



Here is a quick cheat sheet for using pygame, with side by side comparison to XEngine.

For a complete reference, use the official reference doc on their website:

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

To use pygame, first thing you need to do is to import the pygame module:

```
import pygame
# do pygame stuff
```

Description	Pygame	XEngine
Engine start up/initialization	pygame.init()	X::Start()
Engine shutdown	pygame.quit()	X::Stop()
Create a window and setting the resolution	win = pygame.display.set_mode((width, height))	Window is automatically created, resolution is set via xconfig.json
Setting window title bar name	pygame.display.set_caption(<your title string>)	Title is set in xconfig.json
Render loop and frame rate	clock = pygame.time.Clock() while True: win.fill(<color>) # draw stuff pygame.display.update() clock.tick(<int for desired fps>)	Can draw anything anywhere within the GameLoop function. Frame rate is locked to monitor refresh rate.
Drawing functions	pygame.draw.rect(...) pygame.draw.circle(...) pygame.draw.line(...) ...	X::DrawScreenRect(...) X::DrawScreenCircle(...) X::DrawScreenLine(...) ...
Loading an image	img = pygame.image.load(<path>)	X::LoadTexture(<path>)
Drawing an image	win.blit(img, (x, y))	X::DrawSprite(...)
Loading a font	font = pygame.font.SysFont(<typeface>, <pointsize>)	A default font is loaded by the engine
Drawing text	text = font.render(...) win.blit(text, (x, y))	X::DrawScreenText(...)



Checking input	Two methods:  <pre>for evt in pygame.event.get():     if evt.type == pygame.QUIT:         quit = True     if evt.type == pygame.KEYDOWN:         if evt.key == pygame.K_ESCAPE:             quit = True</pre> <pre>keys = pygame.key.get_pressed() if keys[pygame.K_SPACE]     shoot = True</pre>	X::IsKeyDown(...) X::IsKeyPressed(...)
Loading a sound	<pre>sound = pygame.mixer.Sound(&lt;path&gt;)</pre>	X::LoadSound(<path>)
Playing a sound	<pre>sound.play()</pre>	X::PlaySoundOneShot(...)
Loading music	<pre>pygame.mixer.music.load(&lt;path&gt;)</pre>	X::LoadSound(<path>)
Music playback	<pre>pygame.mixer.music.play(-1) pygame.mixer.music.stop() pygame.mixer.music.pause() pygame.mixer.music.unpause()</pre>	X::PlaySoundLoop(...) X::StopSoundLoop(...)