

# Pygame

**Pygame** is a cross-platform set of Python modules designed for writing video games. It includes computer graphics and sound libraries designed to be used with the Python programming language. It is built over the Simple DirectMedia Layer (SDL) library, with the intention of allowing real-time computer game development without the low-level mechanics of the C programming language and its derivatives. This is based on the assumption that the most expensive functions inside games (mainly the graphics part) can be abstracted from the game logic, making it possible to use a high-level programming language, such as Python, to structure the game.

Pygame was built to replace PySDL after its development stalled.<sup>[4]</sup> Pygame was originally written by Pete Shinnars and is released under the open source free software GNU Lesser General Public License. It has been a community project since 2004 or 2005. There are many tutorials<sup>[5][6][7][8][9]</sup> and there are regular competitions to write little games using Python (and usually but not necessarily, Pygame).<sup>[10]</sup>

## 1 Pygame on Android

Pygame applications can run on the Android phones and tablets with the use of Pygame Subset for Android (pgs4a).<sup>[11]</sup> Sound, vibration, keyboard, accelerometer are supported on Android.<sup>[12]</sup> There is no way to run Pygame applications on iOS. Another major limitation of pgs4a is the lack of multi-touch support, which prevents the use of things like pinch to zoom and two-finger rotation. An alternative to running Pygame Subset for Android is to use Kivy,<sup>[13]</sup> which includes multi-touch and iOS support.

## 2 Notable games using Pygame

- *Slingshot*
- *Frets on Fire*
- *Dangerous High School Girls in Trouble*<sup>[14]</sup>
- *Save the Date*,<sup>[15]</sup> IndieCade 2013 Finalist.

## 3 See also

- Pyglet

- PySDL2 is a wrapper around the SDL2 library and is similar to the discontinued PySDL project.<sup>[16]</sup>

## 4 References

- [1] Shinnars, Pete. "Python Pygame Introduction - History".
- [2] "Downloads - Pygame - Python game development".
- [3] "About Pygame".
- [4] "pySDL sourceforge page".
- [5] Shinnars, Pete. "Line by line tutorial — Tutorial for beginners".
- [6] "Creating Games with Python - A tutorial explaining how to use Pygame for game development and improved execution".
- [7] "PyGame Tutorials - tutorials with OOP approach".
- [8] "pyGame Basics". ShowMeDo.com.
- [9] "Arinoid tutorials video tutorials at ShowMeDo".
- [10] "Pyweek homepage — regular contest (Pyweek) to write a game during one week using Python (most entries use pygame)".
- [11] <http://pygame.renpy.org/>
- [12] <http://pygame.renpy.org/api.html>
- [13] <http://kivy.org/>
- [14] "Dangerous High School Girls in Trouble!". Pygame.org. Retrieved 8 July 2011.
- [15] "Save the Date". Paperdino.com. Retrieved 14 October 2014.
- [16] [http://pysdl2.readthedocs.org/en/rel\\_0\\_9\\_3/#](http://pysdl2.readthedocs.org/en/rel_0_9_3/#)

## 5 Literature

- *Making Games With Python & Pygame*—A CC-by-nc-sa-licensed book that introduces programming and game development with Python and Pygame.
- *Game Programming the L Line*—A book that introduces programming and game development with Python and Pygame
- *Introduction to Computer Science Using Python and Pygame*—An e-book that introduces programming by using Python and Pygame.

## 6 External links

- [Pygame newsgroup \(web access\)](#) — the “official” Pygame newsgroup, requires registration
- [Pygame Subset for Android \(PGS4A\)](#)
- [pyOpenGL](#) - Python OpenGL Bindings

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