



Version 1.0 - 13/01/24

# 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.  
`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:

<code>djb.btn_Up</code>	: Up button	<code>djb.btn_Down</code>	: Down button
<code>djb.btn_Left</code>	: Left button	<code>djb.btn_Right</code>	: Right button
<code>djb.btn_A</code>	: A button	<code>djb.btn_B</code>	: B button
<code>djb.btn_X</code>	: X button	<code>djb.btn_Y</code>	: Y button
<code>djb.btn_Home</code>	: Home button	<code>djb.btn_Start</code>	: Start button
<code>djb.btn_Volume</code>	: Volume button	<code>djb.btn_Menu</code>	: 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 color 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 sprite 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.sprite_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

## Views

