

# Praktikum Entwicklung von Mediensystemen mit iOS

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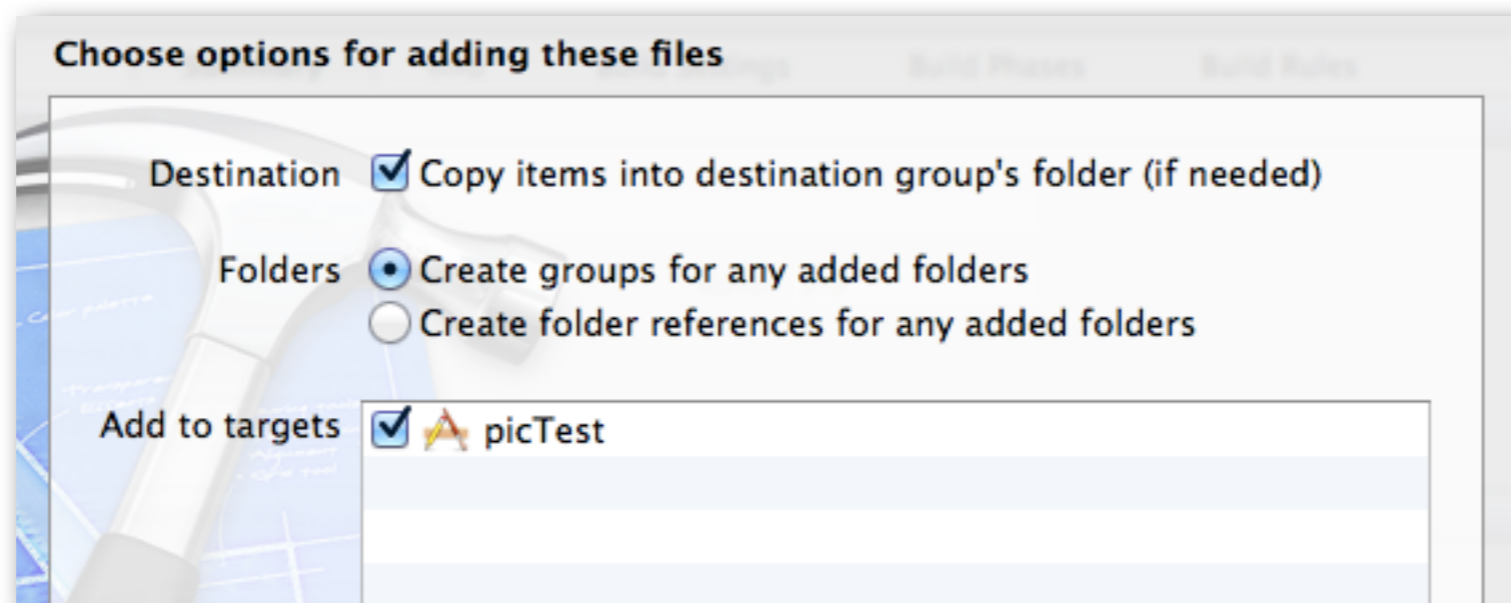
# Today

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- Assignment 2
- More iOS
- Tips & Tricks
- Your Favorite UI Elements
- Assignment 3

# Assignment 2

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Make sure to copy your image files to the project

# Text Input

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- UITextField
- Requires UITextFieldDelegate
- Process text input:

```
// dismiss keyboard
-(BOOL)textFieldShouldReturn:(UITextField *)textField {
    // calls textFieldShouldEnd where you can check
    // for invalid input
    [textField resignFirstResponder];
    return YES;
}

// get text input
-(void)textFieldDidEndEditing:(UITextField *)textField {
    NSString* textInput = textField.text;
}
```



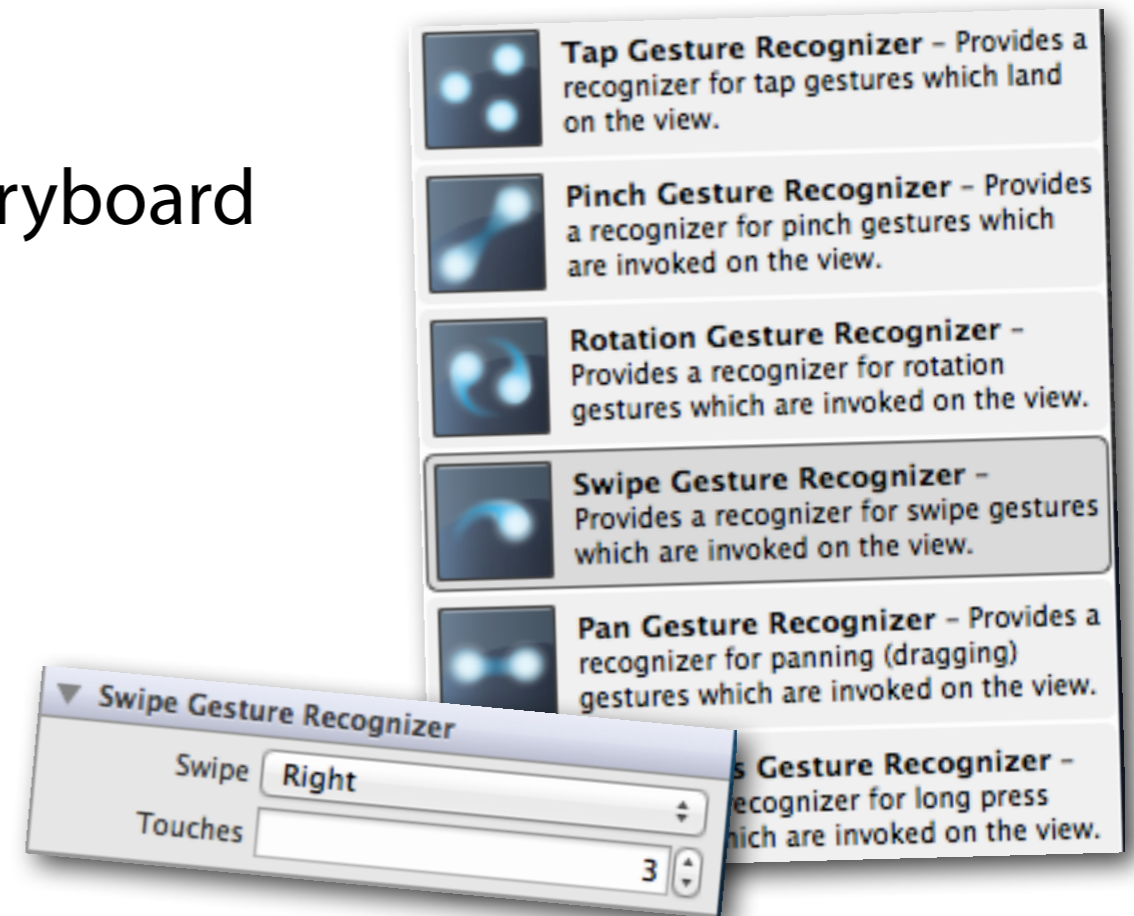
# Touch Input

- Use gesture recognizers
  - Init in View Controller or add in Storyboard
  - Create IBAction:

```
- (IBAction)swipeRecognized:(id)sender {  
    // handle gesture  
}
```

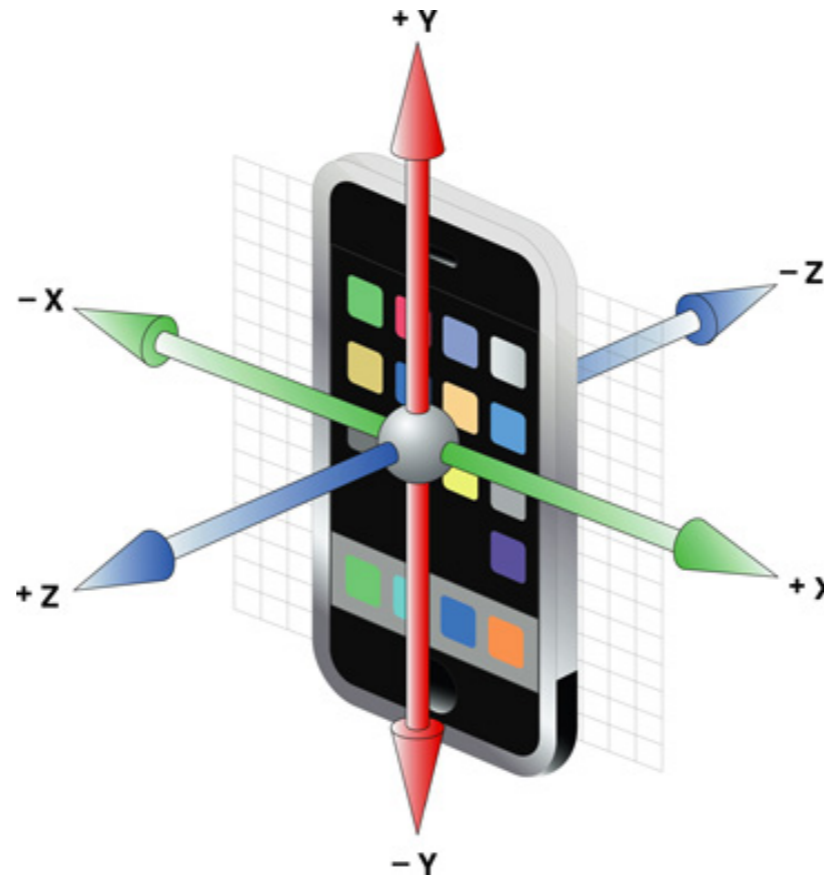
- Use touches methods, e.g.:

```
-(void)touchesBegan:(NSSet *)touches withEvent:(UIEvent *)event {  
    UITouch *touch = [touches anyObject];  
    CGPoint p = [touch locationInView:self.view];  
    // process p.x and p.y  
}
```



# Accelerometer

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- $g$ -force values for  $x, y, z$  ( $1g$  = normal acceleration caused by gravity)
- Access accelerometer by singleton object  

```
[[UIAccelerometer sharedAccelerometer] setDelegate:self];
```

# Accelerometer

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- Get sensor data:

```
- (void)accelerometer:(UIAccelerometer *)accelerometer didAccelerate:  
(UIAcceleration *)acceleration {  
    NSLog(@"x acceleration is %d", acceleration.x);  
}
```

- Detect device orientation: Low-pass filter removes instant motion.



- Detect instant motion (e.g. shaking): High-pass filter removes gravity component.



# Location

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- CLLocationManager
- Configuration:

```
#import <CoreLocation/CoreLocation.h>
```

```
CLLocationManager *locationManager = [[CLLocationManager alloc] init];  
[locationManager setDesiredAccuracy:kCLLocationAccuracyBest];  
[locationManager startUpdatingLocation];  
[locationManager setDelegate:self];
```

- Get location data:

```
- (void)locationManager:(CLLocationManager *)manager didUpdateToLocation:(CLLocation *)newLocation fromLocation:(CLLocation *)oldLocation {  
    // process newLocation.coordinate.latitude  
    // process newLocation.coordinate.longitude  
}  
  
- (void)locationManager:(CLLocationManager *)manager didExitRegion:(CLRegion *)region  
- (void)locationManager:(CLLocationManager *)manager didEnterRegion:(CLRegion *)region
```



# Tips & Tricks

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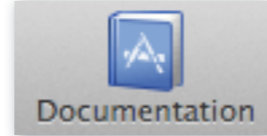
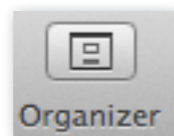
Google Doc

# Top 3 Resources

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1

 iOS Developer Library



or <https://developer.apple.com/library/ios>

2

**RAYWENDERLICH**

Tutorials for iPhone / iOS Developers and Gamers

<http://www.raywenderlich.com/tutorials>

3

 stackoverflow



stackoverflow ios app delegate

