CMPT 365 PA2_Blind   JAVA

Programs:
The sample files include two java applications: **VideoFrame.java**, and
OscillatorPlayer.java. They are both written in JMF(Java Media Framework) from
java.sun.com.

VideoFrame.java is used to read video frames. It consists of two classes: *VideoFrame* and
ProcessFrame. VideoFrame generates a window frame, sets up the menus, accepts a
video file, and send the video to the ProcessFrame. VideoFrame implements *effect plug-
in component* by which users can put user-defined effects into the video playing. Here,
we simply use it to read pixel values from each frame.

In the ProcessFrame class, notice the following commented part:

```
for ( int j = 0; j < ih; j++ )
{
      for ( int i = 0; i < iw; i++ )
      {
       pixelR = inData[ip++];
       pixelG = inData[ip++];
       pixelB = inData[ip++];
      }
}
```

This is an example showing how to read pixel values from the current frame buffer
inData.

OscillatorPlayer.java is a "shruken" version of a waveform playing program from
http://www.jsresources.org/examples/OscillatorPlayer.html. It includes two classes:
OscillatorPlayer and *Oscillator*. OscillatorPlayer plays a sine wave that is created by
Oscillator class.

Requirements:
Platform: JDK 1.1.6 or later
JMF API: 2.0 or later

How to run this sample:
If working not in the Lab: Set the CLASSPATH to point to them.
Alternately, in the Lab or not, simply work in the same directory.

For VideoFrame.java,
1. Run in command line: javac VideoFrame.java
                         java VideoFrame
2. Chose File → Open to load a video file, click the Frame item to dis/play it.
NOTE: Videos in formats other than motion JPEG avi(not all avi files are motion JPEG),
may exhibit unusual playback behavior.

For OscillatorPlayer.java
1. Run in command line: javac OscillatorPlayer.java
                         java OscillatorPlayer

To shut down OscillatorPlayer, simply press CTRL-C or use the Task Manager to close
the java process.

// Cheng Lu, 2004