
pyscroll Documentation

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bitcraft

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for Python 2.7 & 3.3+ and Pygame 1.9

A simple, fast module for adding scrolling maps to your new or existing game. Includes support to load and render maps in TMX format from the Tiled map editor.

CHAPTER 1

Introduction

pyscroll is a generic module for making a fast scrolling image with PyGame. It uses a lot of magic to get reasonable framerates out of PyGame. It only exists to draw a map. It doesn't load images or data, so you can use your own custom data structures, tile storage, ect.

The included class, `BufferedRenderer`, gives great framerates, supports layered rendering and can draw itself.

pyscroll is compatible with pytmx (<https://github.com/bitcraft/pytmx>), so you can use your Tiled maps. It also has out-of-the-box support for PyGame Sprites.

CHAPTER 2

Features

- Fast and small footprint
- Layered drawing for tiles
- Drawing and scrolling shapes
- Dirty screen updates
- Pygame Sprite compatible group included

CHAPTER 3

Shape Drawing

pyscroll has a new experimental feature for drawing shapes to the map and scrolling them as part of the map. This can be useful for game that need to draw arbitrary shaped objects.

The feature requires pytmx, and that the map files be created in the Tiled Map Editor. The advantage of using pyscroll for shape drawing is that pyscroll can draw the shapes much more efficiently than simply drawing the shapes each frame.

This feature is experimental at best. Your comments and support is appreciated!

- Currently, shapes will not draw over sprites.

CHAPTER 4

New Game Tutorial

This is a quick guide on building a new game with pycroll and pygame. It uses the PycrollGroup for efficient rendering. You are free to use any other pygame techniques and functions.

Open quest.py in the tutorial folder for a gentle introduction to pycroll and the PycrollGroup for PyGame. There are plenty of comments to get you started.

The Quest demo shows how you can use a pycroll group for drawing, how to load maps with PyTMX, and how pycroll can quickly render layers. Moving under some tiles will cause the Hero to be covered.

It will also render a Shape on the map with experimental shape drawing.

CHAPTER 5

Example Use with PyTMX

pyscroll and pytmx can load your maps from Tiled and use you PyGame Sprites.

```
# Load TMX data
tmx_data = pytmx.load_pygame("desert.tmx")

# Make data source for the map
map_data = pyscroll.TiledMapData(tmx_data)

# Make the scrolling layer
screen_size = (400, 400)
map_layer = pyscroll.BufferedRenderer(map_data, screen_size)

# make the PyGame SpriteGroup with a scrolling map
group = pyscroll.PyscrollGroup(map_layer=map_layer)

# Add sprites to the group
group.add(sprite)

# Center the layer and sprites on a sprite
group.center(sprite.rect.center)

# Draw the layer
group.draw(screen)
```


CHAPTER 6

Adapting Existing Games / Map Data

pyscroll can be used with existing map data, but you will have to create a class to interact with pyscroll or adapt your data handler.

CHAPTER 7

Indices and tables

- `genindex`
- `modindex`
- `search`