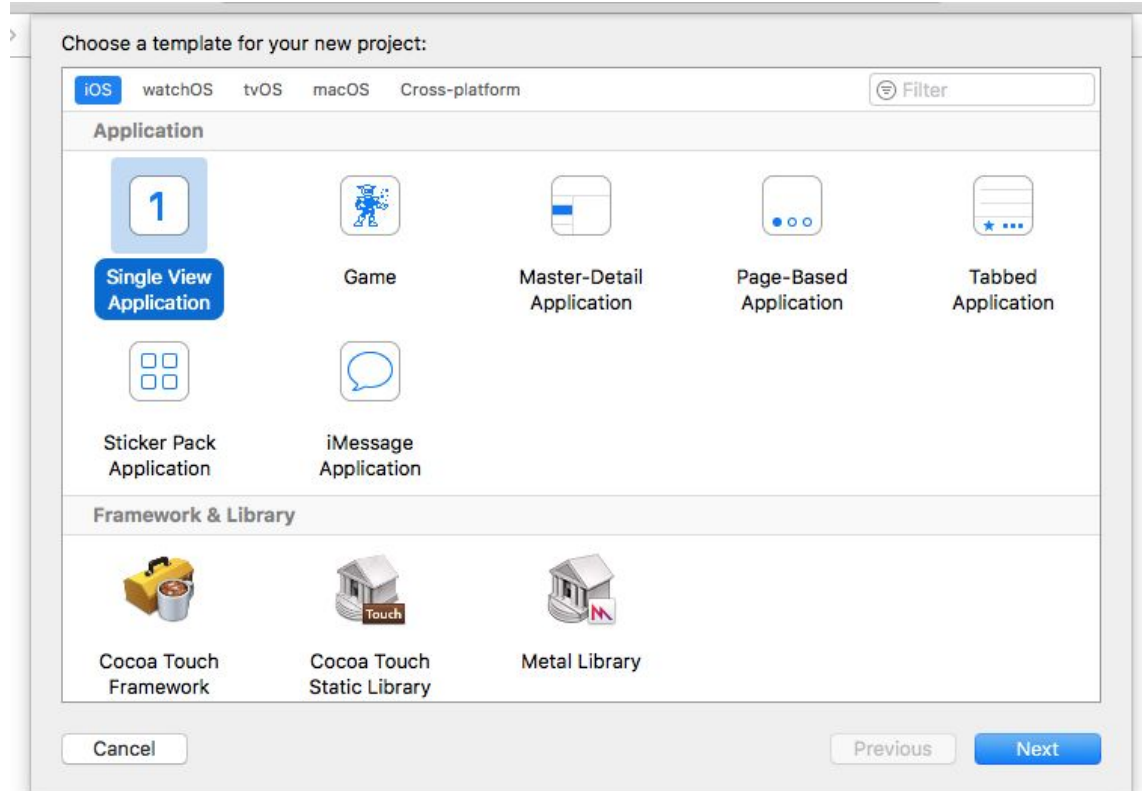


iOS Praktikum Übung 6a

Neues Projekt anlegen (1)



Neues Projekt anlegen (2)

Choose options for your new project:


Product Name:


Team:

Organization Name:

Organization Identifier:

Bundle Identifier:

Language: 

Devices: 

☐ Use Core Data

☐ Include Unit Tests

☐ Include UI Tests

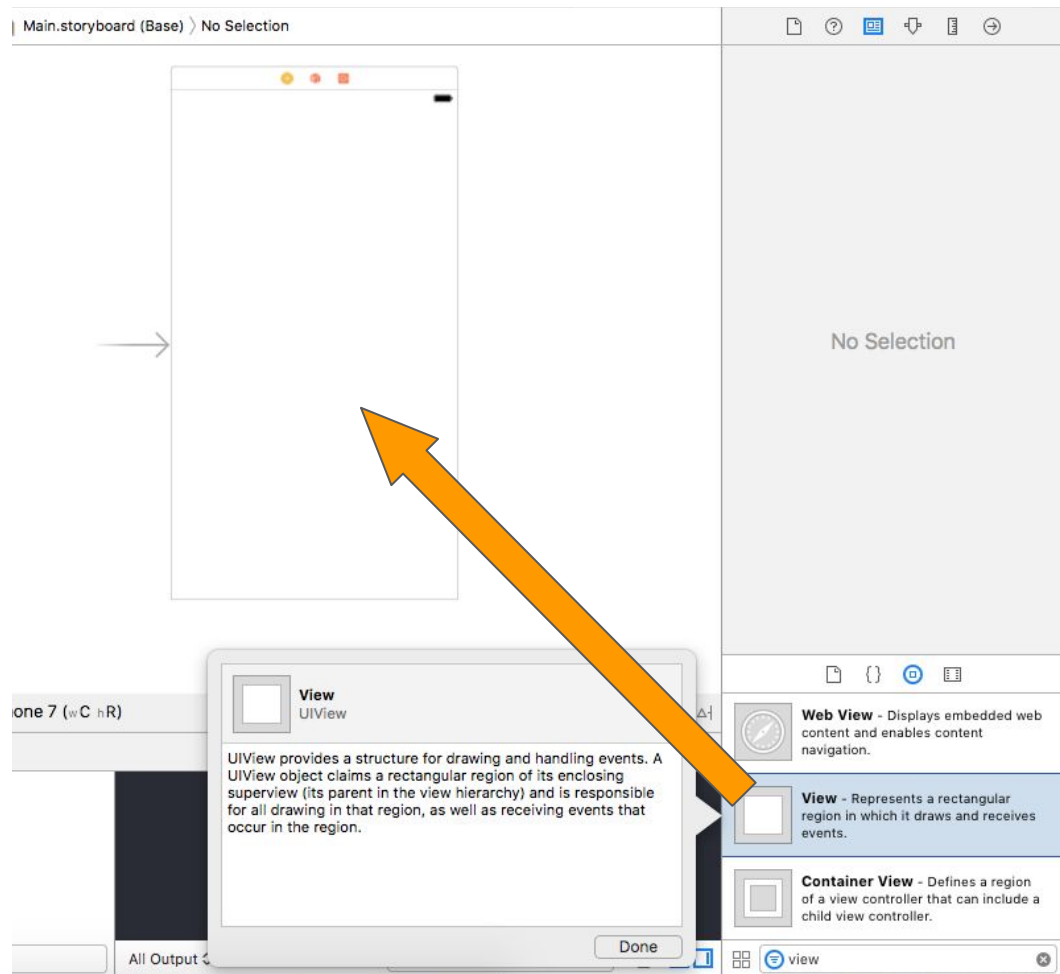
ShadowView.h

```
#ifndef ShadowView_h
#define ShadowView_h
#import <Foundation/Foundation.h>
#import <UIKit/UIKit.h>

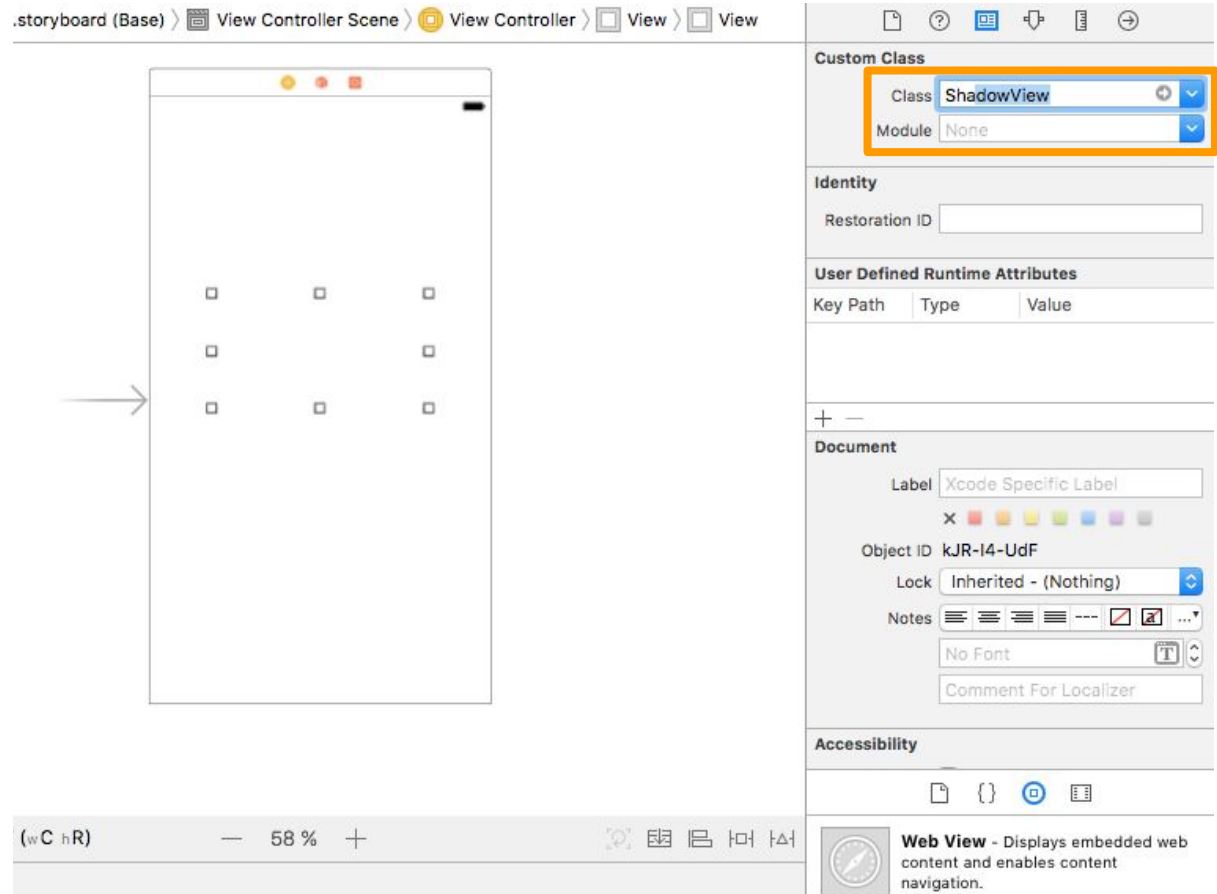
@interface ShadowView : UIView
-(void) drawRect:(CGRect)rect;
-(void) drawRandomRect:(BOOL)shadow;
-(int) getRandomFrom:(int)lower to:(int)upper;
-(float) getRandomFloatFrom:(float)lower to:(float)upper;
@end

#endif /* ShadowView_h */
```

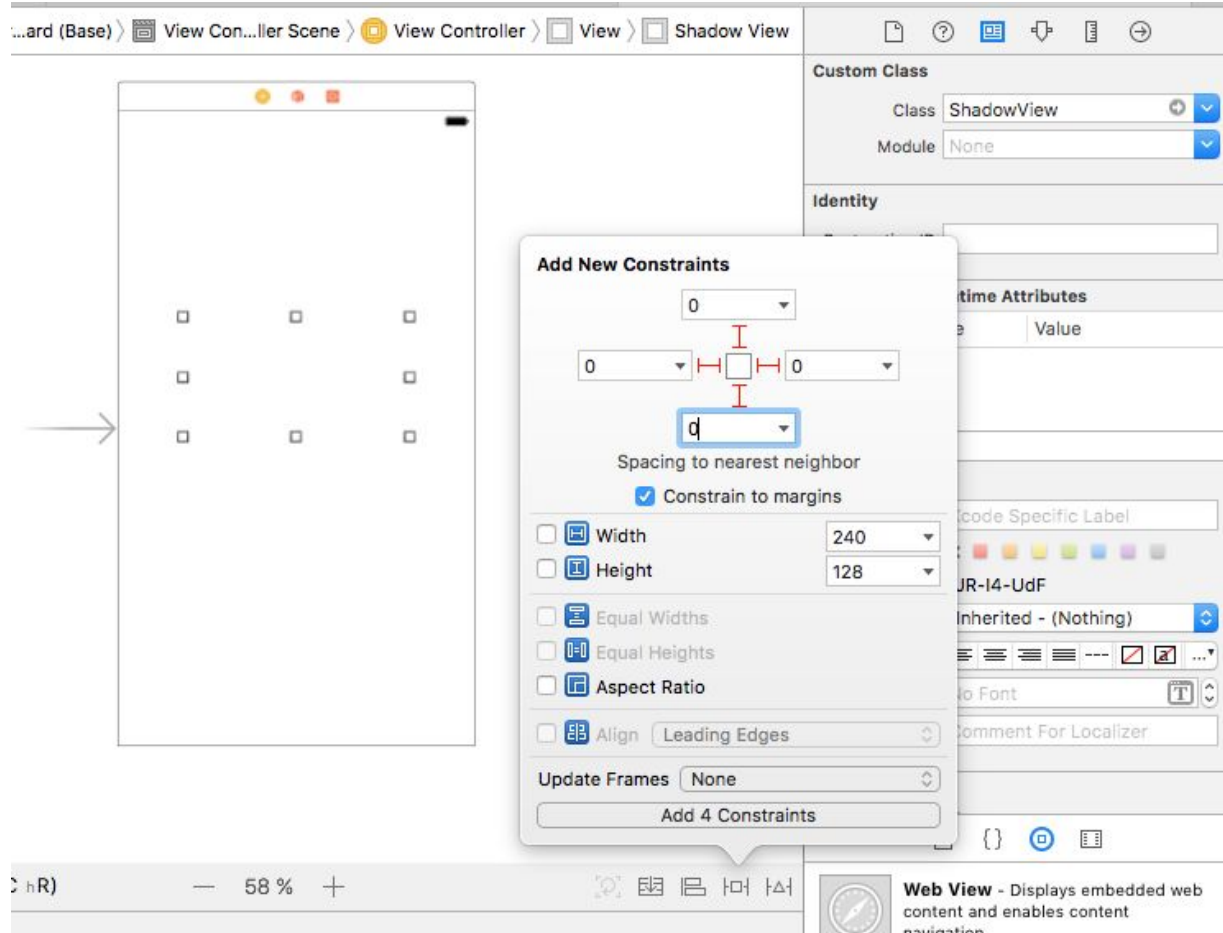
Dem
ViewController
eine neue View
hinzufügen



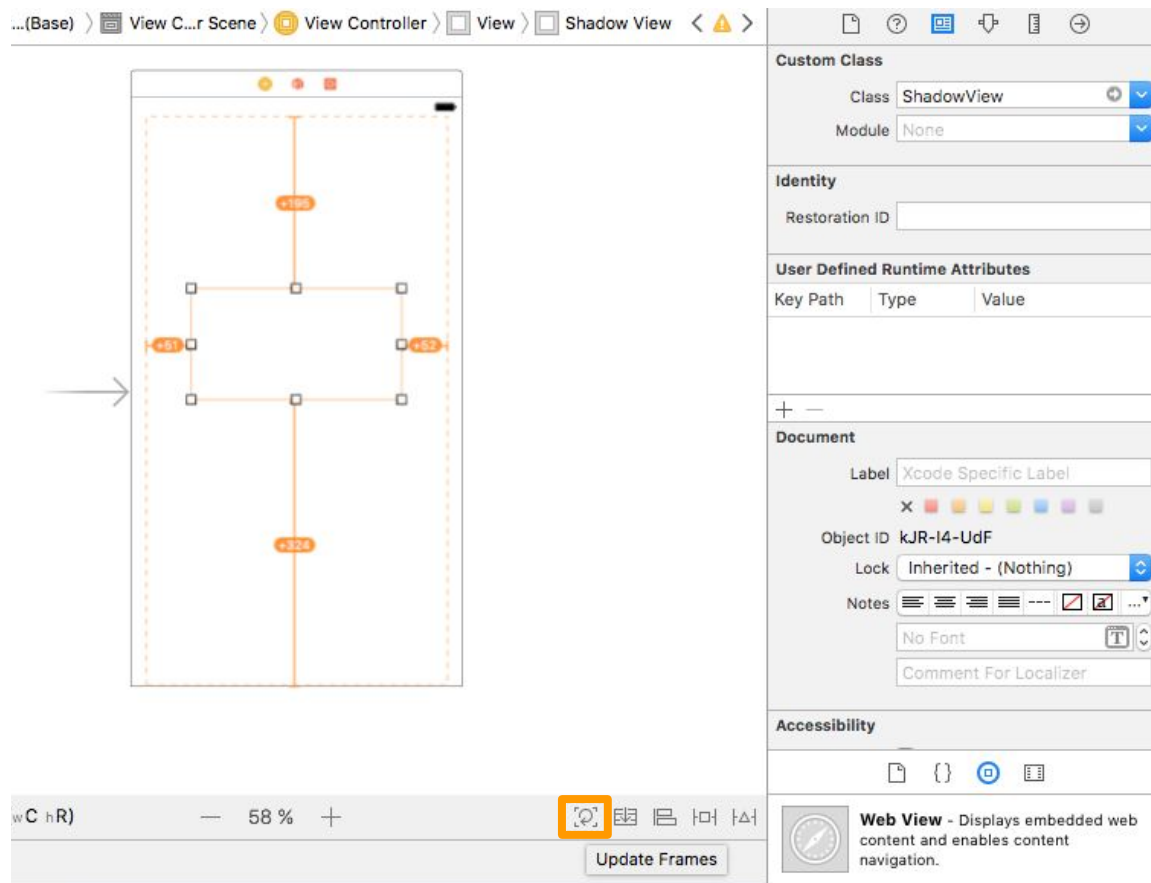
Die neu
angelegte
ShadowView
zuweisen



Die View
ausrichten



Update Frames



ShadowView.m

```
#import <UIKit/UIGraphics.h>
```

```
#include <stdlib.h>
```

```
#include "ShadowView.h"
```

```
@implementation ShadowView
```

```
-(void) drawRect:(CGRect)rect { /*...*/ }
```

```
-(void) drawRandomRect:(BOOL)shadow { /*...*/ }
```

```
-(int) getRandomFrom:(int)lower to:(int)upper { /*...*/ }
```

```
-(float) getRandomFloatFrom:(float)lower to:(float)upper { /*...*/ }
```

```
@end
```

Random

```
#include <stdlib.h>
```

```
-(int) getRandomFrom:(int)lower to:(int)upper {  
    return lower + arc4random_uniform(upper - lower);  
}
```

```
-(float) getRandomFloatFrom:(float)lower to:(float)upper {  
    return lower + ((arc4random() % RAND_MAX) / (RAND_MAX * 1.0)) * (upper - lower);  
}
```

drawRect

```
-(void) drawRect:(CGRect)rect {  
    BOOL shadow = true;  
    int iterations = [self getRandomFrom:1 to:50];  
    NSLog(@"Drawing %d rectangles", iterations);  
    for (int i = 0; i < iterations; ++i) {  
        [self drawRandomRect:shadow];  
        shadow = !shadow;  
    }  
}
```

drawRandomRect (1)

```
-(void) drawRandomRect:(BOOL)shadow {  
    CGContextRef context = UIGraphicsGetCurrentContext();  
    CGContextSaveGState(context);  
  
    // generate rectangle  
    int width = [self getRandomFrom:10 to:100];  
    int height = [self getRandomFrom:10 to:100];  
    int screenHeight = (int) self.frame.size.height;  
    int screenWidth = (int) self.frame.size.width;  
    int x = [self getRandomFrom:0 to:screenWidth - width];  
    int y = [self getRandomFrom:0 to:screenHeight - height];  
    CGRect rectangle = CGRectMake(x, y, width, height);  
  
    // nächste Folie...
```

drawRandomRect (2)

```
// Fortsetzung drawRandomRect  
// set color  
float red = [self getRandomFloatFrom:0 to:1];  
float green = [self getRandomFloatFrom:0 to:1];  
float blue = [self getRandomFloatFrom:0 to:1];  
CGContextSetRGBFillColor(context, red, green, blue, 1.0);  
CGContextSetRGBStrokeColor(context, red, green, blue, 1.0);  
  
// set shadow  
if (shadow) {  
    CGContextSetShadow(context, CGSizeMake(5, 5), 1.0);  
}  
  
// draw rectangle  
CGContextFillRect(context, rectangle);  
CGContextRestoreGState(context);  
}
```

