

Intermediate

Core Graphics

Part 2: Transforms

What is a transform?

- ⚙ A matrix
- ⚙ holds position, scale and rotation
- ⚙ UIView **`CGAffineTransform transform`** property
- ⚙ Context **`CGContextGetCTM`** function
- ⚙ Matrices good for mathematical positioning

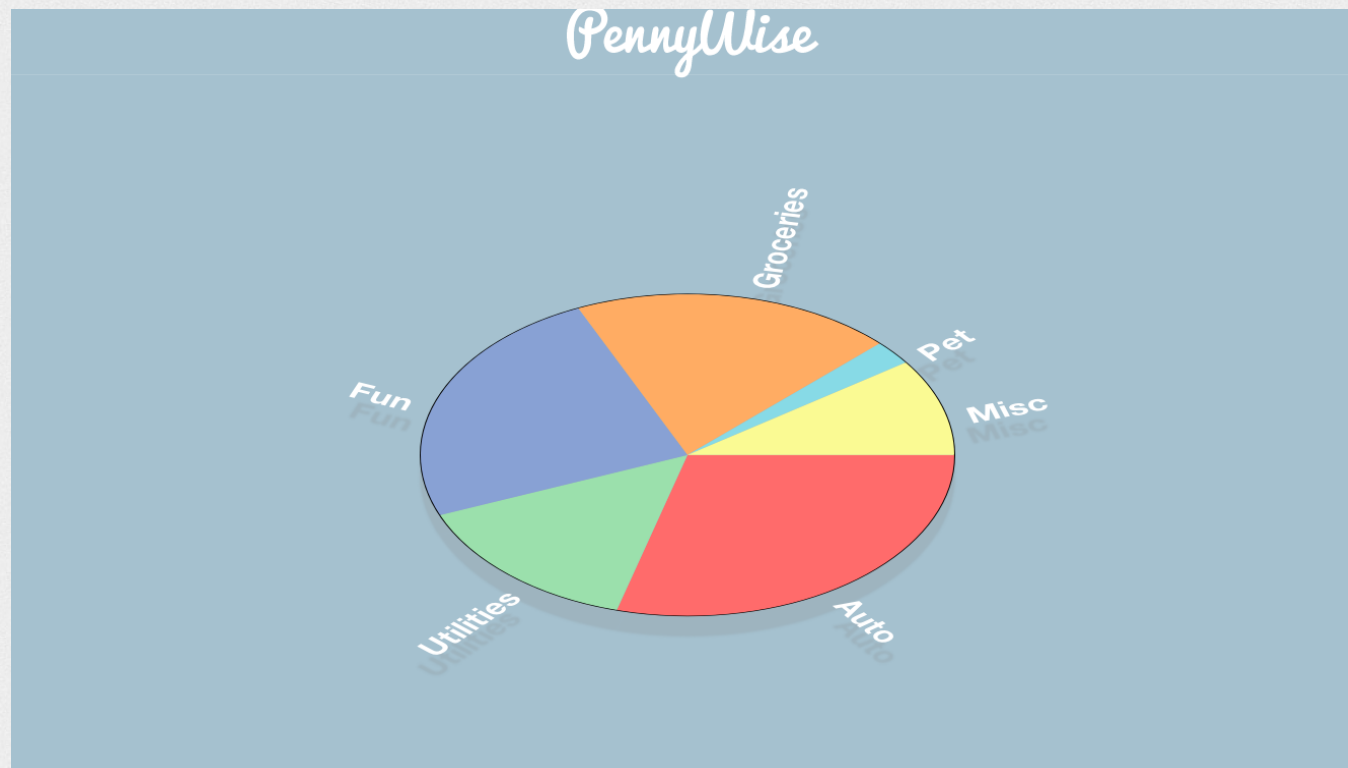


Path Transform

```
private func scalePath(path:UIBezierPath, size:CGSize) {  
    // scale path - icons should all be same height  
    let scale = size.height / path.bounds.size.height * 0.5  
    path.applyTransform(CGAffineTransformMakeScale(scale, scale))  
  
    // move path to origin  
    path.applyTransform(CGAffineTransformMakeTranslation(  
        -path.bounds.origin.x,  
        -path.bounds.origin.y))  
  
    // move path into center  
    path.applyTransform(CGAffineTransformMakeTranslation(  
        size.width/2 - path.bounds.width/2,  
        size.height/2 - path.bounds.height/2))  
}
```

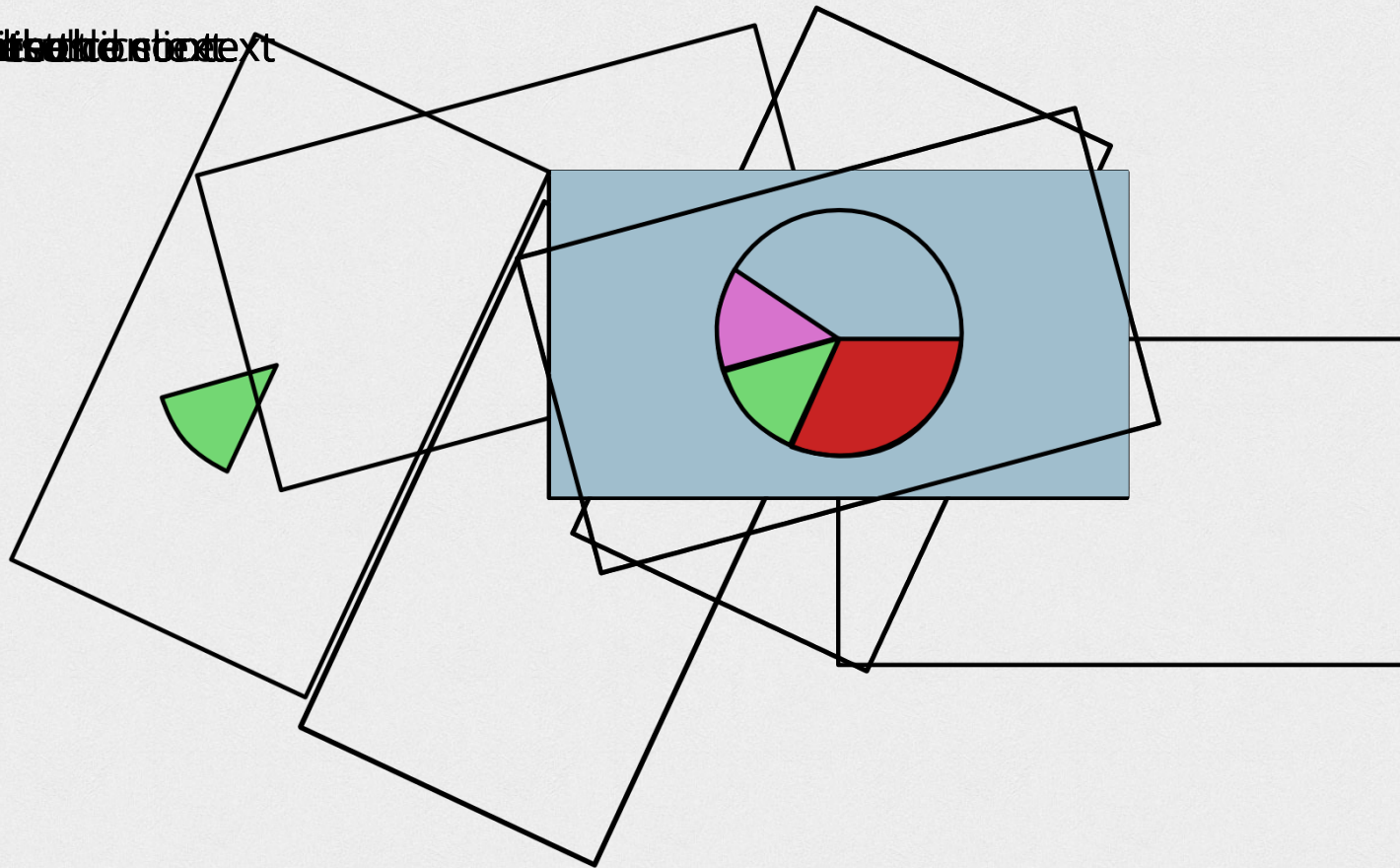


Context CTM

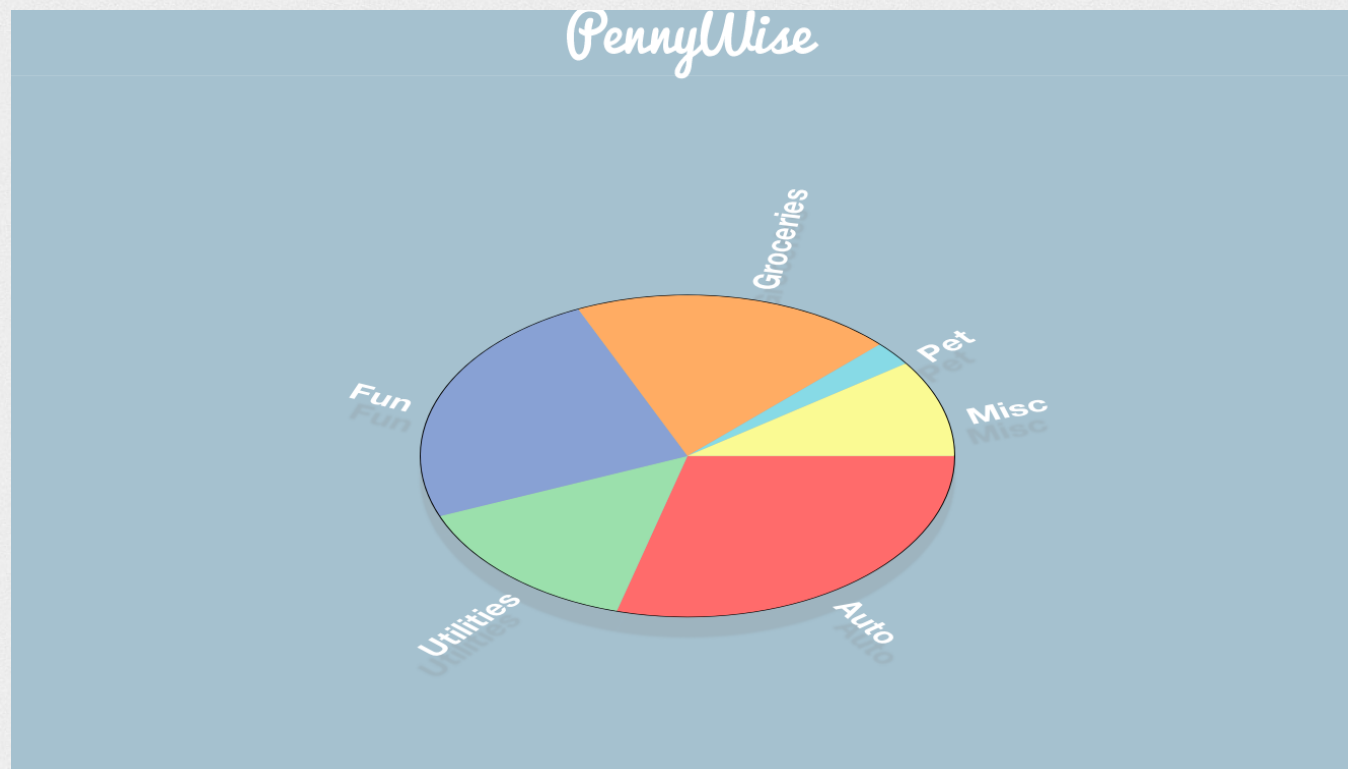


Context CTM 2

Realistic context



Demo



Challenge Time!

