

Ekstraopgave 5

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import java.applet.*;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.event.*;

public class CardGame extends Applet {
    private JButton sortButton, shuffleButton, hideButton;
    private JPanel buttonPanel;
    private CardCanvas cardCanvas;
    private Deck deck;

    private class CardCanvas extends Canvas {
        public void paint(Graphics g) {
            g.setColor(Color.white);
            g.fillRect(0, 0, (int) getSize().width,
                (int) getSize().height);
            int x = 0, y = 0, i = 0;
            for (Card card : deck) {
                g.drawImage(card.toImage(), x, y, CardGame.this);
                if (++i % 13 == 0) {
                    y += getSize().height / 4;
                    x = 0;
                } else
                    x += (getSize().width - 50) / 13.0;
            }
        }
    }
}
```

```

public void init() {
    sortButton = new JButton("Sort");
    sortButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            deck.sort();
            repaint();
        }
    });
    shuffleButton = new JButton("Shuffle");
    shuffleButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            deck.shuffle();
            deck.sortHands();
            repaint();
        }
    });
    hideButton = new JButton("Show Deck");
    hideButton.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            if (deck.faceUp()) {
                deck.hide();
                hideButton.setText("Show Deck");
            } else {
                deck.show();
                hideButton.setText("Hide Deck");
            }
            repaint();
        }
    });
    setLayout(new BorderLayout());
    buttonPanel = new JPanel();
    buttonPanel.add(sortButton);
    buttonPanel.add(shuffleButton);
    buttonPanel.add(hideButton);
    buttonPanel.setBackground(Color.white);
    add(buttonPanel, BorderLayout.NORTH);
    deck = new Deck(this);
    cardCanvas = new CardCanvas();
    add(cardCanvas, BorderLayout.CENTER);
}
}

```