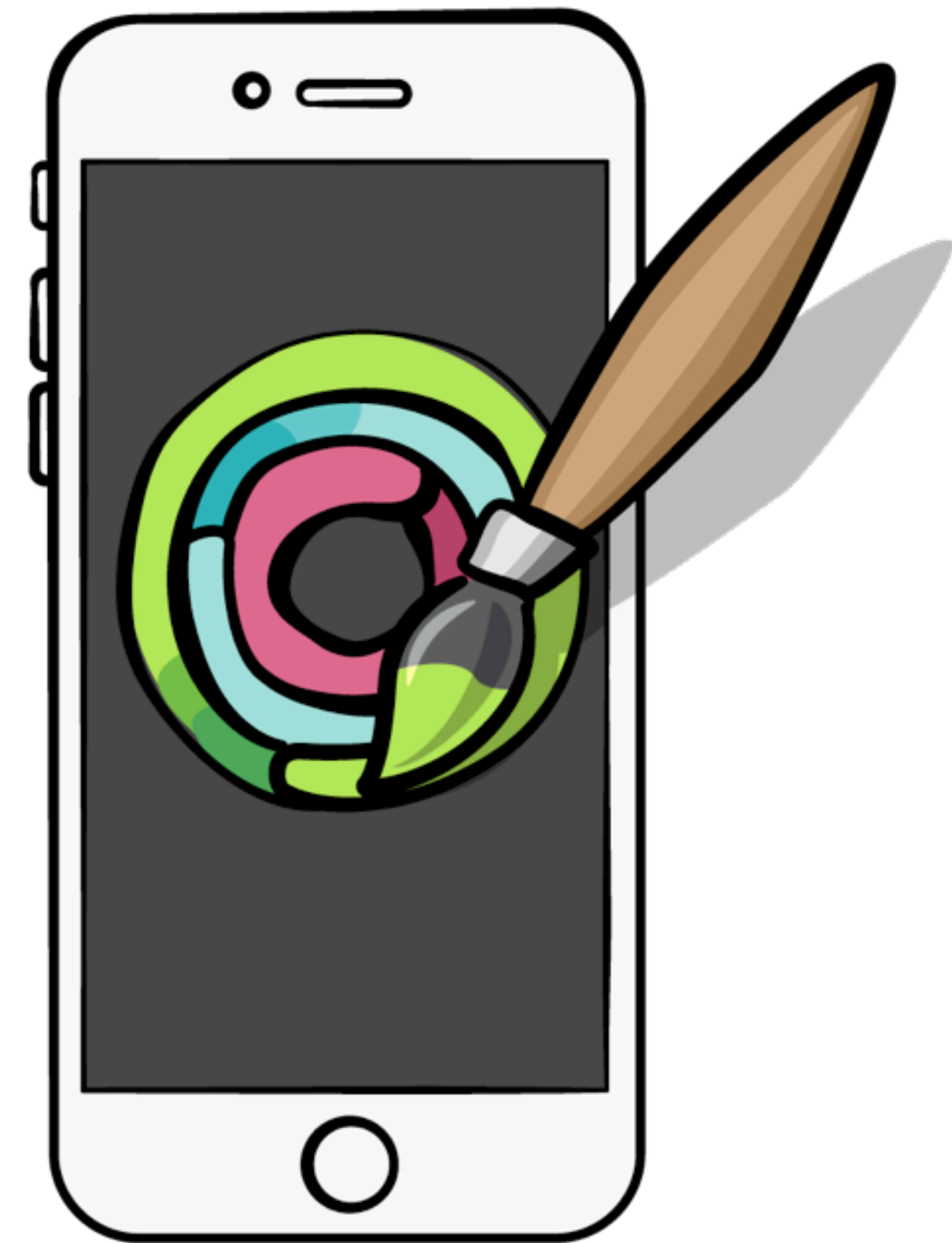


CUSTOM CONTROLS ■ IN iOS ■



PART 11: GESTURE RECOGNIZERS



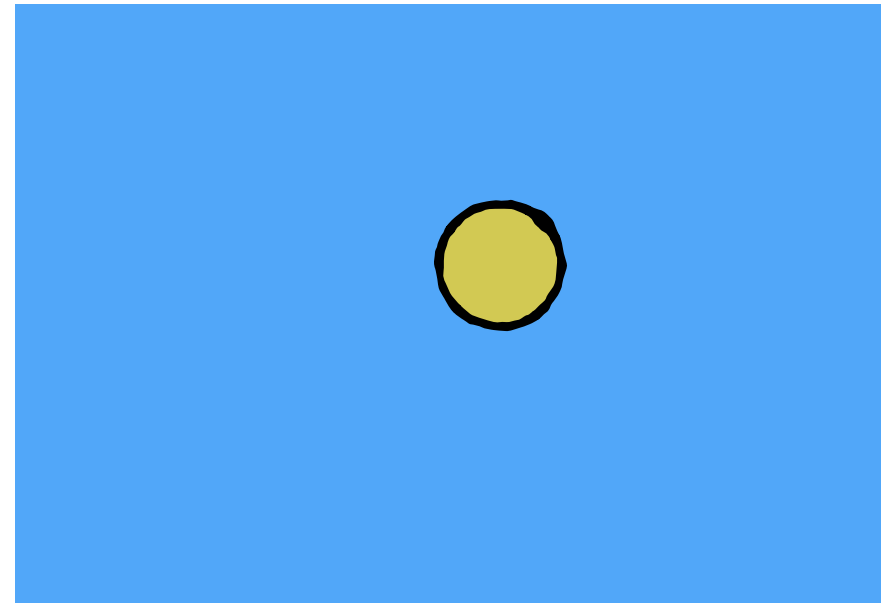
GESTURE RECOGNIZERS

```
extension UIGestureRecognizer {
    ...
    open func touchesBegan( touches: Set<UITouch>, with event: UIEvent )
    open func touchesMoved( touches: Set<UITouch>, with event: UIEvent )
    open func touchesEnded( touches: Set<UITouch>, with event: UIEvent )
}

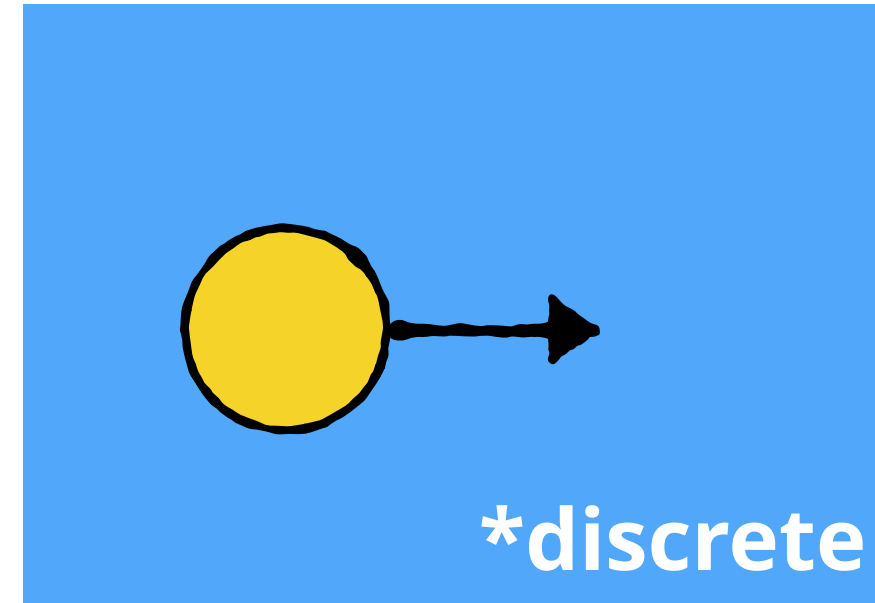
tapGestureRecognizer = TapGestureRecognizer(
    target: self,
    action: #selector(self.handleTap)
)
addGestureRecognizer(tapGestureRecognizer!)

func handleTap() {
    switch tapGestureRecognizer.state {
    case .began:
        ...
    case .ended:
        ...
    default:
        ...
    }
}
```

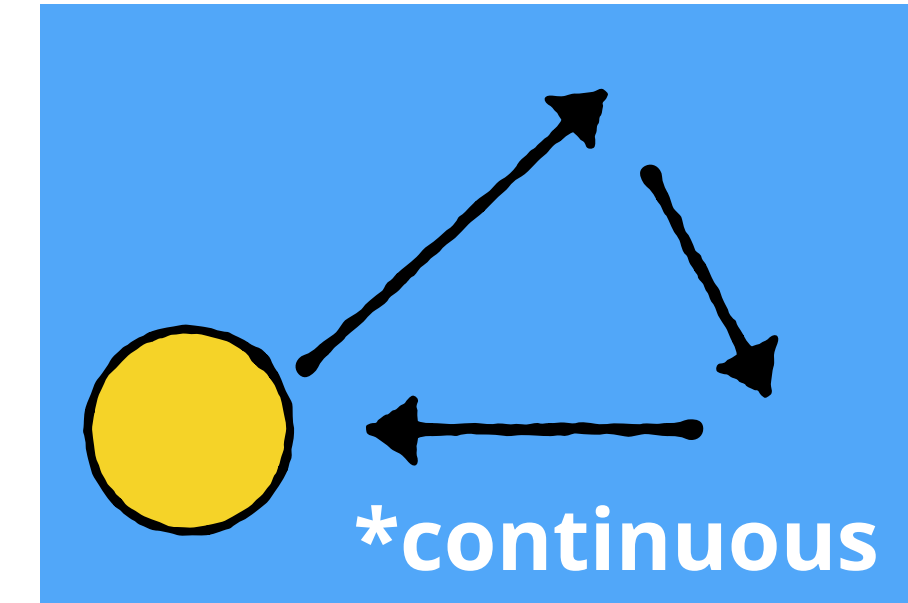
GESTURE RECOGNIZER SUBCLASSES



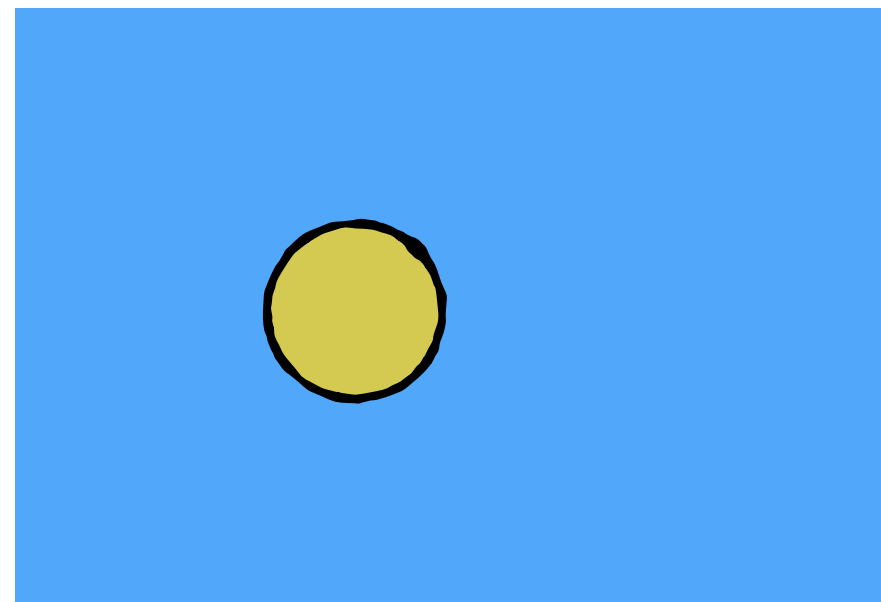
UITapGestureRecognizer



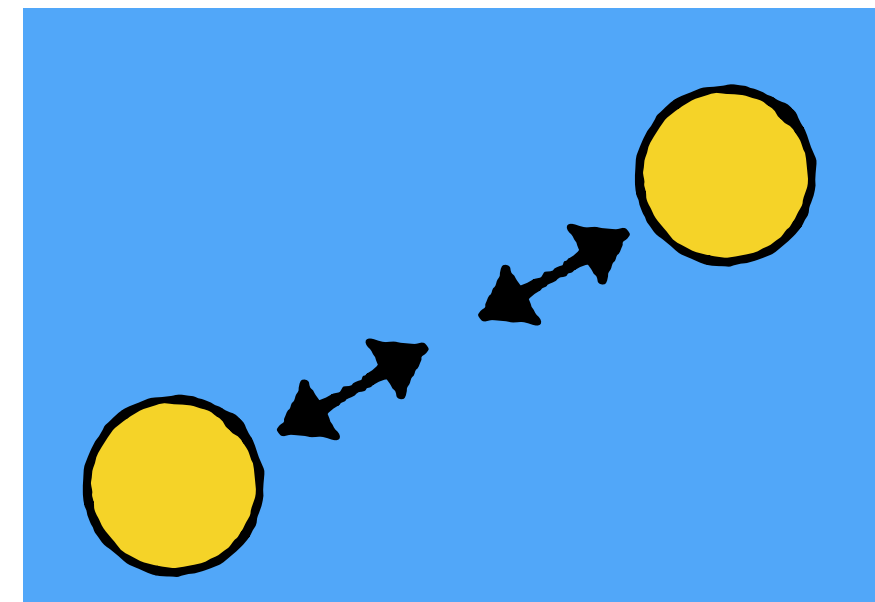
UISwipeGestureRecognizer



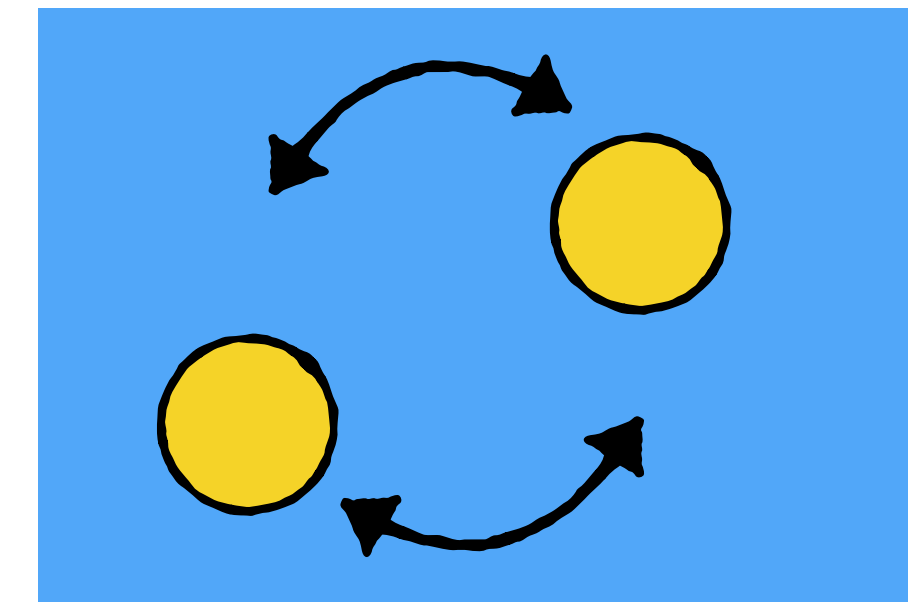
UIPanGestureRecognizer



UILongPressGestureRecognizer



UIPinchGestureRecognizer



UIRotationGestureRecognizer

USING MULTIPLE GESTURE RECOGNIZERS

```
final class TapGestureRecognizer: UITapGestureRecognizer, GestureRecognizer {  
    ...  
}
```

```
extension PanGestureRecognizer: GestureRecognizer {  
    func handleLargeRadiusTouch(yPositionInView: CGFloat) {  
        ...  
    }  
}
```

```
protocol GestureRecognizer: class {  
    var selection: Selection {get set}  
    var selectionTouchRadiusCrossover: CGFloat! {get set}  
}  
  
extension GestureRecognizer where Self: UIGestureRecognizer {  
    func handleLargeRadiusTouch(yPositionInView: CGFloat) {}  
  
    func setSelection(touches: Set<UITouch>) {  
        ...  
    }  
}
```


CHALLENGE TIME!



```
enum Selection {  
  case  
    color(float3),  
    valueDelta(Float)  
}
```

```
if touch.majorRadius < selectionTouchRadiusCrossover {  
  selection = .color(  
    UnitCube.getColor(  
      positionInView: positionInView,  
      viewSize: view!.bounds.size  
    )  
  )  
} else {  
  selectValueDelta(yPositionInView: positionInView.y)  
}
```