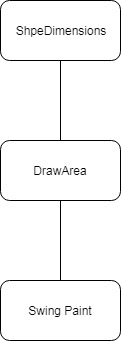
**Statement:**

The software is near to the functionality of the proposed system which is given in our assignment file, the software is capable of doing the following actions.

* Draw line shape on screen
* Draw circle shape on screen
* Draw rectangle on screen
* Draw star shape on screen
* Fill the shape with any specific color
* You can save the shape as “vec” file format.
* You can open the previous shapes.

**Architecture:**

This project is completed by single person so therefore no additional functionality is implemented yet. This software is designed with help of OOP concepts in mind, this software is consists of three main classes Draw area, Shape dimensions and swing paint.



**ShapeDimensions Class:**

This class is not abstract one but this class only remembers the position coordinates of the shape on canvas, this class also provides functionality to draw area class to remember where the shape exists on canvas and by the help of linked list the shapes stores on memory.

**DrawArea Class:**

This class is responsible to draw the actual shape of any type on canvas, this class also provides mouse related and if someone save and open the “vec” file on device.

**SwingPaint Class:**

This class is providing the first screen of the software as well as display all the controls and gadgets on the screen.

**OOP**

This software is designed with the help of OOP in mind therefore all three classes provides encapsulation.

Abstraction:

The Shape dimensions class is not fully abstract class but provide same functionality as abstract class.

Encapsulation:

All the classes shows complete encapsulation and hide the inner details to client program.

Inheritance & Polymorphism:

This software not implemented both features but using both features as client when using java libraries.

**HOW TO USE**

* You can draw any shape display as button on top bar, you just have to click on topmost button then click on the screen.
* To fill the color you first select the choose color button then popup appears you may select any color then you will click fill button and finally click the shape the shape gets display the selected color.
* To clear the screen you just elect the clear button the all shape gets removed from the screen.
* You can select any color and arbitratry daw the lines
* You can save the file on disk by selecting the menu then save button.
* You can open your previous file by selecting the menu then open button

