Symantec Visual Cafe (Java 1.1) Starter's Manual

A pattern-matching guide for computer geeks

Warning: This is not a replacement for a good book. Two good books that you should know about are "Jave in a Nutshell" and "Just Java." The Nutshell book is a really good reference book—it's basically Symantec's Class Browser in paper form. Just Java, by Peter van der Linden, is a really good intro to the language, for the unititiated. From Amazon, you can buy the nut for $15.96 and Just Java for $27.96..

Conversions

strings and integers

String.valueOf(5) ➔ "5"
(Integer.parseInt("5")) ➔ 5

Data Structures

vectors

```
Vector newgolds = new Vector();
newgolds.addElement(newgoldie);
newgolds.removeElementAt(0);
newgolds.elementAt(0);
newgolds.removeAllElements();
newgolds.size()
```

arrays

int[] oldcell = new int[2];
if the array is really just an object then you reference it like this:

```
Array.getInt(object_array, indexnum);
Array.setInt(object_array, indexnum, value);
```

time

```
Date curdate = new Date();
long start_time = curdate.getTime();
```

you'll need **import java.util.***

Math

Math.cos and Math.sin, Math.PI. Enough said.

Flow Control

You can use sleep but you must catch the exception:

```
            try {
                Thread.sleep(500);
            } catch (InterruptedException e)
            {
                System.out.println("Interrupted Sleep exception");
            }
```

```
if (goldspec.length == 2) {
            this.drawGold(goldspec[0],goldspec[1]);
        } else if (goldspec.length == 4) {
            this.drawGold(goldspec[0],goldspec[1],
                        goldspec[2],goldspec[3]);
        } else return(false);
```

```
for (int j=0; j < this.height; j++) {
        ...
        }
```

```
       switch (action) {
          case Console.LEFT:
          case Console.RIGHT:
              newrobot[2] = (newrobot[2]+action)%4;
              return( newstate);
          case Console.GRAB:
              goldGrab(newrobot, newgolds,maze);
              return( newstate);
       } // endswitch //

      while (this.needGold(0)) {
          if (this.getGold(this.computeNeed(0),1,this.robot1) == false) {
              System.out.println("No more gold reachable");
              return;
          } // endif
      } // endwhile
```

You can flow whatever you want out to a simple text file: you need **import java.io.***

```
            try {
                // opens "diary" for appending //
                FileOutputStream fos = new FileOutputStream("diary.txt",true);
                diary = new PrintWriter(fos,true);
            } // endtry
```

```
catch (IOException e) { System.out.println(e); }
diary.println("DIARY FILE BEGINS");
```

Exiting a program

The equivalent of C's exit(0) is: System.exit(0);

Symantec Pointers

You can do printouts straight to the Console:

System.out.println("hello there");

You can even use "+" to put together values of your variables with text:

```
System.out.println("Minimal Cooperation Game; delta = " +
                        String.valueOf(this.delta) + "and my cooling fan is on.");
```

Always put this.setVisible(true) *in your frames.*

Use the right mouse button on a word to go to the class browser on that keyword.

import java.awt.* *and* import java.util.* *are your friends. Be sure to note what you need to import for your favorite objects and classes to exist.*

When you're doing graphics:

this.refresh *is really useful*

Graphics.drawLine, Graphics.drawRect, Graphics.fillOval*are pretty cool, too.*

To write text where you want: Graphics.drawString.

You need colors? Try Color.yellow, Color.green *and* (new Color(12632256))