Pygame Cheat Sheet

Initialization & Setup

pygame.init() → initialize all imported Pygame modules
pygame.quit() → uninitialize everything and close the game
pygame.display.set_mode((width, height)) → create a window
pygame.display.set_caption('Title') → set window title
pygame.display.update() → update the full display
pygame.display.flip() → update the display (alternative to .update())

Drawing Shapes

pygame.draw.rect(surface, color, rect, width=0) → rectangle
pygame.draw.circle(surface, color, center, radius, width=0) → circle
pygame.draw.line(surface, color, start_pos, end_pos, width=1) → line
pygame.draw.ellipse(surface, color, rect, width=0) → ellipse
pygame.draw.polygon(surface, color, pointlist, width=0) → polygon
pygame.draw.arc(surface, color, rect, start_angle, stop_angle, width=1) → arc

Events & Input

pygame.event.get() → get events from queue
pygame.key.get_pressed() → check which keys are currently held
pygame.mouse.get_pos() → current mouse position (x, y)
pygame.mouse.get_pressed() → mouse button states (left, middle, right)
pygame.event.type == pygame.QUIT → check if window closed
pygame.event.type == pygame.KEYDOWN → key pressed
pygame.event.type == pygame.KEYUP → key released

Timing & Game Loop

pygame.time.Clock() → create a clock object to manage FPS
clock.tick(FPS) → limit frame rate (e.g., 60 FPS)
pygame.time.get_ticks() → milliseconds since Pygame started
pygame.time.delay(ms) → pause for ms milliseconds

Surfaces & Images

pygame.image.load('file.png') → load an image
pygame.transform.scale(image, (w,h)) → resize image
pygame.transform.rotate(image, angle) → rotate image
pygame.Surface((w,h)) → create new blank surface
surface.blit(image, (x,y)) → draw one surface onto another

Fonts & Text

pygame.font.init() → initialize font module
pygame.font.SysFont(name, size, bold=False, italic=False) → system font
pygame.font.Font('file.ttf', size) → custom font
font.render(text, antialias, color, background=None) → create text surface
win.blit(text_surface, (x,y)) → draw text on screen

Rectangles (Collisions & Positioning)

rect = pygame.Rect(x, y, w, h) → define rectangle
rect.colliderect(other_rect) → check rectangle collision
rect.collidepoint(x, y) → check if point is inside rectangle
rect.move(dx, dy) → return moved rectangle
rect.inflate(dx, dy) → return bigger/smaller rectangle

Sound & Music

pygame.mixer.init() → initialize sound system
pygame.mixer.Sound('file.wav') → load sound
sound.play() → play sound
pygame.mixer.music.load('file.mp3') → load music
pygame.mixer.music.play(-1) → play music (-1 = loop forever)
pygame.mixer.music.stop() → stop music

Sprites (Advanced OOP Stuff)

pygame.sprite.Sprite → base class for game objects
pygame.sprite.Group() → group multiple sprites
group.add(sprite) / group.remove(sprite) → manage sprites
sprite.update() → update sprite logic
sprite.draw(surface) → draw sprite