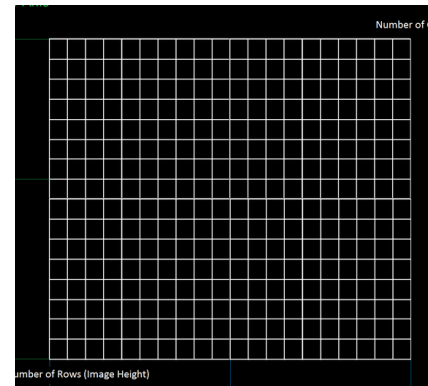


The background features abstract green geometric shapes. On the left is a tall, narrow, light green triangle pointing downwards. On the right is a complex, multi-layered green shape composed of several overlapping triangles and polygons in various shades of green. A thin, light gray line extends from the bottom left towards the right, passing behind the green shapes.

Lab 06

2D Pixel Grid

2D Grid



- ▶ Clickable 2D Grid (20%)
 - ▶ Provide a popup menu to select the grid dimensions: (10 or 15 or 20 , etc). (5%)
 - ▶ At least 3 different dimensions
 - ▶ Draw a 2D grid based on a selected dimension. (5% for each dimension)
 - ▶ The default is 10 \rightarrow x: (-10 ~ 10), y: (-10 ~ 10)
 - ▶ The origin (0,0) is at center (as a cell)
 - ▶ When the user select 15, the grid will be re-drawn to: x: (-15 ~ 15), y: (-15 ~ 15)
- ▶ When the user click on one of the cell (75%)
 - ▶ draw/fill the cell
 - ▶ You will need to implement a function to convert coordinates (Total 45%. 15% for each dimension)
 - ▶ Print out the coordinate (x, y) of this cell on the console
 - ▶ Fill the cell (total 30%, 10% for each dimension)

Requirement

- ▶ Do not use other libraries. Only OpenGL API (gl, glu, glut) is allowed
- ▶ Write comments in your code
- ▶ Turn in your code and demo video. (5%)

