Class Interfaces

@interface Shape : NSObject

@property (assign) NSPoint center;

@property (strong) NSColor* color;

@end

@interface Rectangle : Shape

@property (assign) NSSize size;

@end

@interface Circle : Shape

@property (assign) CGFloat radius;

@end

Class Implementation

@implementation Shape

@synthesize centre;

@synthesize color;

- (void)draw {

[color set];

}

@end

@implementation Rectangle

@synthesize size;

- (void)draw {

[super draw];

[NSBezierPath fillRect:NSMakeRect(self.centre.x - size.width / 2, self.centre.y - size.height / 2, size.width, size.height)];

}

@end

@implementation Circle

@synthesize radius;

- (void)draw {

[super draw];

[[NSBezierPath bezierPathWithOvalInRect:NSMakeRect(self.centre.x - radius, self.centre.y - radius, radius*2, radius*2)] fill];

Class Implementation (cont)

}

@end

Class Use

- (void)drawRect:(NSRect)rect {

rect = [self bounds];

[[NSColor cyanColor] set];

[NSBezierPath fillRect:rect];

Rectangle* rectangle = [[Rectangle alloc] init];

rectangle.size = NSMakeSize(300, 200);

rectangle.centre = NSMakePoint(NSMidX(rect), NSMidY(rect));

rectangle.color = [NSColor whiteColor];

[rectangle draw];

Circle* circle = [[Circle alloc] init];

circle.radius = 60;

circle.centre = rectangle.centre;

circle.color = [NSColor redColor];

[circle draw];

}

Result

http://chocolatapp.com/snaps/japanflag.png