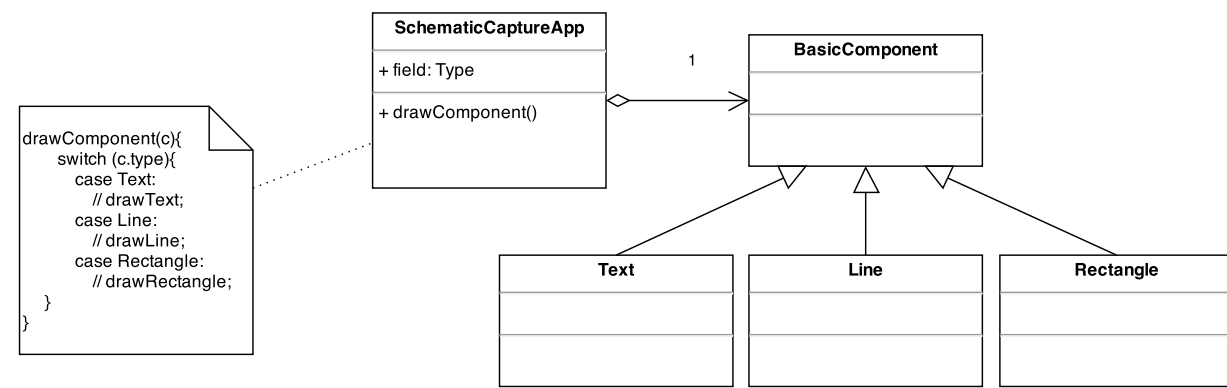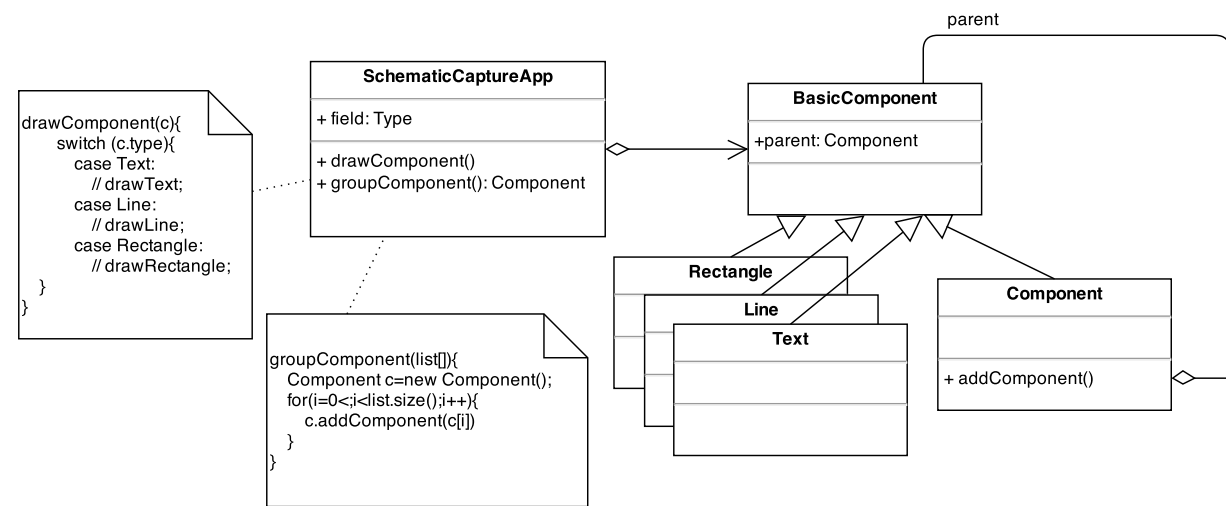In Schematic Capture Application, there are some basic components that can be drawn, such as Text, Line, Rectangle .
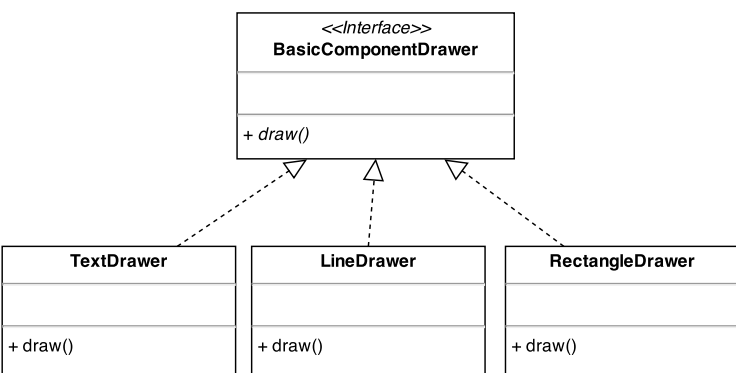
SchematicCaptureApp
+ field: Type
+ drawComponent()

BasicComponent

1

Text **Line** **Rectangle**

```
drawComponent(c){
  switch (c.type){
    case Text:
      // drawText;
    case Line:
      // drawLine;
    case Rectangle:
      // drawRectangle;
  }
}
```

The user can group basic components to form larger components, which in turn can be grouped to form still larger components.

SchematicCaptureApp
+ field: Type
+ drawComponent()
+ groupComponent(): Component

BasicComponent
+parent: Component

parent

Rectangle
Line
Text

Component
+ addComponent()

```
drawComponent(c){
  switch (c.type){
    case Text:
      // drawText;
    case Line:
      // drawLine;
    case Rectangle:
      // drawRectangle;
  }
}
```

```
groupComponent(list[]){
  Component c=new Component();
  for(i=0;i<list.size();i++){
    c.addComponent(c[i])
  }
}
```

Redesign

```
drawComponent(c){
  switch (c.type){
    case Text:
      // drawText;
    case Line:
      // drawLine;
    case Rectangle:
      // drawRectangle;
  }
}
```

SchematicCaptureApp
+ field: Type
+ drawComponent()
+ groupComponent(): Component

BasicComponent

Rectangle
Line
Text

Component
+addComponent()

parent

```
groupComponent(list[]){
  Component c=new Component();
  for(i=0;i<list.size();i++){
    c.addComponent(c[i])
  }
}
```

TextDrawer
+ draw()

LineDrawer
+ draw()

RectangleDrawer
+ draw()

<<Interface>>
BasicComponentDrawer
+ *draw()*

TextDrawer
+ draw()

LineDrawer
+ draw()

RectangleDrawer
+ draw()

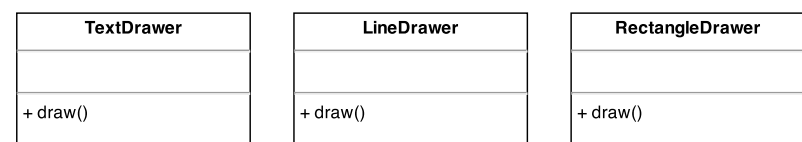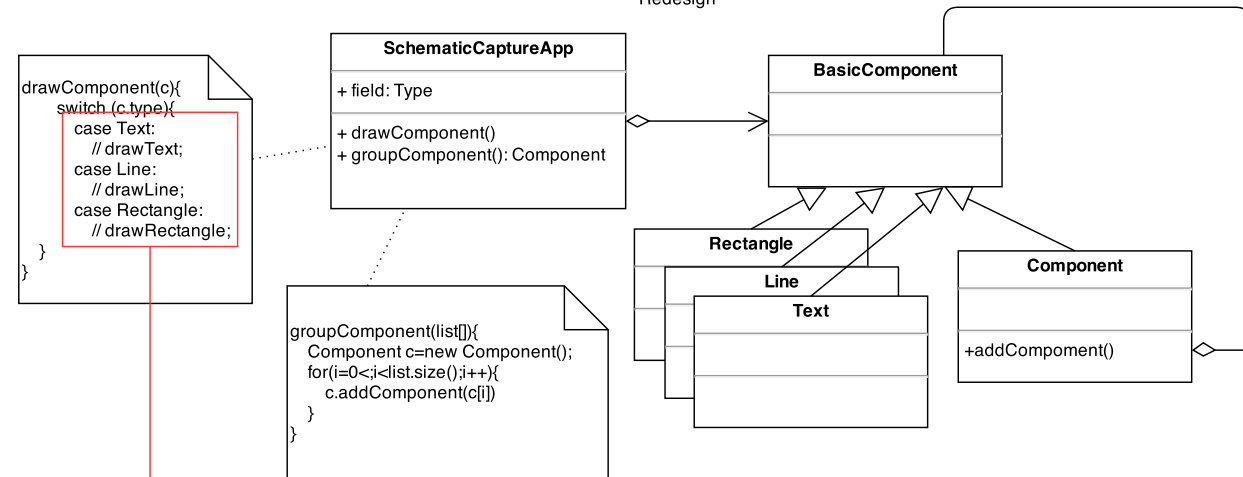In Schematic Capture Application, there are some basic components that can be drawn, such as Text, Line, Rectangle .

BasicComponent
+draw()

Text
+draw()

Line
+draw()

Rectangle
+draw()

The user can group basic components to form larger components, which in turn can be grouped to form still larger components.

child
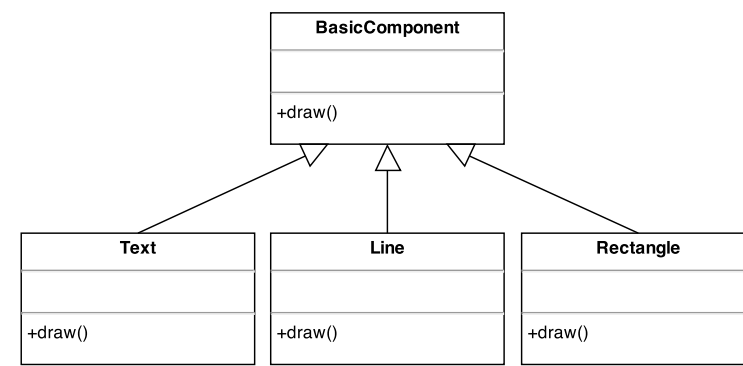
SchematicCaptureApp
+ groupComponent(): Component

BasicComponent
+parent: Component
+draw()

Rectangle
Line
Text
+draw()
+draw()

Component
+ draw()
+ addComponent()

parent

Redesign

child

BasicComponent
+*draw()*

Rectangle
Line
Text
+draw()
+draw()

Component
+ draw()
+ addComponent()

parent

In Schematic Capture Application, there are some basic components that can be drawn, such as Text, Line, Rectangle .

SchematicCaptureApp

BasicComponent
+draw()

Text
+draw()

Line
+draw()

Rectangle
+draw()

The user can group basic components to form larger components, which in turn can be grouped to form still larger components.
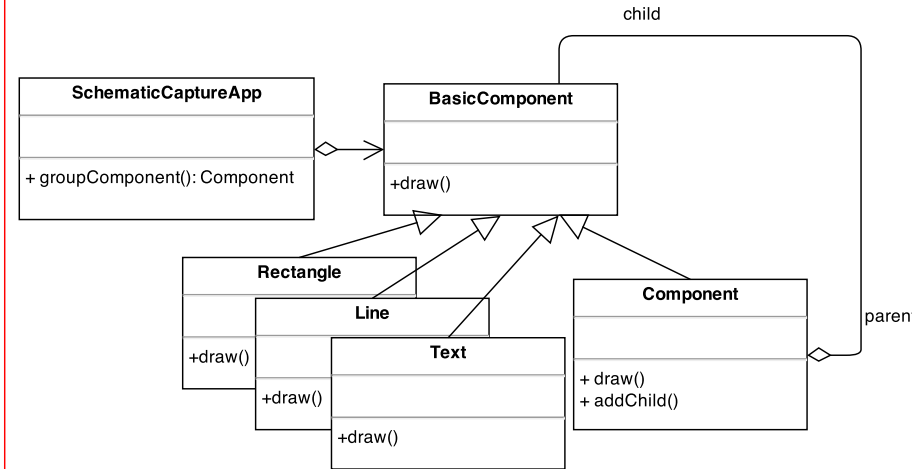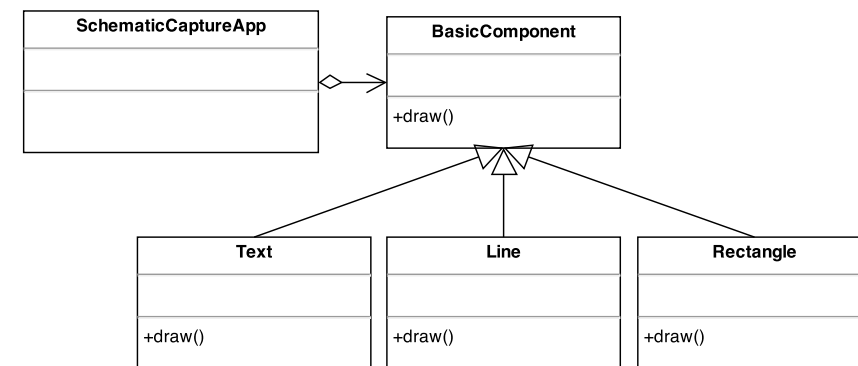
child

SchematicCaptureApp
+ groupComponent(): LargerComponent

Component
+ draw()

BasicComponent
+draw()

LargerComponent
+ draw()
+ addChild()

parent

```
groupComponent(list[]){
  Component c=new LargerComponent();
  for(i=0;i<list.size();i++){
    c.addComponent(c[i])
  }
}
```

Rectangle
Line
Text
+draw()
+draw()
+draw()

SchematicCaptureApp
+ groupComponent(): LargerComponent

Component
+ *draw()*

BasicComponent
+*draw()*

LargerComponent
+ draw()
+ addChild()

parent

```
groupComponent(list[]){
  Component c=new LargerComponent();
  for(i=0;i<list.size();i++){
    c.addComponent(c[i])
  }
}
```

Rectangle
Line
Text
+draw()
+draw()
+draw()

StillLargerComponent
+ draw()
+ group(): LargerComponent

Component
+ draw()
+ addChild()

BasicComponent
+draw()
+group(): LargerComponent

LargerComponent
+ draw()
+ group(): LargerComponent

BasicComponent
+draw()

Rectangle
Line
Text
+draw()
+draw()
+draw()

Component
+ draw()
+ group(): LargerComponent

BasicComponent
+draw()
+group(): LargerComponent

LargerComponent
+ draw()
+ group(): LargerComponent

StillLargerComponent
+ draw()
+ group(): LargerComponent

Rectangle
Line
Text
+draw()
+draw()
+draw()