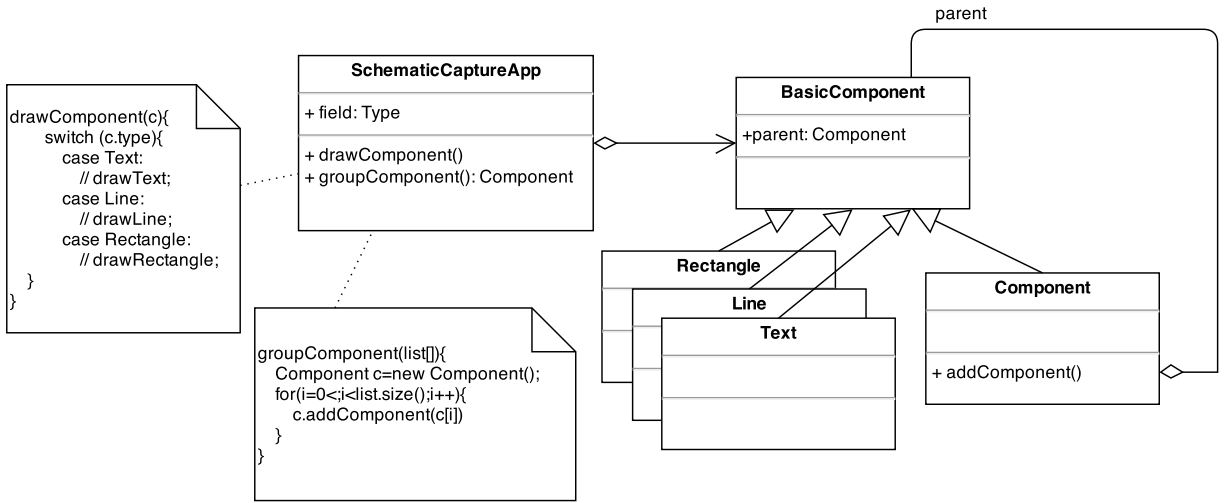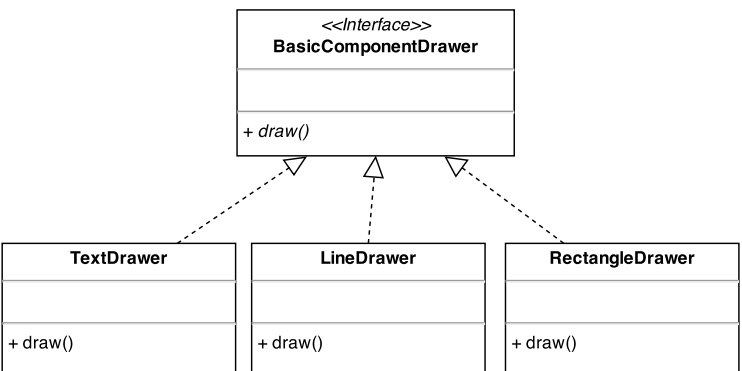In Schematic Capture Application, there are some basic components

that can be drawn, such as Text, Line, Rectangle .

SchematicCaptureApp
+ field: Type
+ drawComponent()

BasicComponent

1

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

Text

Line

Rectangle

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

```
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])
    }
}
```

Rectangle
Line
Text

Component
+ addComponent()

Redesign

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

BasicComponent

```
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])
    }
}
```

Rectangle
Line
Text

Component
+addComponent()

parent

TextDrawer
+ draw()

LineDrawer
+ draw()

RectangleDrawer
+ draw()

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

TextDrawer
+ draw()

LineDrawer
+ draw()

RectangleDrawer
+ draw()

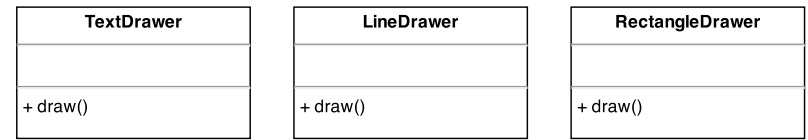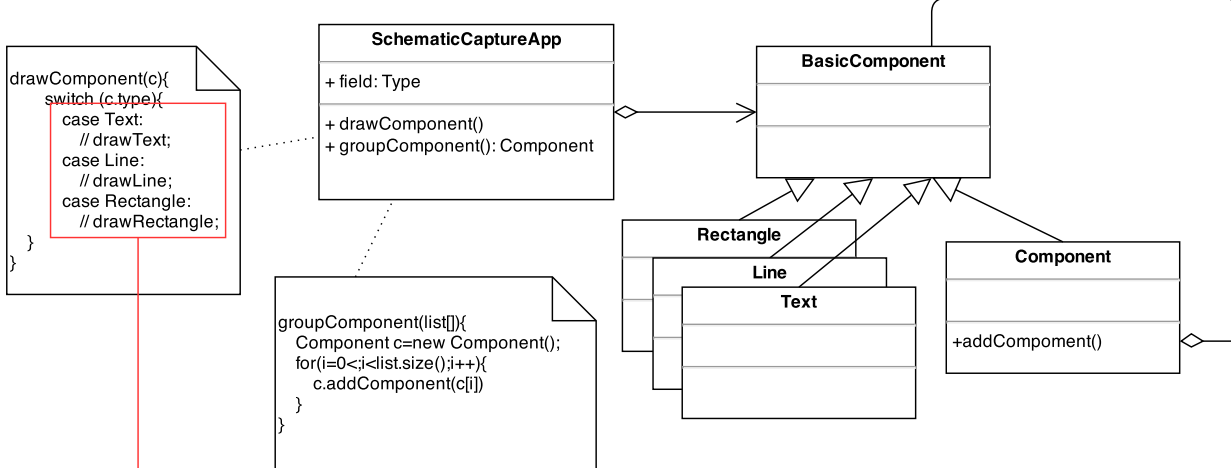In Schematic Capture Application, there are some basic components

that can be drawn, such as Text, Line, Rectangle .

BasicComponent
+draw()

Text
+draw()

Line
+draw()

Rectangle
+draw()
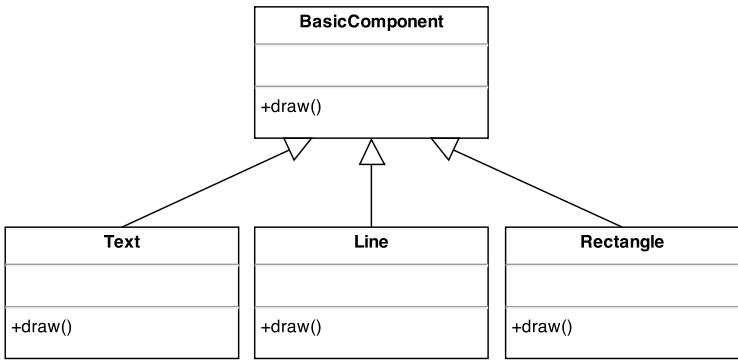
The user can group basic components to form larger components,

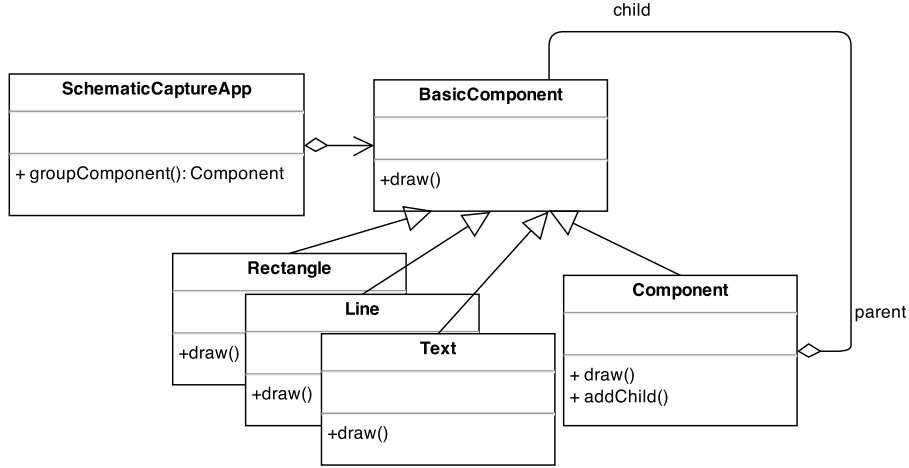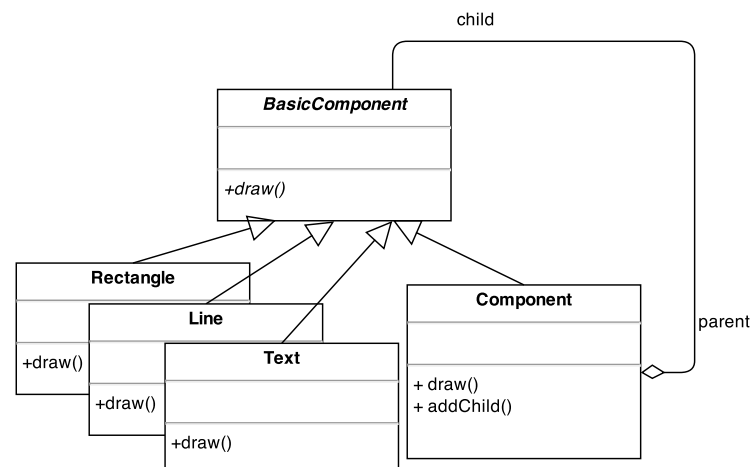which in turn can be grouped to form still larger components.

child

SchematicCaptureApp
+ groupComponent(): Component

BasicComponent
+draw()

Rectangle
Line
Text
+draw()
+draw()

Component
+ draw()
+ addChild()

parent

Redesign

child

SchematicCaptureApp
+ groupComponent(): Component

BasicComponent
+*draw()*

Rectangle
Line
Text
+draw()
+draw()

Component
+ draw()
+ addChild()

parent

In Schematic Capture Application, there are some basic components

that can be drawn, such as Text, Line, Rectangle .

SchematicCaptureApp

BasicComponent
+draw()
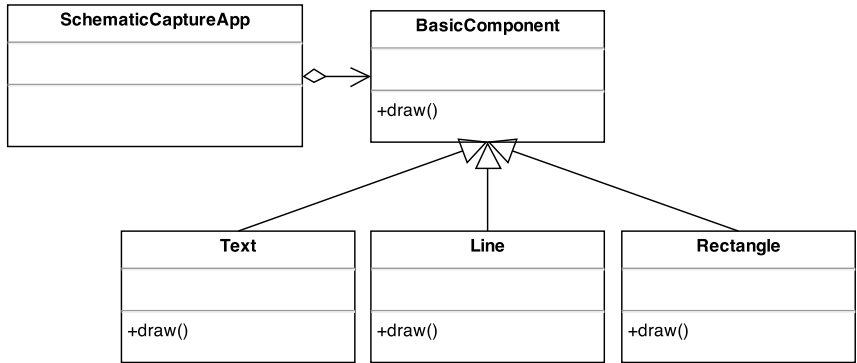
Text
+draw()

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()

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

BasicComponent
+draw()

Rectangle
Line
Text
+draw()
+draw()

LargerComponent
+ draw()
+ addChild()

parent

SchematicCaptureApp
+ groupComponent(): LargerComponent

Component
+ *draw()*

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

BasicComponent
+*draw()*

Rectangle
Line
Text
+draw()
+draw()

LargerComponent
+ draw()
+ addChild()

parent

Component
+ draw()
+ addChild()

BasicComponent
+draw()

Rectangle
Line
Text
+draw()
+draw()

StillLargerComponent
+ draw()
+ group(): LargerComponent

BasicComponent
+draw()
+group(): LargerComponent

LargerComponent
+ draw()
+ group(): LargerComponent

Rectangle
Line
Text
+draw()
+draw()

Component
+ draw()
+ group(): LargerComponent

BasicComponent
+draw()
+group(): LargerComponent

LargerComponent
+ draw()
+ group(): LargerComponent

StillLargerComponent
+ draw()
+ group(): LargerComponent

Rectangle
Line
Text
+draw()
+draw()