Lab 14

Casey Sorrells

Code

// initial setup

int timeDelayStart = 30;

int timeDelay = timeDelayStart;

int score = 0;

// use a String array to hold the file name of every card in the deck

String whatCard[] = {

"c1.gif",

"c10.gif",

"c2.gif",

"c3.gif",

"c4.gif",

"c5.gif",

"c6.gif",

"c7.gif",

"c8.gif",

"c9.gif",

"cj.gif",

"ck.gif",

"cq.gif",

"d1.gif",

"d10.gif",

"d2.gif",

"d3.gif",

"d4.gif",

"d5.gif",

"d6.gif",

"d7.gif",

"d8.gif",

"d9.gif",

"dj.gif",

"dk.gif",

"dq.gif",

"ec.gif",

"h1.gif",

"h10.gif",

"h2.gif",

"h3.gif",

"h4.gif",

"h5.gif",

"h6.gif",

"h7.gif",

"h8.gif",

"h9.gif",

"hj.gif",

"hk.gif",

"hq.gif",

"jb.gif",

"jr.gif",

"s1.gif",

"s10.gif",

"s2.gif",

"s3.gif",

"s4.gif",

"s5.gif",

"s6.gif",

"s7.gif",

"s8.gif",

"s9.gif",

"sj.gif",

"sk.gif",

"sq.gif"

};

int xCoordinates[] = {10, 110, 210, 310};

int yCoordinates[] = {50, 200, 350};

int pair1, pair2, pair3, pair4, pair5, pair6; // Used to hold random numbers in memory for reuse

Sprite cards[] = new Sprite[] {

new Sprite(new ImageIcon(whatCard[pair1 = randomNumber(0, 53)]).getImage(), xCoordinates[0], yCoordinates[0]),

new Sprite(new ImageIcon(whatCard[pair2 = randomNumber(0, 53)]).getImage(), xCoordinates[1], yCoordinates[0]),

new Sprite(new ImageIcon(whatCard[pair3 = randomNumber(0, 53)]).getImage(), xCoordinates[2], yCoordinates[0]),

new Sprite(new ImageIcon(whatCard[pair4 = randomNumber(0, 53)]).getImage(), xCoordinates[3], yCoordinates[0]),

new Sprite(new ImageIcon(whatCard[pair5 = randomNumber(0, 53)]).getImage(), xCoordinates[0], yCoordinates[1]),

new Sprite(new ImageIcon(whatCard[pair6 = randomNumber(0, 53)]).getImage(), xCoordinates[1], yCoordinates[1]),

new Sprite(new ImageIcon(whatCard[pair1]).getImage(), xCoordinates[2], yCoordinates[1]),

new Sprite(new ImageIcon(whatCard[pair2]).getImage(), xCoordinates[3], yCoordinates[1]),

new Sprite(new ImageIcon(whatCard[pair3]).getImage(), xCoordinates[0], yCoordinates[2]),

new Sprite(new ImageIcon(whatCard[pair4]).getImage(), xCoordinates[1], yCoordinates[2]),

new Sprite(new ImageIcon(whatCard[pair5]).getImage(), xCoordinates[2], yCoordinates[2]),

new Sprite(new ImageIcon(whatCard[pair6]).getImage(), xCoordinates[3], yCoordinates[2])

};

// Instantiate Concentration Object

Concentration conObject = new Concentration(cards);

// Track how many cards are in play:

int numOfCards = cards.length;

public void initializeSprites(){

//type your sprite initialization code here

}

/\*\*

\* paint the current frame of the game

\* @param g handle to the screen

\*/

public void paintFrame(Graphics g) {

// Do all this every 1/15th of a second:

if (numOfCards < 1) {

g.setFont(new Font("Impact", Font.BOLD, 48));

g.drawString("YOU WIN!", 75, 200);

return;

}

// Draw Cards

conObject.paintComponent(g);

// Check for two or more cards being face up, if so, start here:

if (conObject.numberOfFaceUpCards() > 1) {

// If two or more cards are face up, do they match?

if (conObject.doAllFaceUpCardsMatch()) {

// Now if two or more cards are face up, and they match,

// AND the timeDelay counter is less than 1,

// turn face up cards invisible, and decrement

// the visible card tracker.

if (timeDelay < 1) {

conObject.makeAllFaceUpCardsInvisible();

numOfCards -= 2;

// flip everything face down, reset timeDelay,

// and exit the loop.

conObject.flipAllCardsFaceDown();

timeDelay = timeDelayStart;

return;

}

// If two or more cards are face up, and they match,

// but timeDelay isn't down to 0 yet, decrement timeDelay,

// and exit the loop.

timeDelay--;

return;

}

// if two or more cards are face up, but they do NOT match,

// AND the timeDelay is less than 1, do this:

if (timeDelay < 1) {

conObject.flipAllCardsFaceDown();

timeDelay = timeDelayStart;

}

// If two or more cards are face up, but they don't match,

// and timeDelay is NOT less than 1, decrement timeDelay,

// and exit the loop.

timeDelay--;

return;

}// If there are less than 2 cards face up, continue here:

// Check if a card has been clicked on, if so, turn it face up.

conObject.ifMouseIsClickedOnCardThenFlipCardFaceUp();

}

**Screenshots**



