:

Scroll function: Ctrl + Fn + s

This mode will allow you to use the h, j, k, l keys to scroll through the application you are using:

j: scroll down

k: scroll up

h: scroll left

l: scroll right

### Function 3:

Mouse movement mode: Ctrl + Fn + d

#### 1. radius selection:

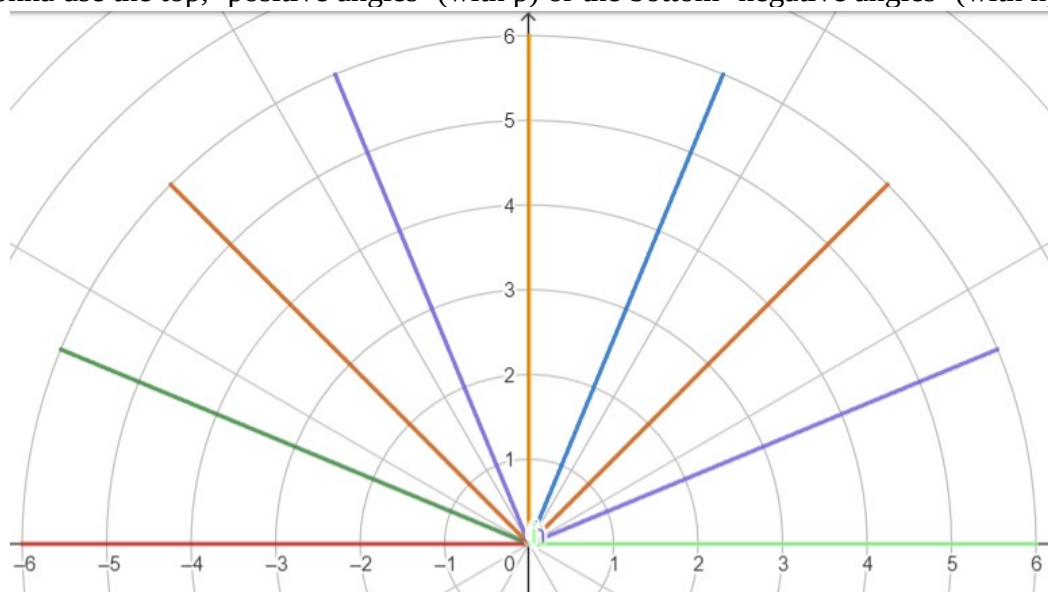
A set of 8 possible radius with values between  $[a=0, \tilde{n}=\max]$ , being max the distance between the center of the screen and the "X"(close) button, and obviously, the minimum would be the center of your screen. The rest of the radius [s, d, f, j, k, l] will be values interpolated according to the size of your screen

#### 2. Radius refinement:

Once the base radius is set, you can decide whether the radius starts increasing (with k) or decreasing (with j)

#### 3. Angle sign selection:

Once the radius is selected, select a sign for the angles positive or negative to determine if you're gonna use the top, -positive angles- (with p) or the bottom -negative angles- (with n)



*-Angles you can select if you had chosen to use positive angles.*

#### 4. Angle magnitude:

Once you set the sign of the angle you select the magnitude of the angle between 8 possible values with 8 different keys

$$\begin{aligned}a &= \pi, s = 7\pi/8, d = 6\pi/8 == 3\pi/4, f = 5\pi/8, \\ \text{spacebar} &= \pi/2, \\ j &= 3\pi/8, k = 2\pi/8 == \pi/4, l = \pi/8, \tilde{n} = 0\end{aligned}$$

angle refinement:

once the base angle is set, you can decide whether the angle starts increasing (with j) or start decreasing (with g)

NOTE: for purposes of usability, I will define:

decreasing an angle: the magnitude of the angle will increase if it is  $\geq \pi/2$  this way I think will be more intuitive to use so if I press "j", the angle will move to the right, and if I press "f" it'll move to the left, making it similar to the radius behaviour.

Function 4:

Move with arrow function: Ctrl + Fn + f

in this mode, you will be able to move the cursor with arrows for small adjustments

j = down, k = up, h = left, l = right