

PygameLord 0.0.4 (Ves'nan)

By LordLynx

PygameLord the master module to control Pygame.

1. What is Pygame Lord?:

Perhaps it's easier to say what it isn't.

It isn't a game engine like Unity or Godot, nor is it a binding like Open GL, it is a collection of functions that make game programming much easier, using the python language.

2. Change log:

New stuff:

- More colors
- Motion file
- Surface File
- Added quit function

Bug fix:

- No bug fixes

Other:

- Misc tweaks and organization stuff.

Highlighted Function:

the `display_text` function it parses normal python strings to work with pygame. Allowing you to use the `\n` and `\t` allowing you to not having to worry about formatting. See part 7 for how it works.

3. Requirements:

Python 3.8 or greater

Pygame 2.0

```
pip install pygame==2.0.0.dev6
```

4. History:

I have gathered many examples and tidbits of information that I found quite useful. I wanted an easy way to store them and use them, They required Python and Pygame thus the title. PygameLord is the module.

Release History:

0.0.1 (Voldemort) The first release.

0.0.4

(Ues'nan) and the first large release of the project and the current one! It is stable.

5. Features:

Images:

- A Tileset loader.

- A Many file loader for .png(s) and JPEG(s) or any others

- A re-color module

Sounds:

- A many file loader.

Window:

- Window re-scaling function.

- Constants for windows.

Loading:

- A Customize able many file loader and text parser.

Text:

- A Parser that fixes the problems with pygame's text display enabling multiple lines of text displayed with ease

Motion:

- A rotation function that will point towards coordinates on the window

Colors:

Over 100 colors by me and
<https://www.99colors.net/rgb-colors>

Formatted by my brother William C
Stottlemeyer

Tutorials:

Each Modules is commented to help with the understanding, in the haughty style of dark lords and there is two examples see the entry for further information

6 Examples:

Two examples are included to show off the power of PygameLord. One is a space invaders clone, the other is a rotation demo, showing off a lot of the features and also it has a basic vector moving/shooting project/

They are not turned into tutorials so for proper understanding you must refer back to the modules or this file.

Note there is a bug in aliens. If you find it and fix it, a release will be named after you.

7 List of functions:

Init.py:

`quit():`

A simple quit of pygame.

`exit():`

Instant ending of the program.

`ColorChanger.py:`

`ChangeColor(image, color_to_change, color_change_into)`

`images:` The image you wish to change

`color_to_change:` The color to change in RGB Value

`color_change_into:` The color that `color_to_change` is replaced with

`Loads.py:`

`Parse_Locations(file)`

`file:` Your text file, use a `.txt`

`#` Like in Python will be ignored like so follow this example

`#Comment`

`./File/File`

`./File/Other_File`

`Lord_Loaders(paths,files)`

`paths:` The folders returned in the `Parse_Locations` function

`files:` The `.files` which you wish to use

Modified versions of this are in Sounds and Images

If the opportunity arises copy and past this code into your program and change the files like the Image and Sound loaders

Motion.py:

```
point_towards(current_pos,  
point_pos)
```

current_pos: The pos which the thing to rotate is set

point_pos: The pos to point towards.

Note: the images when put into this ought to have the way you want pointing right.

Font.py:

```
display_text(text, font, surface,  
xpos,ypos, color)
```

text: Text to display

font: The font to display it with

surface: On wich to display thine text

xpos: The location of the top left corner of the text on the x cordanints

ypos The y positon of the top left corenr

color: the color desired to the theme of thine project.

Sounds.py:

`Load_Sounds(paths,files)`

`paths`: Those folders returned in the Parse locations section

`files`: a list of your .mp3 or .ogg the file endings you want to use

Note: you use the ParseLocations in Loads, this is a modified of Lord Loader code.

`Tileset(file, (width, height))`

`Tileset` (a single word), A tilesheet is a group of images stuck together found in the games of long ago, this class will store and split it when needed.

`file`: the file to load and store

`width`: The width of every single tile on the set

`height`: the height of the tiles on the set. Note width and height are in a tuple.

`Get_Tile(self, x, y)`

Thus it returns the tiles to your use.

`x`: X coordinates that starts with 0

`y`: same as x but with the y cords

Load_Images(paths,files)

paths: The list of folders you wish to use

files: the .png or .jpeg or whay else you want to use.

Note: you use the ParseLocations in Loads, this is a modified of Lord Loader code.

Surface.py

resize_window(event)

event: the event set from' for event in pygame.event.get(): ' Or another way if you desire

it returns a tuple for screen size

8 The Cost:

Nothing. This module is completely free. Licensed under MIT, you may use this for any of your projects even commercial. Just please give credit to the package and those who helped in the credits. See license for legal stuff.

Also consider contributing anything you found useful in your development. (see contributing)

Please be polite in your programming. There are younger people working to learn, keep your programming clean for them or warn them before hand.

9 The future:

I hope to maintain the code and add to it. Here is a list of ideas of adding if you want to make one of these or have an idea of your own see contributing.

- Full tutorials

- A function for pygame's text events.

- Midi note variables and recording

- To go with the rotation function a vector moving function,

- 3d, Animating 3d models, lighting sound. It's ambitious but I think it'd be useful.

The functions don't have to require pygame, but try to keep with the game type theme, but try to if you make things with graphics to use pygame not pygamelet or any of the other modules. Open GL's okay.

10 Contributing:

If you find a bug, have suggestions or have something you want to add, find a typo or want to write a tutorial (insert contact info)

All language for tutorials must be squeaky clean or it will not be accepted. Thank you.

11 Questions and answers:

Is this stable?

I hope so, I have yet to run an error, if you find one, please send your code, the error message and your computer make and I'll investigate it.

Is what is this licensed under?

The MIT license

What makes this module useful?

It's basically a bunch of functions, some not very long even, in a package to help with pygame or python in general.

Why did I not see the first release (Voldemort)?

It was still under development and the next update came not far later.

Who is this Vez'nan character?

The dark wizard from the Kingdom Rush Game series by Ironhide games.

I see, your naming the releases off dark lords right?

Yes, those and whoever finds the space invaders game bug or any other, or contributes greatly to this project, See appendices a for list of dark lords that the game will be named after.

Were can I go for help on programming?

See appendix B for information on links for help on programming and other cools stuff

12 Credits:

This was programmed by LordLynx, The colors are from <https://www.99colors.net/rgb-colors> formatted by My brother

The Assistance song is from my friend.

The art and sound effects are by LordLynx

Thanks to Pygame and Python.

This manual was written by LordLynx

Appendix A:

Dark Lord Names

Morgath

MeIkor

Morgoth

Sauron

Gannon

Arwan

Appendex B:

Links

For help with programming learning:

<https://www.inventwithpython.com/>

<https://www.python.org/>

<https://www.pygame.org/>

Tools I use:

<https://www.gimp.org/>

<https://www.foxshub.com/Audacity.html>

<https://thonny.org/>

Game resources:

<https://opengameart.org/>

(Make sure you completely investigate what you are downloading on that site, most are incomplete)

This font is an old IBM font. See in the resources folder for license.