AbstractCommand Attributes AbstractCommand() abstract void excute()

abstract void unExcute()

AbstractState protected AbstractState nextState public AbstractState() seNext(AbstractState nextState) abstract void nextAction(LadyBird bird)

public

LadyBird Attributes public LadyBird() nextAction() paint(Graphics g) collide(LadyBird other) boolean turn() boolean go() setState(AbstrateState s) setSize(int size) int getSize() int geX() int getY() setColors(Color bodyColor, Color dotColor) Color getColor() Color getDotColor() setGoal(int x, int y)

```
LadyBirdSettings

Attributes

public

LadyBirdSettings(int halfLadyBirdSize, Color body, Color dot)
LadyBirdSettings(LadyBirdSettings settings)
Color getColor()
Color getDotColor()
int getHalfLadyBirdSize()
int getHalfSizeOfSpot()
int getNumberOfDots()
int getStepSize()
```

private LadyBirdManager extends Thread implements Runnable private LadyBirdManager() public LadyBirdManager instance() setApplet(JApplet a) run() LadyBird createLadyBird() removeLadyBird(LadyBird bird) addLadyBird(LadyBird bird) markLadyBirdAt(int x , int y) boolean isLadyBirdAt(int x, int y) LadyBird getMarkedLadyBird() paint(Graphics g)

FarmApplet extends JApplet implements MouseListener, KeyListener

```
public

FarmApplet()

init()

paint(Graphics g)

mousePressed(MouseEvent e)

mouseReleased(MouseEvent e)

mouseEntered(MouseEvent e)

mouseClicked(MouseEvent e)

mouseExited(MouseEvent e)

keyReleased(KeyEvent e)

keyPressed(KeyEvent e)

keyTyped(KeyEvent e)

private

addCommand(AbstractCommand c)

undoCommand()
```

```
NullState extends AbstractState

Attributes

public

NullState()

nextAction(LadyBird bird)
```