xSGE Lighting Library Documentation

Release 1.0

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xSGE is a collection of extensions for the SGE licensed under the GNU General Public License. They are designed to give additional features to free/libre software games which aren't necessary, but are nice to have.

xSGE extensions are not dependent on any particular SGE implementation. They should work with any implementation that follows the specification.

This extension provides a simple interface for lighting.

CHAPTER

ONE

XSGE_LIGHTING FUNCTIONS

xsge_lighting.**project_light**(*x*, *y*, *sprite*, *image=0*)

Add a light to the current frame. This must be called every frame *xsge_lighting.project_darkness()* is called to maintain the respective light. This function should be called *before* *xsge_lighting.project_darkness()*.

Arguments:

- `x` – The horizontal location of the light relative to the room.
- `y` – The vertical location of the light relative to the room.
- `sprite` – The sprite to use as the light. Black pixels are ignored, and all other colors make the appropriate pixel
- `image` – The frame of the sprite to use, where `0` is the first frame.

xsge_lighting.**clear_lights**()

Remove all lights that have been projected by *xsge_lighting.project_light()*.

xsge_lighting.**project_darkness**(*z=100000*, *ambient_light=None*, *buffer=0*)

This function must be called every frame to maintain darkness.

Arguments:

- `z` – The Z-axis position of the darkness in the room. Anything with a higher Z-axis value will not be affected.
- `ambient_light` – A `sge.gfx.Color` object indicating the color that should be applied as lighting to the entirety of the darkness. Set to `None` for no ambient lighting.
- `buffer` – An extra portion of the room, in addition to what is covered by the room's views, to cover with darkness. This can be used to prevent situations where movement of a view at the wrong time causes part of the view to not be properly covered in darkness. To ensure maximum efficiency, this should be the smallest number possible, i.e. the maximum amount of view movement that can happen in a single frame.

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