Display\_Name..

Computer Programming Using Kivy - **OpenGL 6 - Heads Up Display**

**GOAL: Use sound in an event and music during init in a 3D scene.**

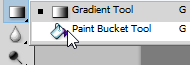
(You must first have a completed and working opengl1.py)

Update the 3D engine:

* Go to your home drive (File Explorer, Computer, T:\*username* or H:)
* Go to your opengl folder, then double-click update-kivyglops

Create a Heads Up Display (such as a spaceship control panel with transparent glass):

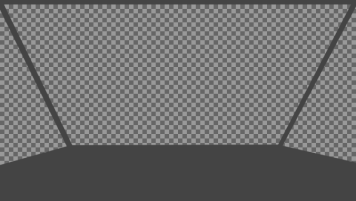
* Open GIMP or PhotoShop
* File, New, make sure units are Pixels for width and height, then set width and height to 1920 x 1080
* Remove the background so the window is transparent (checkered part is see-through):
  + Layer, New Layer, choose Transparent or None for background, OK
  + Click on the background layer on the right, then click Trash Can under it
* Paint the window frame:
  + Choose bucket tool

(if using PhotoShop, hold down the fill menu then click Paint Bucket tool )

* + Click the color swatch:



then choose gray or other color for your dashboard

* + Click the canvas to fill it with gray
    - Choose the lasso tool, draw windows: If using Gimp, click the first point after finished to finish the selection), then push delete key [If using PhotoShop, hold down lasso button then choose Polygonal lasso tool, then double-click the second to last point to end the selection, then push delete key]
  + [OPTIONAL STEP: choose the brush tool and draw dials and indicators such as for a spaceship]
  + File, Save As (but for GIMP, click File, Export As instead), then for format choose  
    **PNG**

then go to your home drive such as H:, open your opengl1 folder, and name the file hud.png

Load the HUD image in your program:

* Open Geany
* File, Open, your home drive (such as T:\*username* or H:), opengl, opengl1.py
* File, Save As, go to your opengl folder, then name this file opengl6hud.py
* In the load\_glops method, load the hud background that you made:





* Then load a star background:



* Then load a space ship:

