

```
//
// Pens.swift
// Arm
//
// Created by Erik Nordlund on 4/5/19.
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//
// Arm Controller includes the following open-source components:
// • swiftBluetoothSerial: https://github.com/hoiberg/SwiftBluetoothSerial
// • peertalk-simple: https://github.com/kirankunigiri/peertalk-simple
```

```
import Foundation
import UIKit
```

```
enum PenWidthUnits {
    case inches
    case millimeters
}
```

```
struct Pen {
    init(name: String, color: UIColor, dryTime: Double, widthMillimeters:
        Double) {
        self.name = name
        self.color = color
        self.dryTime = dryTime
        self.widthInches = widthMillimeters / 254
        self.widthMillimeters = widthMillimeters

        widthUnitPreference = PenWidthUnits.millimeters
    }
    init(name: String, color: UIColor, dryTime: Double, widthInches: Double) {
        self.name = name
        self.color = color
        self.dryTime = dryTime
        self.widthInches = widthInches
        self.widthMillimeters = widthInches * 254

        widthUnitPreference = PenWidthUnits.inches
    }
}
```

```
func isEqual(to: Pen) -> Bool {
    if self.widthInches == to.widthInches {
        if self.widthMillimeters == to.widthMillimeters {
            if self.color == to.color {
                if self.dryTime == to.dryTime {
                    if self.name == to.name {
                        return true
                    }
                }
            }
        }
    }
}
```

```
        }  
    }  
    return false  
}  
  
var widthInches: Double  
var widthMillimeters: Double  
var widthUnitPreference: PenWidthUnits  
var color: UIColor  
var dryTime: Double  
var name: String  
}
```