Experiment 4

Source Code:

import javax.microedition.midlet.\*;

import javax.microedition.lcdui.\*;

public class CanvasDrawExample extends MIDlet implements CommandListener{

private Display display;

private List list;

private Command ok, exit;

private CanvasDraw canvasDraw;

int listItemIndex;

public CanvasDrawExample(){

canvasDraw = new CanvasDraw();

display = Display.getDisplay(this);

list = new List("CanvasDrawList", List.IMPLICIT);

ok = new Command("Draw", Command.OK, 2);

exit = new Command("Exit", Command.EXIT, 2);

list.append("Draw Lines", null);

list.append("Draw Rectangle", null);

list.append("Draw Rounded Rectangle", null);

list.append("Draw Arc", null);

list.append("Draw Triangle", null);

list.addCommand(ok);

list.addCommand(exit);

list.setCommandListener(this);

}

public void startApp(){

display.setCurrent(list);

}

public void pauseApp(){}

public void destroyApp(boolean unconditional){

notifyDestroyed ();

}

public void commandAction(Command c, Displayable d){

listItemIndex = list.getSelectedIndex();

if(c == ok){

display.setCurrent(canvasDraw);

}else if(c == exit){

destroyApp(true);

}

}

class CanvasDraw extends Canvas implements CommandListener{

Command back;

public CanvasDraw(){

back = new Command("Back", Command.BACK, 1);

addCommand(back);

setCommandListener(this);

}

public void paint(Graphics g){

g.setColor(0, 0, 255);

g.fillRect(0,0, getWidth (), getHeight ());

g.setColor(255, 0, 0);

if(listItemIndex == 0){

g.drawString("Draw line", getWidth () / 2, 5, Graphics.HCENTER |

Graphics.TOP);

g.drawLine(getWidth()/4, 100, 3 \* getWidth()/4, 100);

}

if(listItemIndex == 1){

g.drawString("Draw Rectangle", getWidth()/2, 5, Graphics.HCENTER |

Graphics.TOP);

g.fillRect(getWidth () / 4, 100, getWidth() / 2, 40);

}

if(listItemIndex==2){

g.drawString("Draw Rounded Rectangle", getWidth () / 2, 5,

Graphics.HCENTER | Graphics.TOP);

g.fillRoundRect(getWidth () / 4, 100, getWidth () / 2, 40, 30, 40);

}

if(listItemIndex == 3){

g.drawString("Draw Arc", getWidth () / 2, 5, Graphics.HCENTER |

Graphics.TOP);

g.fillArc(getWidth () / 4, 100, 90, 90, 180, 270);

}

if(listItemIndex == 4){

g.drawString("Draw Traingle", getWidth () / 2, 5, Graphics.HCENTER |

Graphics.TOP);

g.fillTriangle(getWidth() / 4, 100, 90, 90, 100, 180);

}

}

public void commandAction (Command c, Displayable d){

if(c == back){

display.setCurrent(list);

}

}

}

}

Output:

