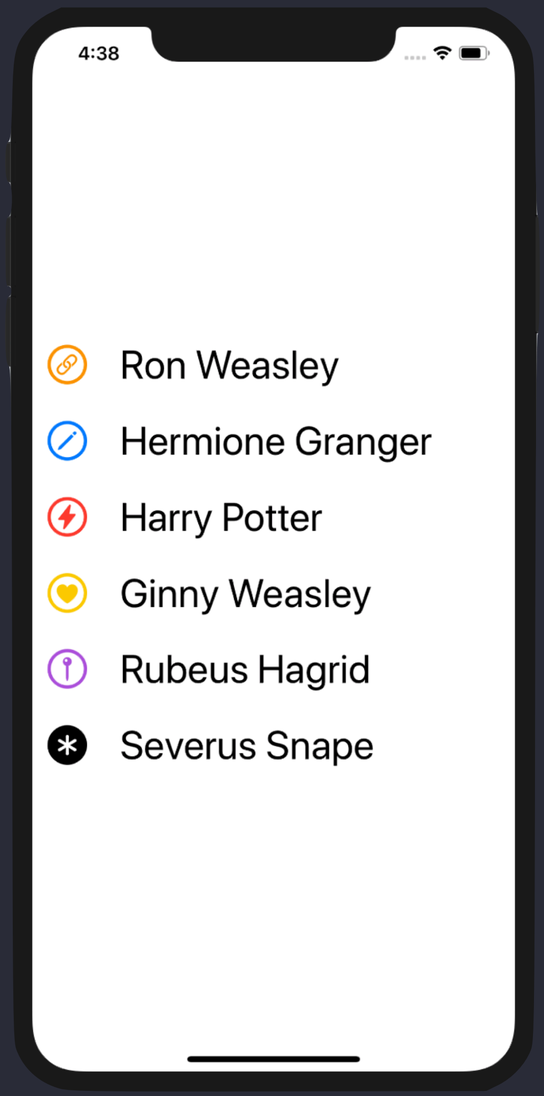
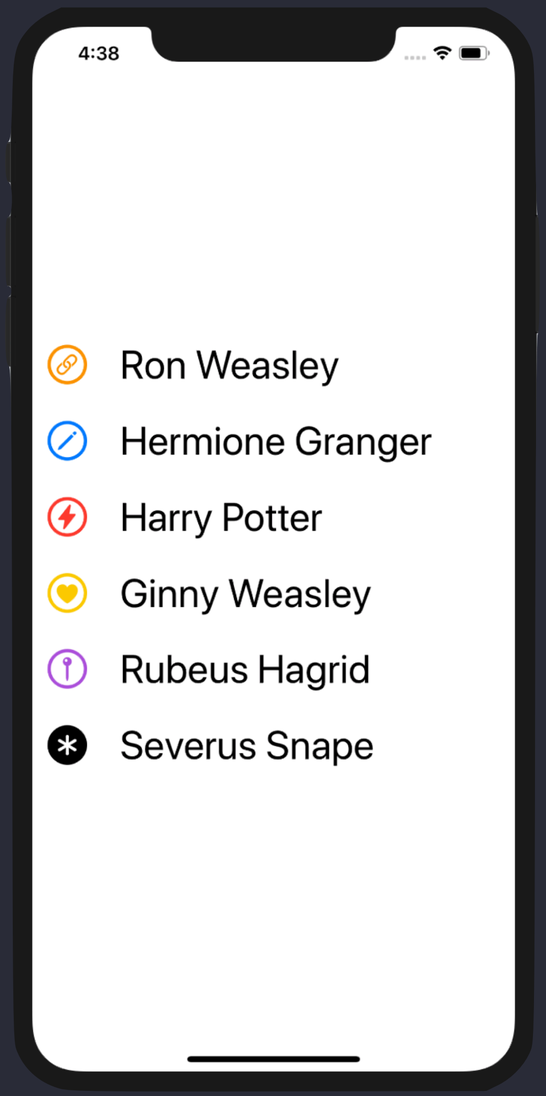
Extraction de vues

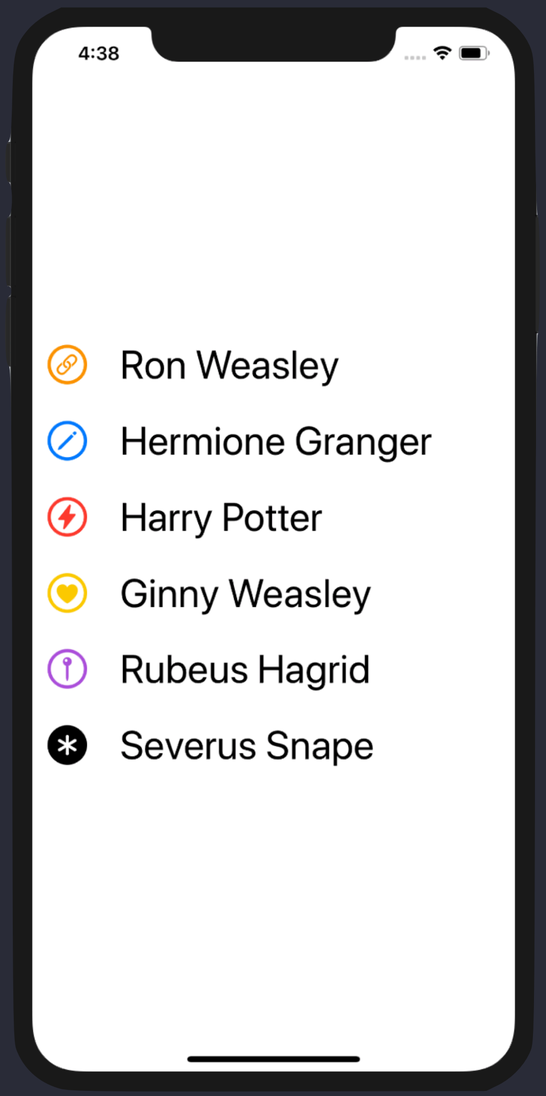
```
struct HeroList: View {
  var body: some View {
    VStack (alignment: .leading) {
      HStack {
        Image(systemName: "link.circle")
          .foregroundColor( .orange )
          .frame(width: 60)
        Text(" Ron Weasley")
      }.font(.largeTitle)
      HStack {
        Image(systemName: "pencil.circle")
          .foregroundColor( .blue )
          .frame(width: 60)
        Text(" Hermione Granger")
      }.font(.largeTitle)
      HStack {
        Image(systemName: "bolt.circle")
          .foregroundColor( .red )
          .frame(width: 60)
        Text(" Harry Potter")
      }.font(.largeTitle)
      HStack {
        Image(systemName: "heart.circle")
          .foregroundColor( .yellow )
          .frame(width: 60)
        Text(" Ginny Weasley")
      }.font(.largeTitle)
      HStack {
        Image(systemName: "mappin.circle")
          .foregroundColor( .purple )
          .frame(width: 60)
        Text(" Rubeus Hagrid")
      }.font(.largeTitle)
```



```swift
struct HeroList: View {
  var body: some View {
    VStack (alignment: .leading){
      HeroRow(icon: "link.circle", name: " Ron Weasley", color: .orange)
      HeroRow(icon: "pencil.circle", name: " Hermione Granger", color: .blue)
      HeroRow(icon: "bolt.circle", name: " Harry Potter", color: .red)
      HeroRow(icon: "heart.circle", name: " Ginny Weasley", color: .yellow)
      HeroRow(icon: "mappin.circle", name: " Rubeus Hagrid", color: .purple)
      HeroRow(icon: "asterisk.circle.fill", name: " Severus Snape", color: .black)
    }
  }
}

struct HeroRow: View {
  let icon: String
  let name: String
  let color: Color
  var body: some View {
      HStack {
        Image(systemName: icon)
          .foregroundColor(color)
          .frame(width: 60)
        Text(name)
      }.font(.largeTitle)
  }
}
```



```swift
struct HeroList: View {
  var body: some View {
    VStack (alignment: .leading){
      HeroRow(icon: "link.circle", name: " Ron Weasley", color: .orange)
      HeroRow(icon: "pencil.circle", name: " Hermione Granger", color: .blue)
      HeroRow(icon: "bolt.circle", name: " Harry Potter", color: .red)
      HeroRow(icon: "heart.circle", name: " Ginny Weasley", color: .yellow)
      HeroRow(icon: "mappin.circle", name: " Rubeus Hagrid", color: .purple)
      HeroRow(icon: "asterisk.circle.fill", name: " Severus Snape", color: .black)
    }
  }
}

struct HeroRow: View {
  let icon: String
  let name: String
  let color: Color
  var body: some View {
      HStack {
        Image(systemName: icon)
          .foregroundColor(color)
          .frame(width: 60)
        Text(name)
      }.font(.largeTitle)
  }
}
```

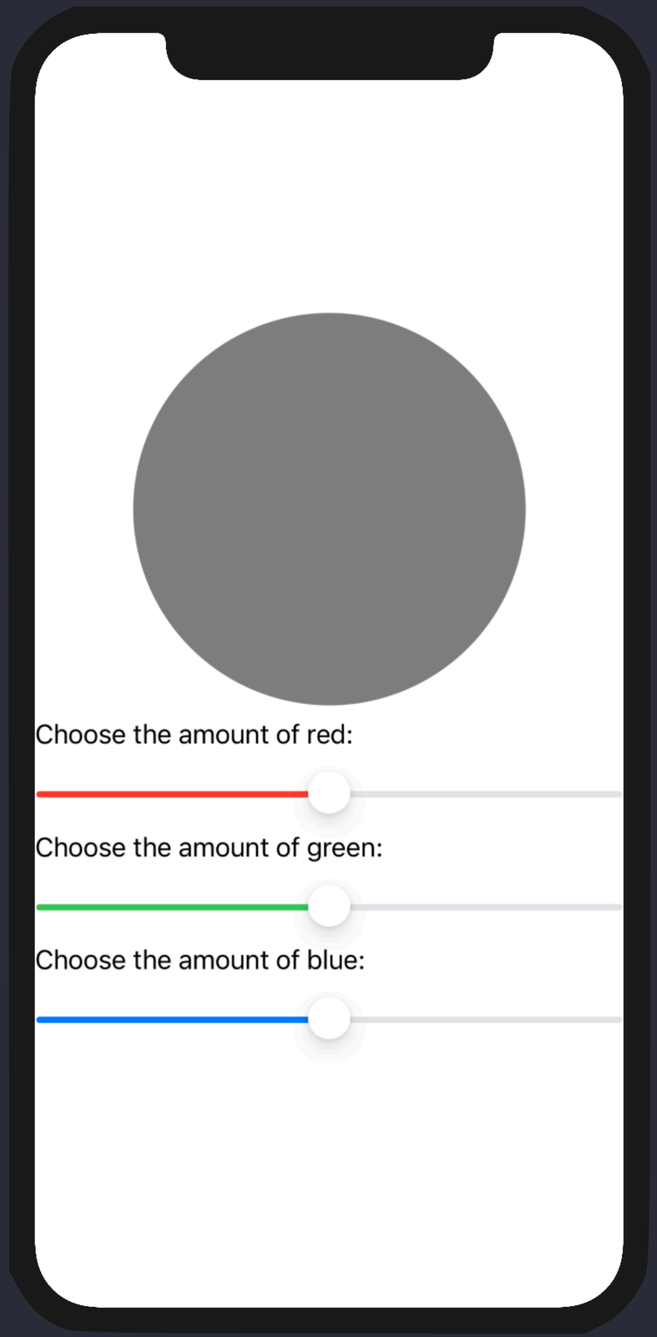


Pourquoi ? 🤔

- Éviter de dupliquer du code
- Plus facile à lire
- Plus facile à maintenir
- Moins de risque de bugs
- Réutilisabilité
  - Un composant complexe personnalisable avec quelques paramètres !

Two way binding

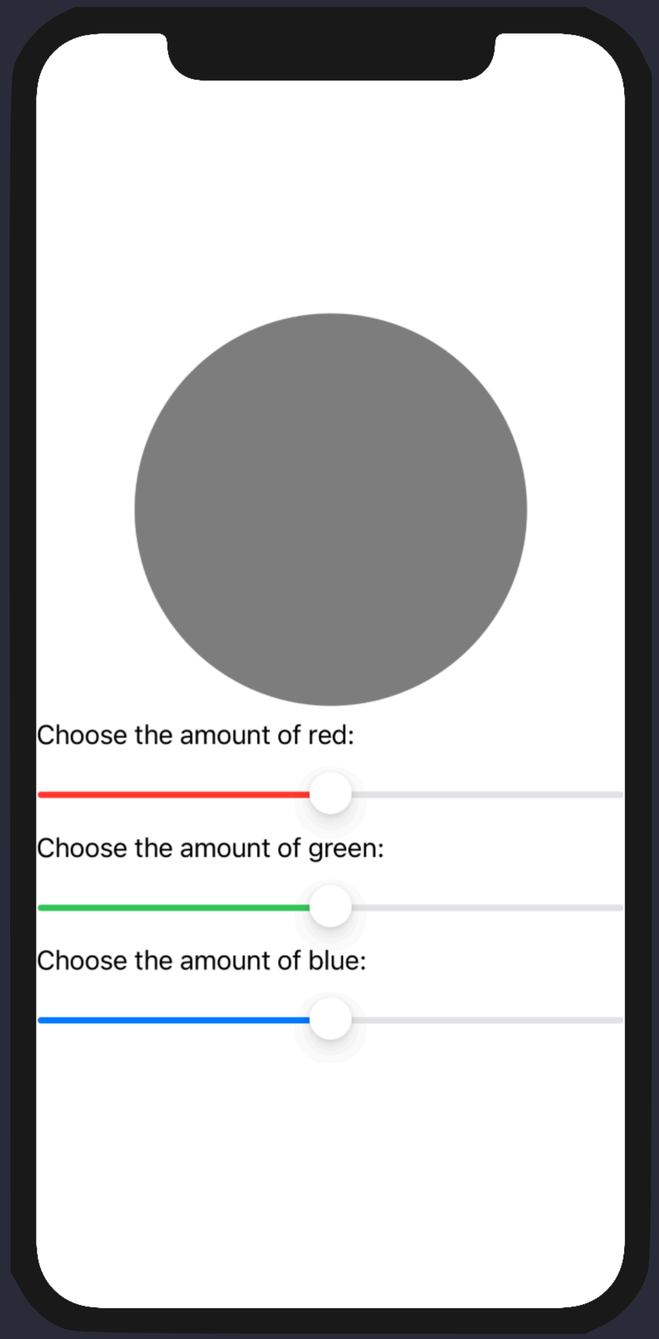
```swift
struct ColorPickerView: View {

    @State var red: Double = 0.5
    @State var green: Double = 0.5
    @State var blue: Double = 0.5

    var body: some View {
        VStack {
            Color(red: red, green: green, blue: blue, opacity: 1)
                .frame(width: 250, height: 250)
                .mask(Circle())
            VStack(alignment: .leading) {
                Text("Choose the amount of red:")
                Slider(value: $red, in: 0...1) {
                    Text("Red Slider")
                }
                .accentColor(.red)
            }
            VStack(alignment: .leading) {
                Text("Choose the amount of green:")
                Slider(value: $green, in: 0...1) {
                    Text("Green Slider")
                }
                .accentColor(.green)

            }
            VStack(alignment: .leading) {
                Text("Choose the amount of blue:")
                Slider(value: $blue, in: 0...1) {
                    Text("Blue Slider")
                }
                .accentColor(.blue)
            }
        }
    }
}
```



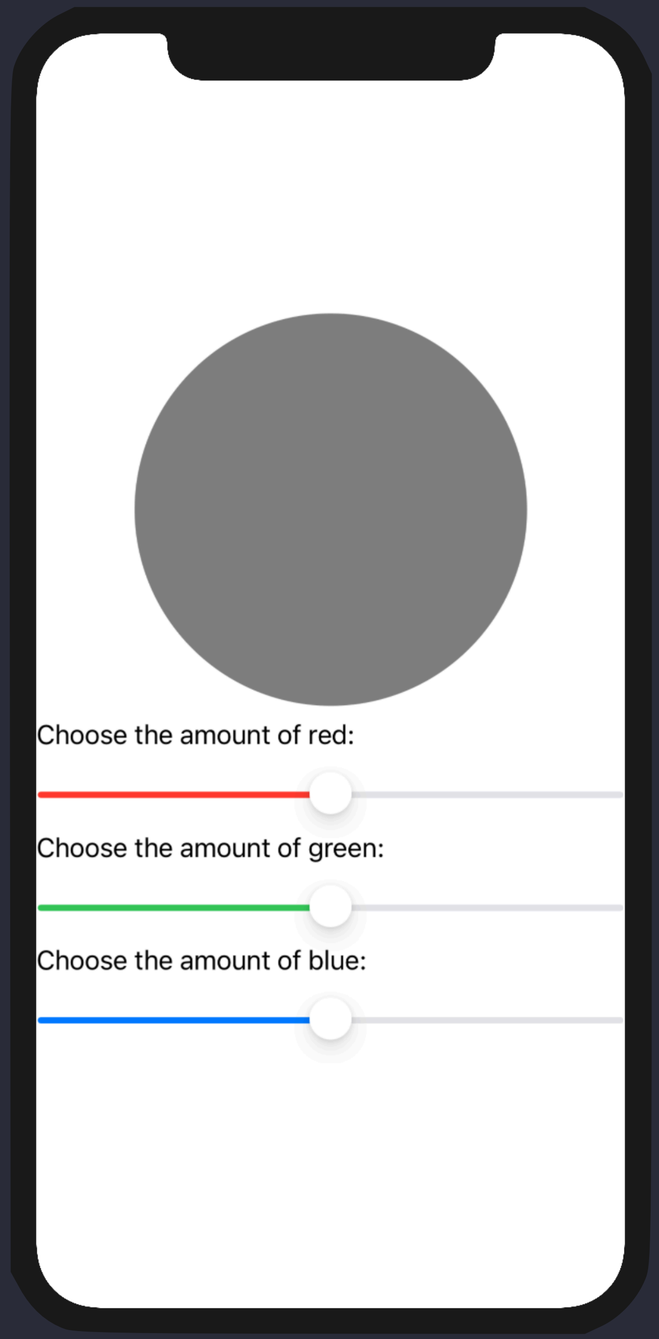
```swift
struct ColorPickerView: View {

    @State var red: Double = 0.5
    @State var green: Double = 0.5
    @State var blue: Double = 0.5

    var body: some View {
        VStack {
            Color(red: red, green: green, blue: blue, opacity: 1)
                .frame(width: 250, height: 250)
                .mask(Circle())
            ColorPickerSlider(colorValue: red, colorName: "red", color: .red)
            ColorPickerSlider(colorValue: green, colorName: "green", color: .green)
            ColorPickerSlider(colorValue: blue, colorName: "blue", color: .blue)
        }
    }
}

struct ColorPickerSlider: View {

    var colorValue: Double
    let colorName: String
    let color: Color

    var body: some View {
        VStack(alignment: .leading) {
            Text("Choose the amount of \(colorName):")
            Slider(value: colorValue, in: 0...1) {
                Text("\(colorName.capitalized) Slider")
            }
            .accentColor(color)
        }
    }
}
```

Cannot convert value of type 'Double' to expected argument type 'Binding<Double>'

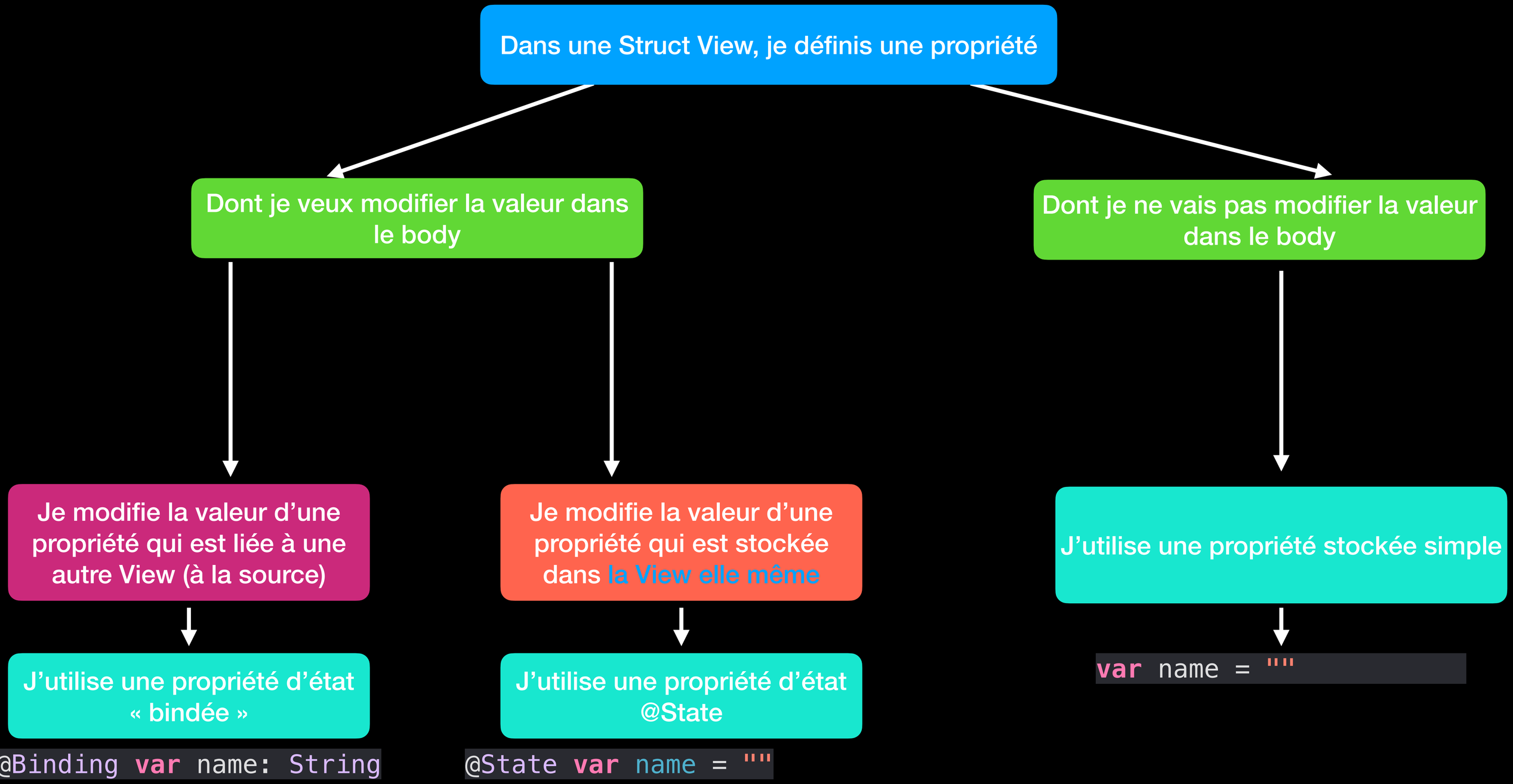
```swift
struct ColorPickerView: View {

    @State var red: Double = 0.5
    @State var green: Double = 0.5
    @State var blue: Double = 0.5

    var body: some View {
        VStack {
            Color(red: red, green: green, blue: blue, opacity: 1)
                .frame(width: 250, height: 250)
                .mask(Circle())
            ColorPickerSlider(colorValue: $red, colorName: "red", color: .red)
            ColorPickerSlider(colorValue: $green, colorName: "green", color: .green)
            ColorPickerSlider(colorValue: $blue, colorName: "blue", color: .blue)
        }
    }
}

struct ColorPickerSlider: View {

    @Binding var colorValue: Double
    let colorName: String
    let color: Color

    var body: some View {
        VStack(alignment: .leading) {
            Text("Choose the amount of \(colorName):")
            Slider(value: $colorValue, in: 0...1) {
                Text("\(colorName.capitalized) Slider")
            }
            .accentColor(color)
        }
    }
}
```



```swift
struct ColorPickerView: View {

    @State var red: Double = 0.5
    @State var green: Double = 0.5
    @State var blue: Double = 0.5

    var body: some View {
        VStack {
            Color(red: red, green: green, blue: blue, opacity: 1)
                .frame(width: 250, height: 250)
                .mask(Circle())
            ColorPickerSlider(colorValue: $red, colorName: "red", color: .red)
            ColorPickerSlider(colorValue: $green, colorName: "green", color: .green)
            ColorPickerSlider(colorValue: $blue, colorName: "blue", color: .blue)
        }
    }
}

struct ColorPickerSlider: View {

    @Binding var colorValue: Double
    let colorName: String
    let color: Color

    var body: some View {
        VStack(alignment: .leading) {
            Text("Choose the amount of \(colorName):")
            Slider(value: $colorValue, in: 0...1) {
                Text("\(colorName.capitalized) Slider")
            }
            .accentColor(color)
        }
    }
}
```



@State, @Binding ou pas


Dans une Struct View, je définis une propriété
Dont je veux modifier la valeur dans le body
Dont je ne vais pas modifier la valeur dans le body
Je modifie la valeur d'une propriété qui est liée à une autre View (à la source)
Je modifie la valeur d'une propriété qui est stockée dans la View elle même
J'utilise une propriété stockée simple
J'utilise une propriété d'état « bindée »
J'utilise une propriété d'état @State
var name = ""
@Binding var name: String
@State var name = ""