

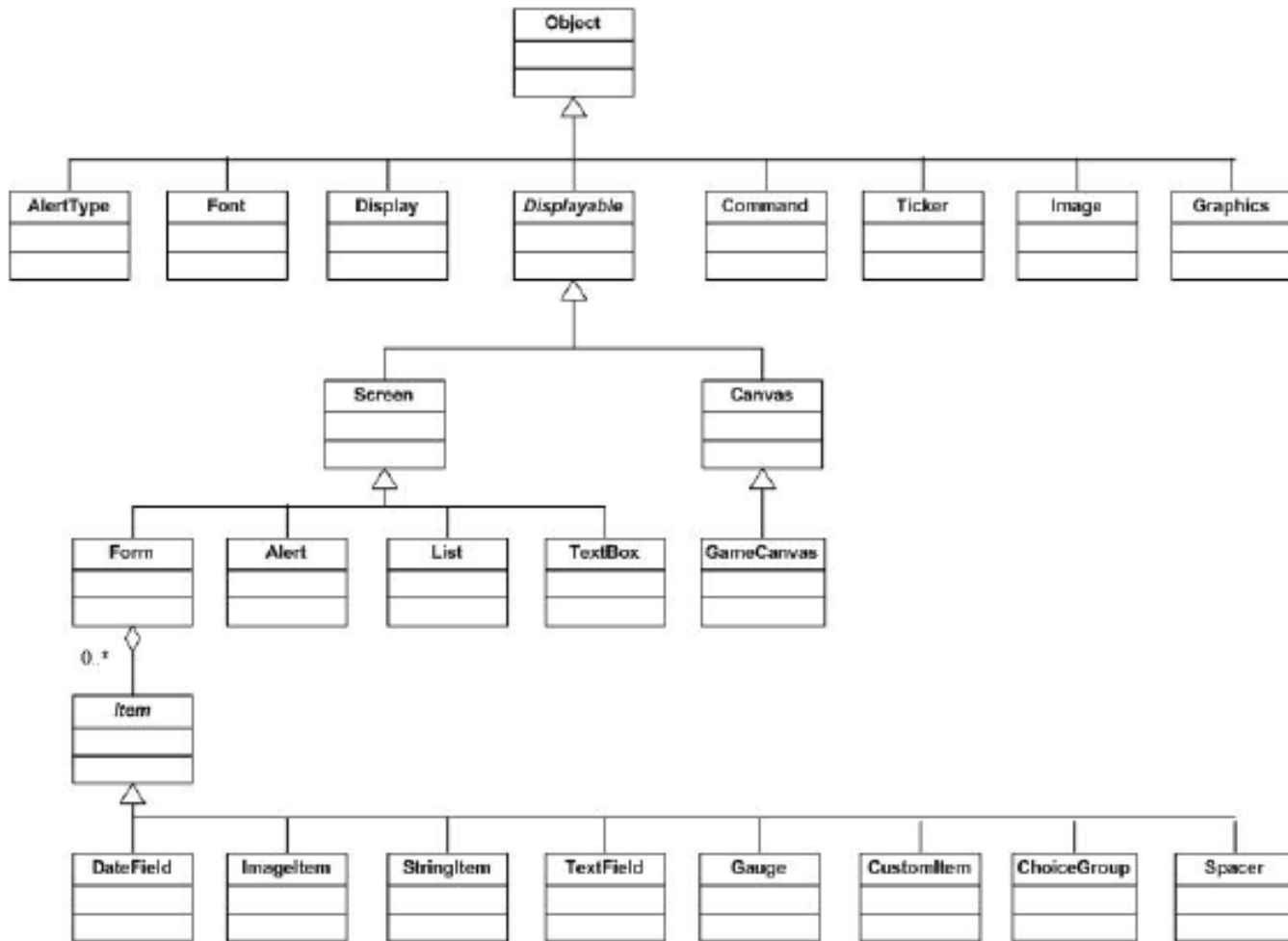
Mobile Computing

# Low Level UI

Ramos Somya, S.Kom.

## Low Level UI

- Spesifik look and feel
- Digunakan untuk mengontrol tampilan (menggambar pixel, shape, rendering, font)
- Mempunyai kendali yang lebih leluasa pada layar.
- Biasanya digunakan untuk membuat mobile game secara grafik.
- Contoh: canvas.



# contoh

```
public class ContohSVG extends MIDlet implements CommandListener {
```

```
    Kanfas kanfas;  
    Form fUtama;  
    Command ok, exit, back;
```

```
    public ContohSVG() {  
        this.fUtama = new Form("Form Utama");  
        this.ok = new Command("Ok", Command.OK, 1);  
        this.exit = new Command("Exit", Command.EXIT, 1);  
        this.back = new Command("Back", Command.BACK, 1);  
        this.fUtama.addCommand(ok);  
        this.fUtama.addCommand(exit);  
        this.fUtama.setCommandListener(this);  
    }
```



```
public void startApp() {  
    Display.getDisplay(this).setCurrent(fUtama);  
}  
  
public void pauseApp() {  
}  
  
public void destroyApp(boolean unconditional) {  
}
```



```
class Kanfas extends Canvas {  
  
    SVGImage svgImage = SVGImage.createEmptyImage(null);  
    Document doc = svgImage.getDocument();  
    SVGSVGElement svg = (SVGSVGElement) doc.getDocumentElement();  
    protected ScalableGraphics sg = ScalableGraphics.createInstance();  
    SVGElement r;  
  
    public SVGElement addElement() {  
        SVGRect vb = svg.createSVGRect();  
        vb.setWidth(getWidth());  
        vb.setHeight(getHeight());  
        svg.setRectTrait("viewBox", vb);  
    }  
}
```



```
SVGElement elm = (SVGElement) this.doc.createElementNS("", "rect");
    SVGRGBColor bkgColor = this.svg.createSVGRGBColor(255, 0, 255);
    elm.setRGBColorTrait("fill", bkgColor);
    elm.setFloatTrait("x", 60);
    elm.setFloatTrait("y", 60);
    elm.setFloatTrait("rx", 60);
    elm.setFloatTrait("ry", 60);
    elm.setFloatTrait("width", 30);
    elm.setFloatTrait("height", 30);
    svg.appendChild(elm);
    return elm;
}
```

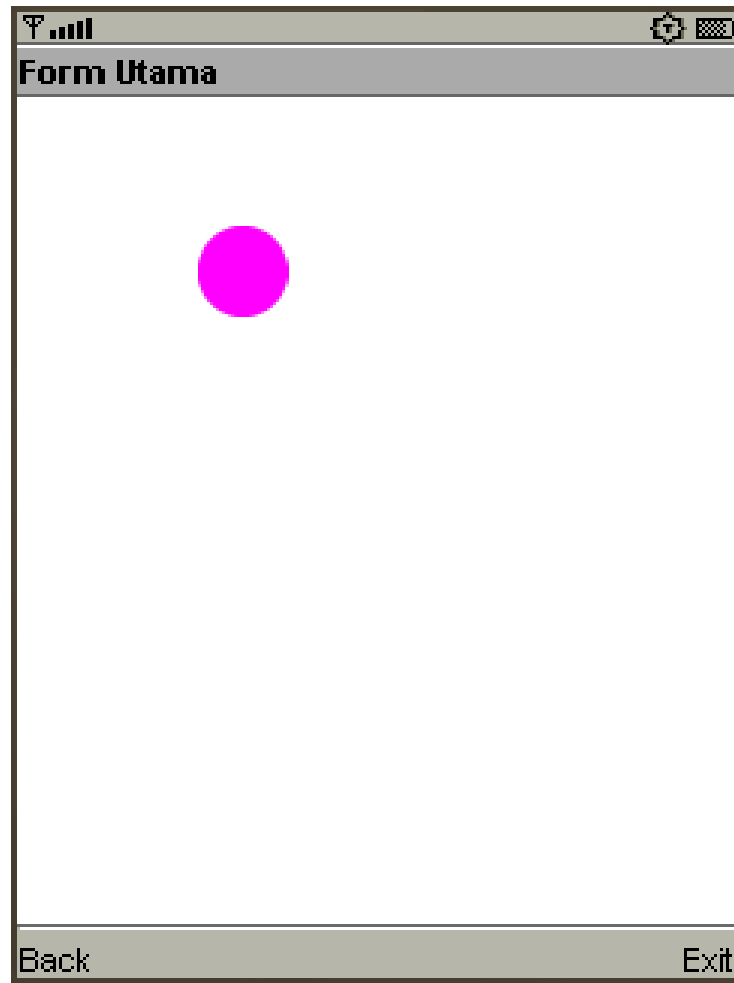


```
protected void paint(Graphics g) {  
    sg.bindTarget(g);  
    svgImage.setViewportWidth(getWidth());  
    svgImage.setViewportHeight(getHeight());  
    sg.render(o, o, svgImage);  
    sg.releaseTarget();  
}  
}
```



```
public void commandAction(Command c, Displayable d) {
    if (c == exit) {
        destroyApp(true);
        notifyDestroyed();
    }
    if (c == ok) {
        this.kanfas = new Kanfas();
        this.kanfas.addCommand(back);
        this.kanfas.addCommand(exit);
        this.kanfas.setCommandListener(this);
        this.kanfas.addElement();
        this.kanfas.repaint();
        Display.getDisplay(this).setCurrent(kanfas);
    }
    if (c == back) {
        Display.getDisplay(this).setCurrent(fUtama);
    }
}
}
```

# Hasil



# Tugas Rancang

- Dikerjakan maksimal 2 mahasiswa.
- Output: program dan laporan (jurnal).

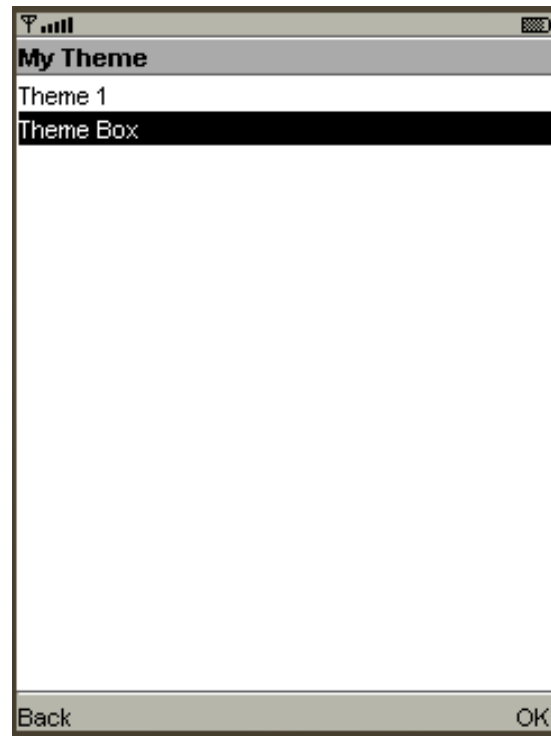
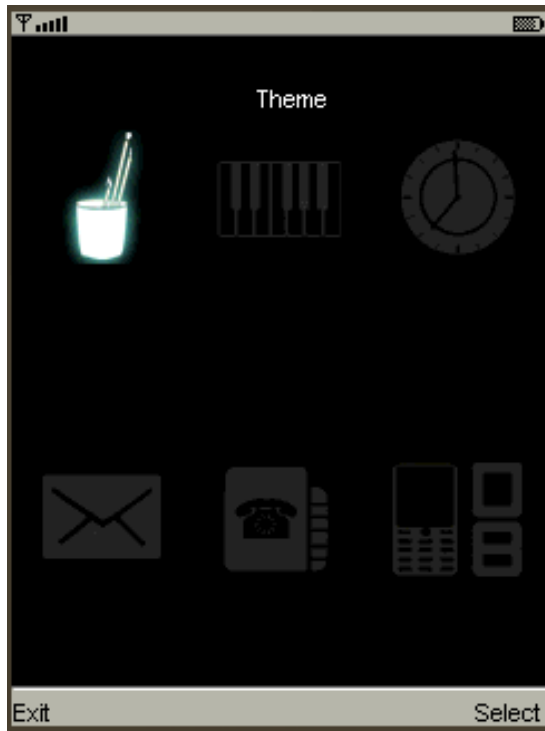
# jadwal

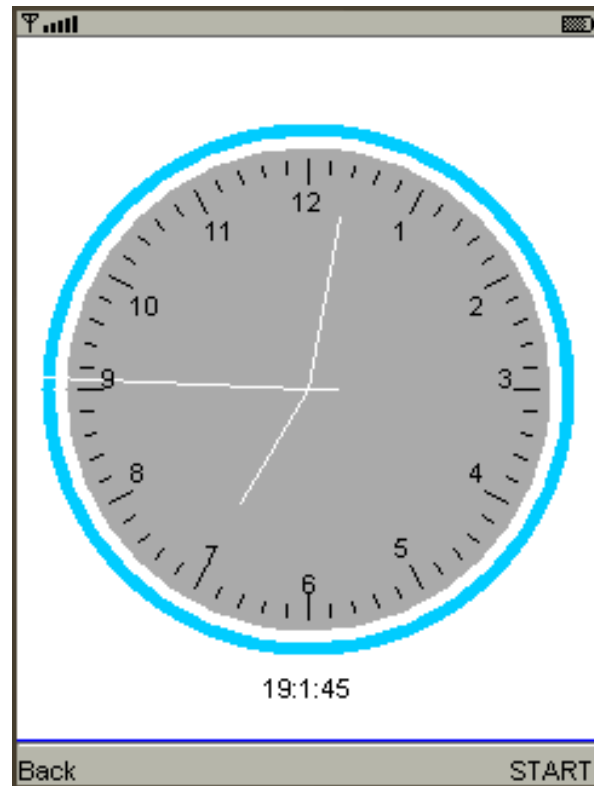
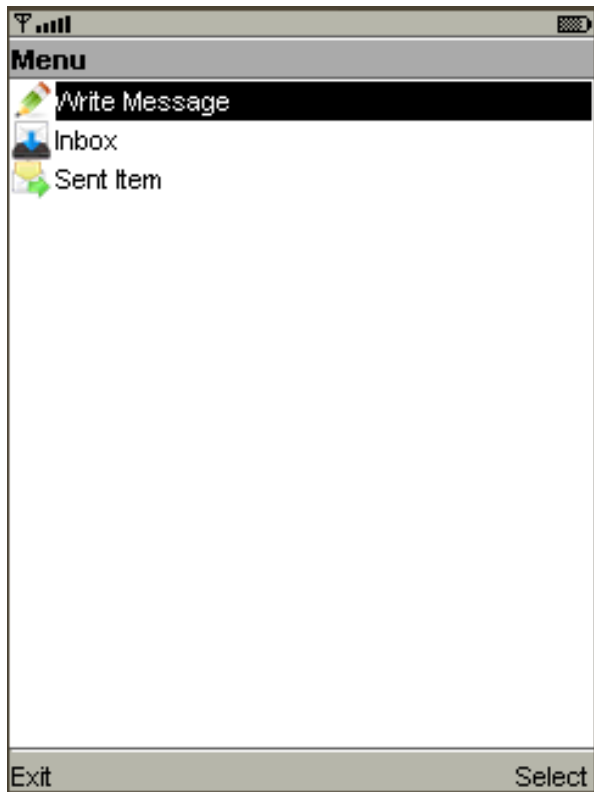
- **9/11/2011 : pengumuman TR**
- **16/11/2011 : LIBUR (TR)**
- **23/11/2011 : LIBUR (TR)**
- **30/11/2011 : presentasi**
- **...**

## Topik TR

- **Buatlah sebuah aplikasi handphone J2ME lengkap.**
- **Minimal terdapat 6 menu yang disediakan.**
- **Misal: menu SMS, Alarm, Music Player, Game.**
- **Ada fitur untuk ganti Themes (minimal ada 3 themes yang tersedia).**
- **Harus diimplementasikan di handphone.**

# contoh





---

**Terima Kasih**