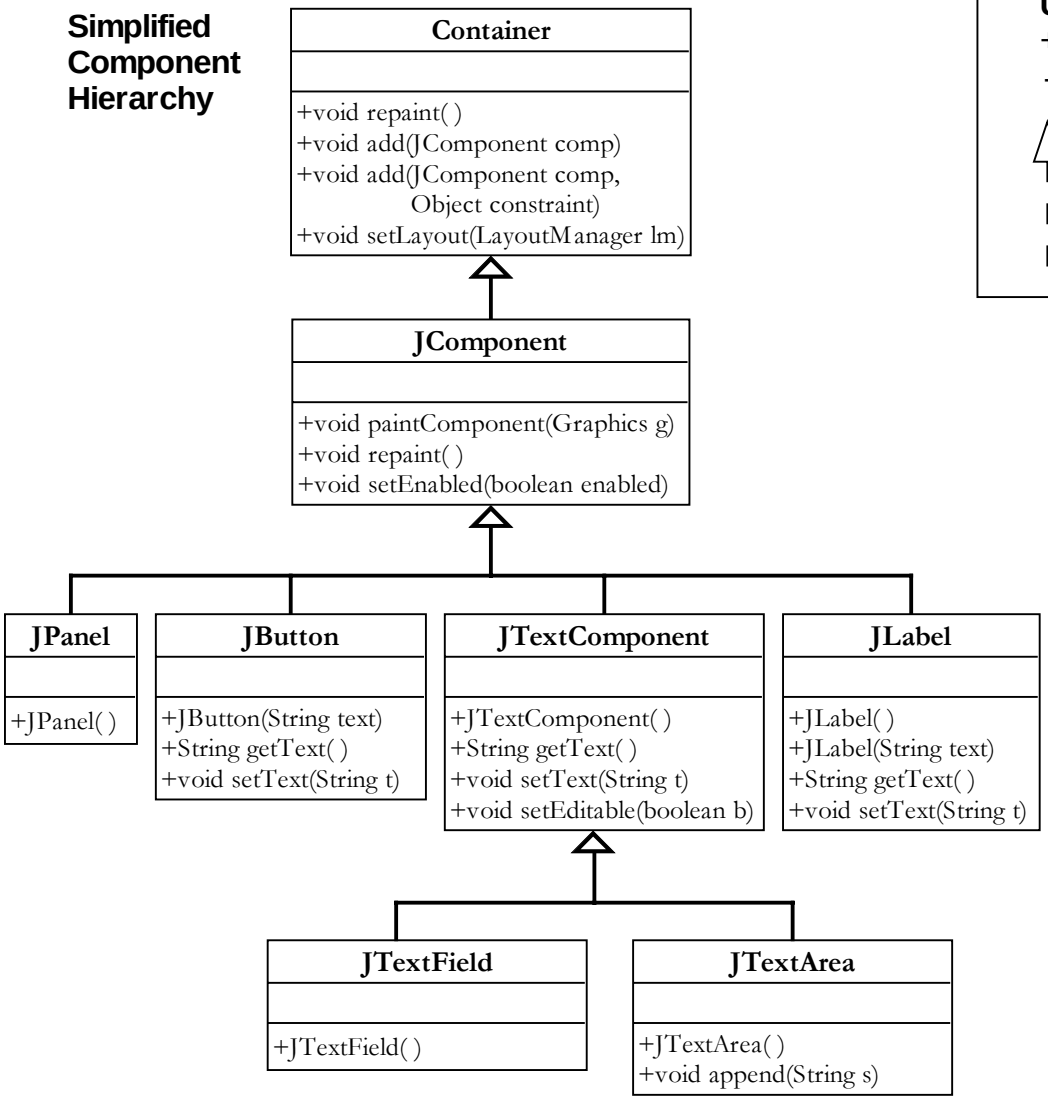
CS132 Winter 2005 Final Exam Reference Booklet

Selected GUI Documentation

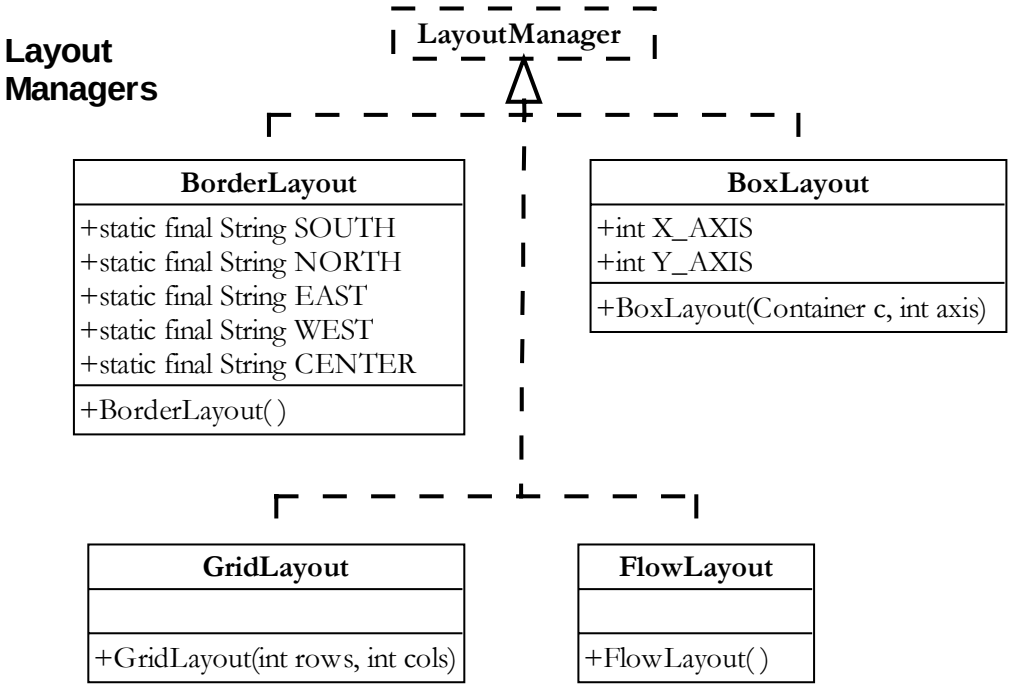
Simplified Component Hierarchy



UML Notes
+ means public
- means private

means implements an interface

Layout Managers



EventListeners

```
ActionListener
+void actionPerformed(ActionEvent e)

FocusListener
+void focusGained(FocusEvent e)
+void focusLost(FocusEvent e)

MouseListener
+void mouseClicked(MouseEvent e)
+void mouseEntered(MouseEvent e)
+void mouseExited(MouseEvent e)
+void mousePressed(MouseEvent e)
+void mouseReleased(MouseEvent e)
```

Documentation for the "Types, Inheritance, Polymorphism and Interfaces" Question on pages 17 – 19

```
public class Parent extends Object
{
    private double a;

    public Parent(double x)
    {   super();
        this.a = x;
    }

    public void silly(double x)
    {   this.a = this.a * x;
    }

}
```

```
public interface AnInterface
{
    public void nonsense(double x);

}
```

```
public class ChildA extends Parent
{
    private double b;

    public ChildA()
    {   super(10.0);
        this.b = 10.0;
    }

    public void nonsense(double x)
    {   this.b = x + 999.0;
    }

    public void silly(double y)
    {   double z = y * this.b;
        super.silly(z);
    }

}
```

```
public class ChildB extends Parent
            implements AnInterface
{
    private double b;

    public ChildB(double x, double y)
    {   super(x * 2.0);
    this.b = y;
    }

    public void nonsense(double z)
    {   System.out.println(this.b);
    }

    public void foo(double w)
    {   this.silly(w);
    }

}
```

```
public class GrandChildA extends ChildA
            implements AnInterface
{
    public GrandChildA()
    {   super();
        System.out.println("I Love
                                Java");
    }

}
```

```
public class GrandChildB extends ChildB
            implements AnInterface
{
    public GrandChildB(double x,
                       double y)
    {   super(x, y);
    }

    public void nonsense(double z)
    {   System.out.println("CS 134 is
                               next");
    }

    public void silly(double w)

    {   System.out.println("Summer is
                           almost here");
    }

}
```