

Version 1.0 - 17/02/24

Dojo Boy Class

Import

from dojoboy_v1.dojoboy import DojoBoy

Class instance & init

djb = DojoBoy([show_intro=True][, width=xxx, height=yyy][, framerate=30][, refreshBeep=5]) width and height define screen resolution.

Constants

Color:

djb.display.BLACK_H or BLACK: black
djb.display.BLACK_L: dark grey
djb.display.WHITE_H or WHITE: bright white
djb.display.WHITE_L: bright grey
djb.display.BLUE_H: bright navy blue
djb.display.BLUE_L: dark navy blue
djb.display.CYAN_H: bright sky blue
djb.display.CYAN_L: dark sky blue
djb.display.MAGENTA_H: bright purple
djb.display.MAGENTA_L: dark purple
djb.display.RED_H: bright red

djb.display.RED_L: dark red
djb.display.YELLOW_H: bright yellow
djb.display.YELLOW_L: dark yellow
djb.display.GREEN_H: bright green
djb.display.GREEN_L: dark green
djb.display.color_pal[c]: c color index 0..15

Display:

djb.display.width : width of display
djb.display.height : height of display

Sound:

djb.sound.tone: tone C1, C#1,...,D8,D#8

Display

djb.display.fill(color): fill display with color

Pixel and Lines (native methods):

djb.display.pixel(x,y[,color]): draw pixel at x, y using the given color djb.display.line(x1,y1,x2,y2,color): draw line from x1,y1 to x2,y2 using the given color djb.display.vline(x,y,h,color): draw vertical line at x,y with h lenght using the given color djb.display.hline(x,y,w,color): draw horizontal line at x,y with w length using the given color

Shapes (native methods):

djb.display.rect(x,y,w,h,color[,fill]): draw rectangle at x,y with size w,h using the given color. Pass 'True' as last parameter to fill rectangle.

djb.display.ellipse(x,y,rx,ry,color[,fill]): draw ellipse at x,y with rx as vertical radius and ry as horizontal radius (rx = ry for circle) using the given color. Pass 'True' as last parameter to fill ellipse.

djb.display.poly(x,y,coords,color[,fill]): draw polygon at x,y with array of relative coordonates to x,y (ex:array('h',[x0,y0,x1,y1,...xn,yn]) using the given color. Pass 'True' as last parameter to fill polygon.

djb.display.circle(x,y,rad,color[,fill]): draw circle at x,y with rad as radius using the given color. Pass 'True' as last parameter to fill circle.

 $\frac{djb.display.triangle}{(x0,y0,x1,y1,x2,y2,color[,fill])}$: draw triangle around three points at x0,y0,x1,y1,x2,y2 using the given color. Pass 'True' as last parameter to fill triangle.

Text:

djb.display.text(string, x, y, color[, scale=1]): draw text at x,y using the given color. Set scale to 2 or 4 to scale up text.

djb.display.center_text(string, color[, scale=1]): draw text at center of screen using the given color. Set scale to 2 or 4 to scale up text.

djb.display.center_text_XY(string[,x],[y,] color[, scale=1]): draw text at vertical or horizontal center of screen using the given color. Set scale to 2 or 4 to scale up text.

Refresh display:

djb.display.show(): show display.

djb.display.show_and_wait(): show and refresh display at defined framerate (default at 30 img/s).



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Joystick and Buttons Control

Button constants:

djb.btn Up : Up button djb.btn Down : Down button djb.btn_Left : Left button djb.btn_Right : Right button djb.btn A : A button djb.btn B : B button djb.btn X : X button djb.btn Y : Y button djb.btn_Home : Home button djb.btn_Start : Start button djb.btn Volume : Volume button djb.btn Menu : Menu button

Methods:

djb.scan jst btn(): poll joystick and buttons status djb.pressed(button): return 'True' if button pressed

djb.just_pressed(button) : return one time 'True' if button pressed djb.just released(button): return one time 'True' if button released

Sprite

djb.display.add_sprite(buffer, w, h): add a sprite in sprite list. Buffer must be in RGB565 format. w and h are width and height of sprite in pixel. Return the index of sprite.

djb.display.add_sprite_from_file(filename, w, h[,format]): add a sprite in sprite list from file in RGB565 format. w and h are width and height of sprite in pixel. Return the index of sprite.

djb.display.add_rect_sprite(w, h, color): add a rectangular sprite with coloc in sprite list. w and h are width and height of rectangular sprite in pixel. Return the index of sprite.

djb.display.sprite(n, x, y[, transparent color]): display sprint n at x, y. transparent color if defined hide this color in sprite.

djb.display.sprite_width(n): return width of sprite n

djb.display.prite_height(n):return height of sprite n

Sound

djb.play freq(freq, duration): play non blocking sound at freq Hz for duration

djb.play_tone(tone, duration]): play non blocking tone at tone note for duration

djb.bequiet(channel): silence channel 0 (sound—tone) or 1 (song)

djb.mute(status): disable all sound with True

djb.start_song(songBuf): play non blocking song

djb.stop_song(): stop playing song

