

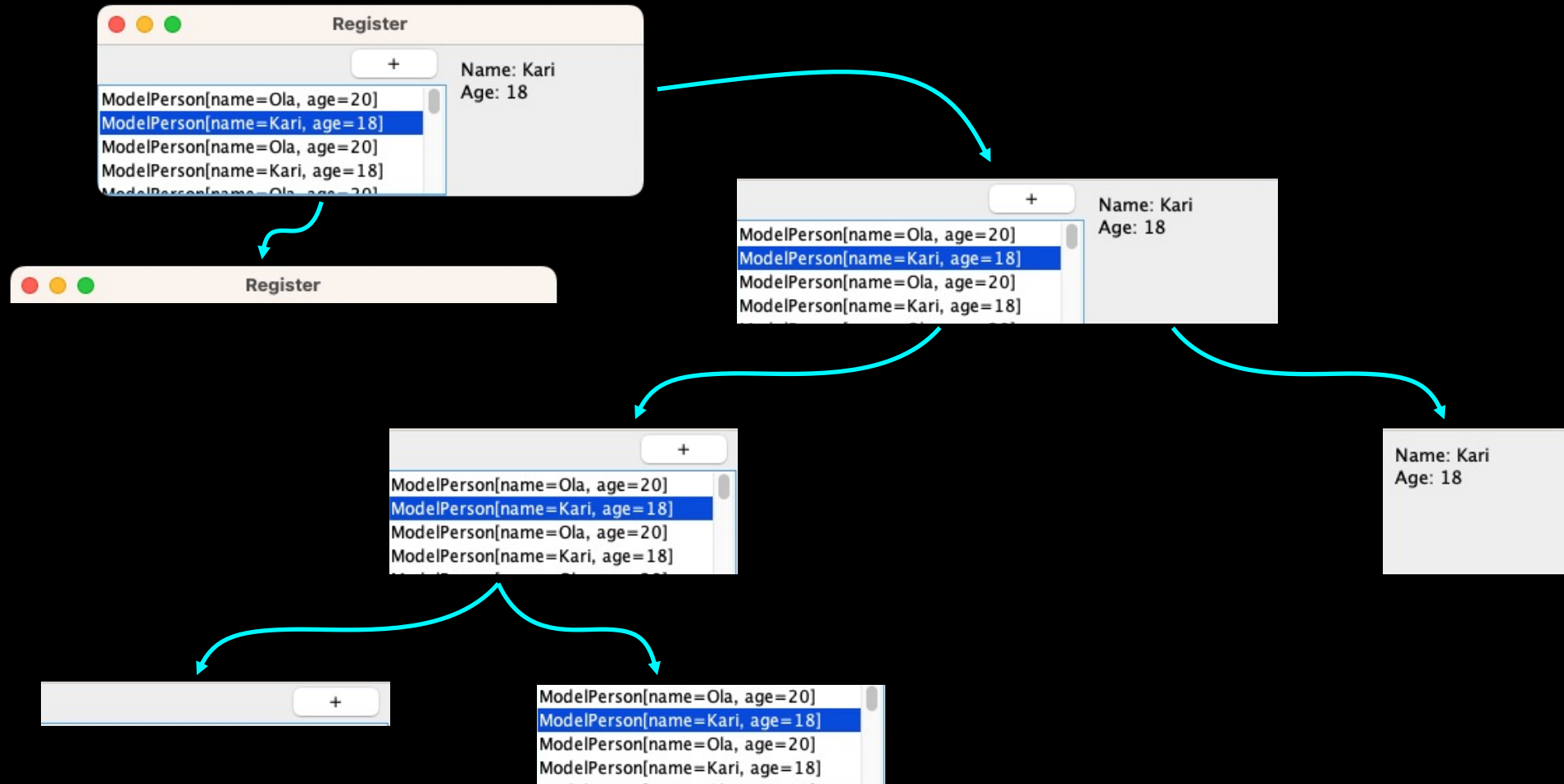
Et grafikk-hierarki

INF101 forelesning 14. mars 2023

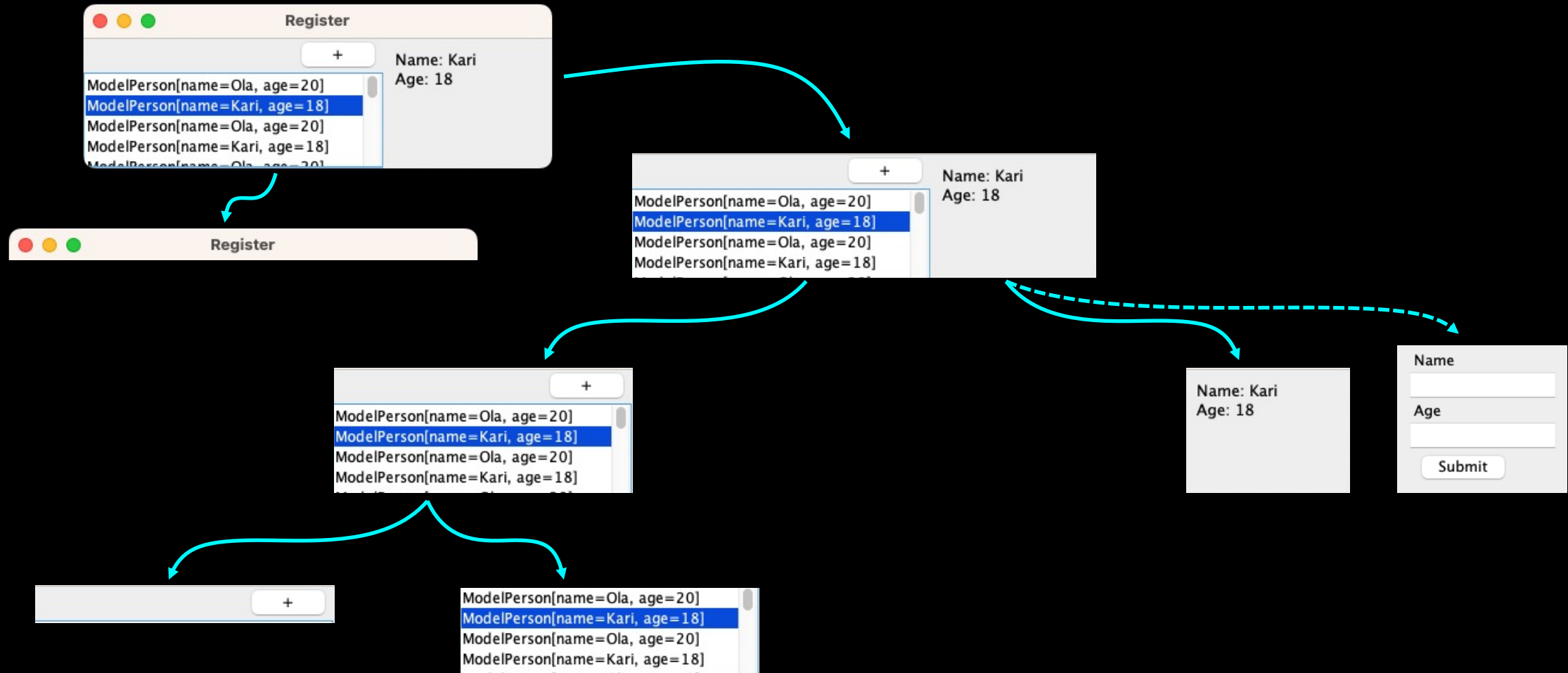
Torstein Strømme

Stikkord: swing, UML, funksjonelle grensesnitt, observerbar

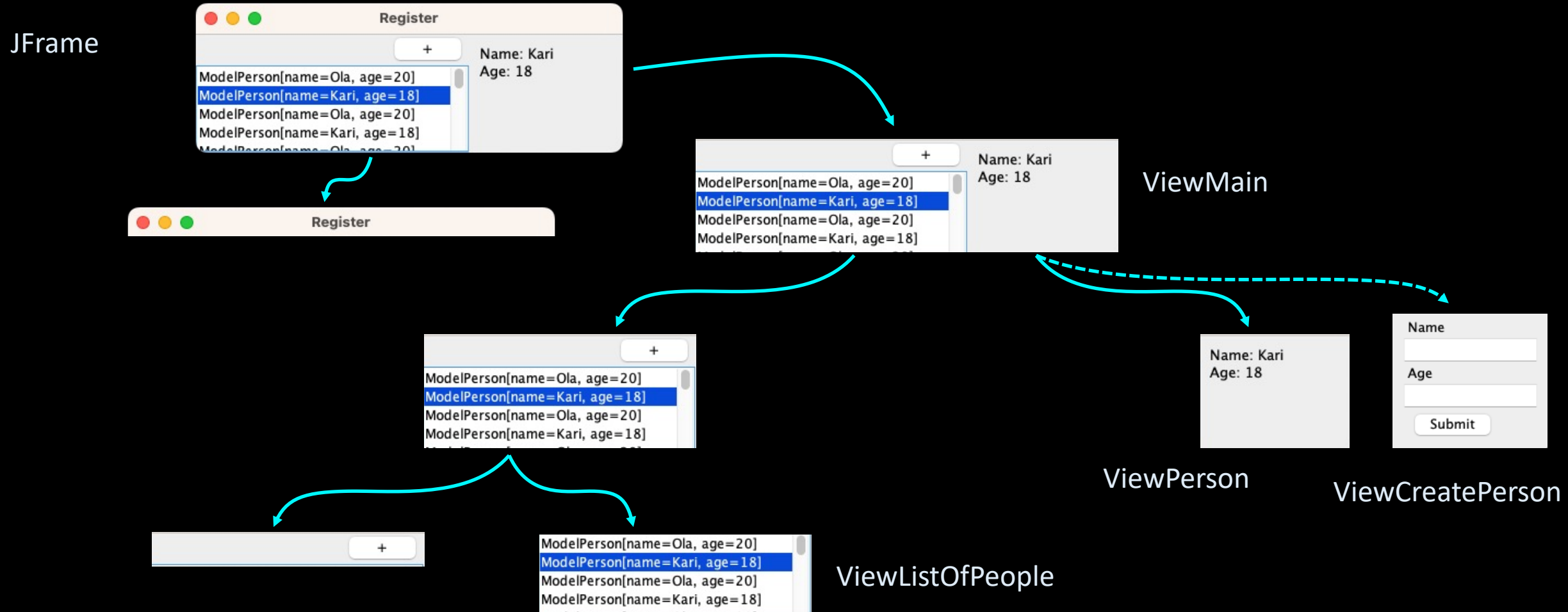
Et hierarki av grafiske komponenter



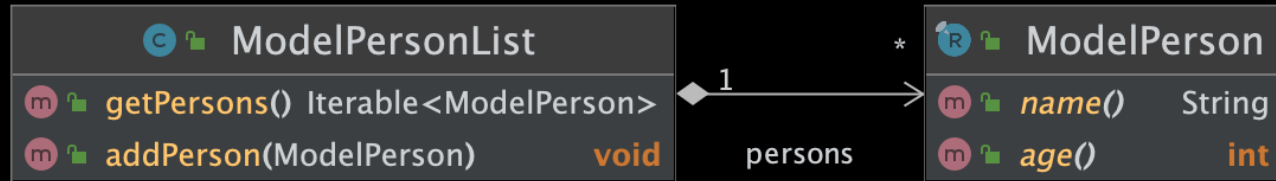
Et hierarki av grafiske komponenter



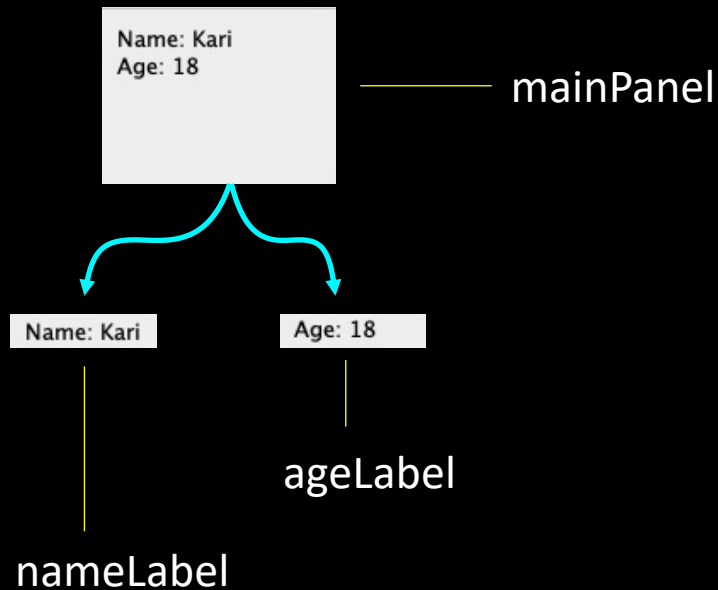
Et hierarki av grafiske komponenter



Modellen



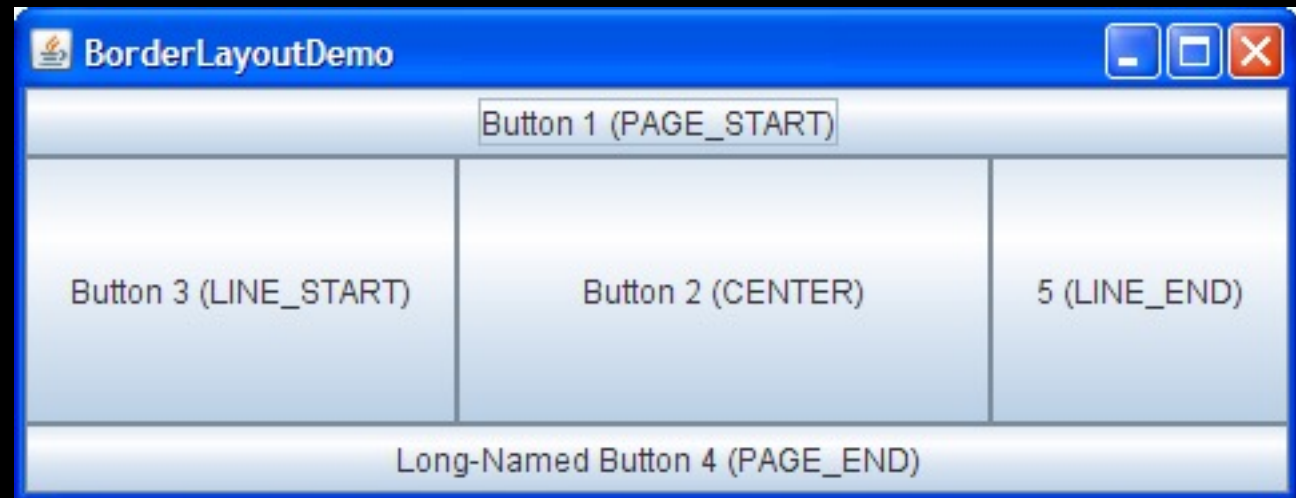
ViewPerson



```
public class ViewPersonData {  
  
    private final JLabel nameLabel;  
    private final JPanel mainPanel;  
    private final JLabel ageLabel;  
  
    public ViewPersonData(ModelPerson model) {  
        this.mainPanel = new JPanel();  
        this.nameLabel = new JLabel();  
        this.ageLabel = new JLabel();  
  
        this.mainPanel.setLayout(new BorderLayout(this.mainPanel, BorderLayout.Y_AXIS));  
        this.mainPanel.add(this.nameLabel);  
        this.mainPanel.add(this.ageLabel);  
  
        setPerson(model);  
    }  
  
    private void setPerson(ModelPerson person) {  
        if (person == null) {  
            this.nameLabel.setText("No person selected");  
            this.ageLabel.setText("");  
        } else {  
            this.nameLabel.setText("Name: " + person.name());  
            this.ageLabel.setText("Age: " + person.age());  
        }  
    }  
  
    public JComponent getMainComponent() {  
        return this.mainPanel;  
    }  
}
```

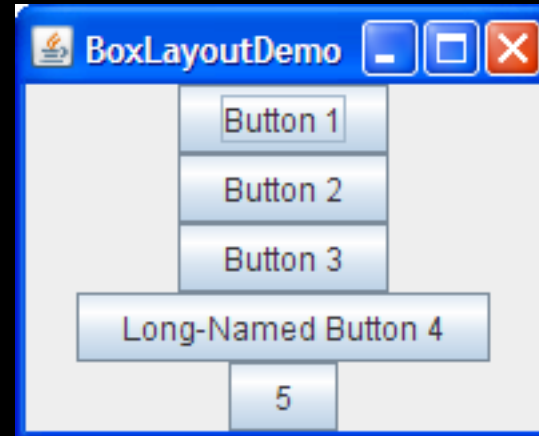
Swing: layout manager

- Flere ulike layout-managere å velge mellom:
- **BorderLayout**



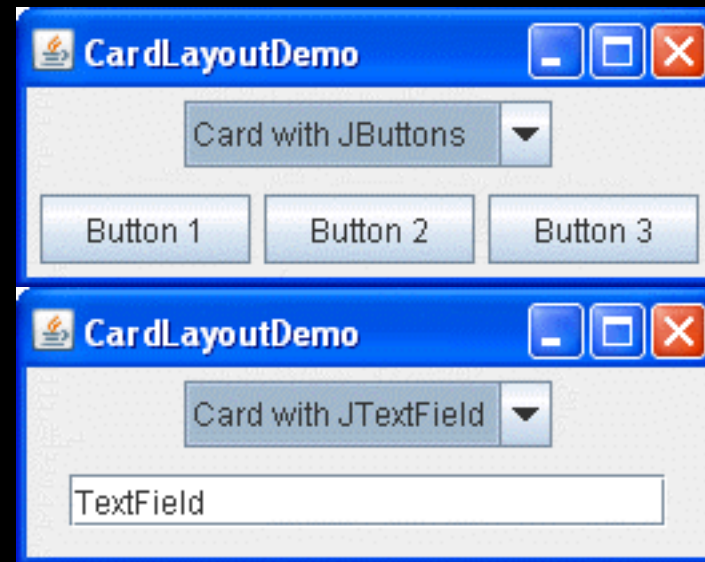
Swing: layout manager

- Flere ulike layout-managere å velge mellom:
- BorderLayout
- **BoxLayout**



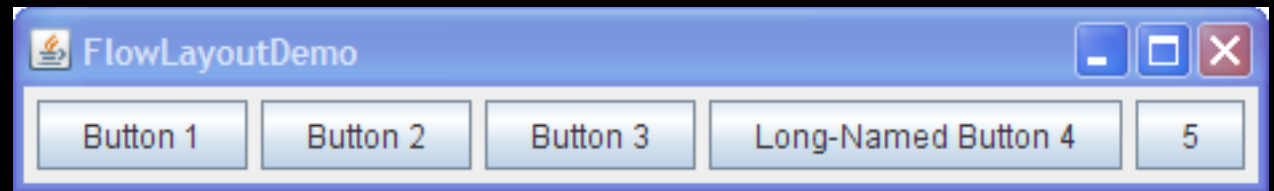
Swing: layout manager

- Flere ulike layout-managere å velge mellom:
- BorderLayout
- BoxLayout
- **CardLayout**



Swing: layout manager

- Flere ulike layout-managere å velge mellom:
- BorderLayout
- BoxLayout
- CardLayout
- **FlowLayout**



Swing: layout manager

- Flere ulike layout-managere å velge mellom:
- BorderLayout
- BoxLayout
- CardLayout
- FlowLayout
- **GridLayout**



Swing: layout manager

- Flere ulike layout-managere å velge mellom:
- BorderLayout
- BoxLayout
- CardLayout
- FlowLayout
- GridLayout
- og flere eksempler:

<https://docs.oracle.com/javase/tutorial/uiswing/layout/visual.html>

<https://docs.oracle.com/javase/tutorial/uiswing/examples/layout/index.html>