Department of Computer Engineering

Academic Term: Jan-Apr 2023

Class: T.E Computer Sem -VI Subject:

Mobile Computing

Practical No:	8
Title:	To make an application that draws basic graphical primitives on the screen.
Date of Performance:	7/04/2025
Date of Submission:	27/04/2025
Roll No:	9913
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Evaluation:

Sr. No	Rubric	Grade
1	On time Completion & Submission(2)	
2	Output(3)	
3	Code Optimization(3)	
4	Knowledge of the topic(2)	
5	Total (10)	

Signature of the Teacher:

Experiment No.: 8

Aim: To make an application that draws basic graphical primitives on the screen.

Theory:

The android.graphics.Canvas can be used to draw graphics in android. It provides methods to draw oval, rectangle, picture, text, line etc.

The android graphics. Paint class is used with canvas to draw objects. It holds the information of color and style.

Android Canvas class encapsulates the bitmaps used as surface. It exposes the draw methods which can be used for designing. Let us first clear the following terms:

Bitmap: The surface being drawn on.

Paint: It lets us specify how to draw the primitives on bitmap. It is also referred to as "Brush".

Canvas: It supplies the draw methods used to draw primitives on underlying bitmap.

Each drawing object specifies a paint object to render. Let us see the available list of drawing objects and they are as follows:

drawAre: This draws an arc between the two angles bounded by an area of rectangle.

drawBitmap: It draws an bitmap on canvas.

drawRGB/drawARGB/drawColor: This fills the canvas with a single color.

drawBitmapMesh: It draws a bitmap using a mesh. It manipulates the appearance of target by moving points on it.

drawCircle: This draws a circle on a specified radius centered on a given point.

drawLine(s):it draws a line (or series of lines) between points.

drawOval: it draws an oval which is bounded by the area of

rectangle. drawPaint: It fills the entire canvas with a specific paint.

drawPath: It draws a path as per specification.

drawPicture: It draws a picture specified on a rectangular area.

drawPosText: it draws a text string specifying the offset of each character.

drawRect: It draws a rectangle.

drawRoundRect: it draws a rectangle with round edges.

drawText: It draws a text string on canvas.

The **Paint** class consists of a paint brush and a palette. It lets us choose how to render the primitives drawn into canvas by draw methods. We can control the color, style, font, special effects etc can be modified by modifying the paint object. For instance, **setColor** method can be used to select the color of Paint. Paint class supports transparency so it can be used to control variety of shades or effects, etc. Let us create a simple example and see the basic usage of canvas and paint.



Conclusion:

Thus, we have performed the experiment to draw basic graphical primitives on the screen in the android app using canvas in android studio and over here we have drawn circle and rectangle as example and successfully executed it.