

Swift Code Review

From the current swift project pick a method you have been working on. Paste the code screenshot in the box below

Original source code

```
256 struct MultiSimpleShape : Shape {
257     func makeSimpleShape(in rect: CGRect, position pos : CGPoint) -> Path {
258         var returnPath = Path()
259         var firstPath = Path()
260         var secondPath = Path()
261
262         var xPos = pos.x + 5
263         var yPos = pos.y + 5
264
265         firstPath.move(to: CGPoint(x: xPos, y: yPos))
266         xPos += 30
267
268         firstPath.addLine(to: CGPoint(x: xPos, y: yPos))
269         xPos += 20
270         yPos += 30
271
272         firstPath.addLine(to: CGPoint(x: xPos, y: yPos))
273         xPos -= 20
274
275         firstPath.addArc(
276             center: CGPoint(x: xPos, y: yPos),
277             radius: 20,
278             startAngle: Angle(degrees: 0),
279             endAngle: Angle(degrees: 90),
280             clockwise: false
281         )
282         yPos += 20
283
284         firstPath.addLine(to: CGPoint(x: xPos, y: yPos))
285         xPos -= 30
286         yPos -= 20
287
288         firstPath.addLine(to: CGPoint(x: xPos, y: yPos))
289         firstPath.closeSubpath()
290
291         xPos = pos.x + 50
292         yPos = pos.y + 50
293
294         secondPath.move(to: CGPoint(x: xPos, y: yPos))
295         xPos += 30
296
297         secondPath.addLine(to: CGPoint(x: xPos, y: yPos))
298         xPos -= 15
299         yPos += 15
300
301         secondPath.addArc(
302             center: CGPoint(x: xPos, y: yPos),
303             radius: 21.5,
304             startAngle: Angle(degrees: 315),
305             endAngle: Angle(degrees: 225),
306             clockwise: true
307         )
308         xPos = pos.x + 50
309         yPos = pos.y + 80
310
311         secondPath.addLine(to: CGPoint(x: xPos, y: yPos))
312         xPos += 15
313         yPos -= 15
314
315         secondPath.addArc(
316             center: CGPoint(x: xPos, y: yPos),
317             radius: 21.5,
318             startAngle: Angle(degrees: 225),
319             endAngle: Angle(degrees: 135),
320             clockwise: true
321         )
322     }
323 }
```

What is the key functionality of this method?

It creates the path of one of the shapes used in the CustomView.

How can you rewrite this method to do the same thing or more...(English explanation)

It creates two paths in the same method. Then combine them. I can split this functionality into two or more methods to make things more organized.

Rewrite the method in swift

Rewritten source code

```
255 struct MultiSimpleShape : Shape {
270
277 func makeSimpleShape(in rect: CGRect, position pos : CGPoint) -> Path {
278     var path = Path()
279
280     path.addPath(makeFirstPath(in: rect, position: pos))
281     path.addPath(makeSecondPath(in: rect, position: pos))
282
283     return path
284 }
285
286 func makeFirstPath(in rect: CGRect, position pos : CGPoint) -> Path {
287     var path = Path()
288
289     var xPos = pos.x + 5
290     var yPos = pos.y + 5
291
292     path.move(to: CGPoint(x: xPos, y: yPos))
293     xPos += 30
294
295     path.addLine(to: CGPoint(x: xPos, y: yPos))
296     xPos += 20
297     yPos += 30
298
299     path.addLine(to: CGPoint(x: xPos, y: yPos))
300     xPos -= 20
301
302     path.addArc(
303         center: CGPoint(x: xPos, y: yPos),
304         radius: 20,
305         startAngle: Angle(degrees: 0),
306         endAngle: Angle(degrees: 90),
307         clockwise: false
308     )
309     yPos += 20
310
311     path.addLine(to: CGPoint(x: xPos, y: yPos))
312     xPos -= 30
313     yPos -= 20
314
315     path.addLine(to: CGPoint(x: xPos, y: yPos))
316     path.closeSubpath()
317
318     return path
319 }
320
321 func makeSecondPath(in rect: CGRect, position pos : CGPoint) -> Path {
322     var path = Path()
323
324     var xPos = pos.x + 50
325     var yPos = pos.y + 50
326
327     path.move(to: CGPoint(x: xPos, y: yPos))
328     xPos += 30
329
330     path.addLine(to: CGPoint(x: xPos, y: yPos))
331     xPos -= 15
332     yPos += 15
333
334     path.addArc(
335         center: CGPoint(x: xPos, y: yPos),
336         radius: 21.5,
337         startAngle: Angle(degrees: 315),
338         endAngle: Angle(degrees: 225),
339         clockwise: true
340     )
341     xPos = pos.x + 50
```

Which version is better and why?

This version is better because it makes things a bit easier to read and more organized.