 *DEPARTMENT OF INFORMATION TECHNOLOGY*

**MINI PROJECT REPORT**

**Title: Moving House using Applets in JAVA.**

**Team Members: 1)Abhishek Singh:17101B0061**

**2)Shravan Kegade:17101B0048**

**Explanation:**

**Basic animation techniques**

Many forms of animation are possible in Java. What all of them have in common is that they create some kind of motion on the screen by drawing successive frames at a relatively high speed (usually about 10-20 times per second).

We will start by creating a simple template applet for doing animations and slowly elaborate it until we arrive at a fairly complete applet.

**Using a thread**

To update the screen multiple times per second, you need to create a new Java thread that contains an animation loop. The animation loop is responsible for keeping track of the current frame and for requesting periodic screen updates. To implement a thread, you must either create a subclass of **Thread** or adhere to the Runnable interface.

A common mistake is to put the animation loop in the **paint()** method of an applet. Doing so will have strange side effects because it holds up the main AWT thread, which is in charge of all drawing and event handling.

As an example I have written a small template applet, called Example1Applet, that illustrates the general outline of an animation applet. Example1Applet shows how to create a thread and call the **repaint()** method at fixed intervals. The number of frames per second is specified by passing in an applet parameter. Here is an example of what you would put in your HTML document:

**Code:**

**/\***

**<applet code="Main184.class" width=400 height=450></applet>**

**\*/**

**import java.awt.\*;**

**import java.applet.\*;**

**import java.util.\*;**

**public class Main184 extends Applet implements Runnable**

**{**

**int xRect=150,yRect=150,x1Rect=200,y1Rect=200,xPol=300,x1Pol=225,x2Pol=25;**

**public void init()**

**{**

**setBackground(new Color(123,47,223));**

**}**

**public void start()**

**{**

**Thread th = new Thread(this);**

**th.start();**

**}**

**public void paint(Graphics gp)**

**{**

**int [] x = {xRect, xPol, x1Pol};**

**int [] y = {150, 150, x2Pol};**

**gp.drawRect(xRect, yRect, 150, 200); //House**

**gp.setColor(Color.red);**

**gp.fillRect(xRect,yRect, 150, 200);**

**gp.drawRect(x1Rect, y1Rect, 50, 150); // Door**

**gp.setColor(Color.green);**

**gp.fillRect(x1Rect,y1Rect, 50, 150);**

**gp.drawPolygon(x, y, 3); // Roof**

**gp.setColor(Color.blue);**

**gp.fillPolygon(x, y, 3);**

**gp.drawOval(x1Rect, 75, 50, 50); // Skylight**

**gp.setColor(Color.yellow);**

**gp.fillOval(x1Rect, 75, 50, 50);**

**}**

**public void run()**

**{**

**Thread.currentThread().setPriority(Thread.MIN\_PRIORITY);**

**while(true)**

**{**

**xRect = xRect+1;**

**x1Rect = x1Rect+1;**

**xPol = xPol+1;**

**x1Pol=x1Pol+1;**

**x2Pol = x2Pol;**

**repaint();**

**try**

**{**

**Thread.sleep(200);**

**}**

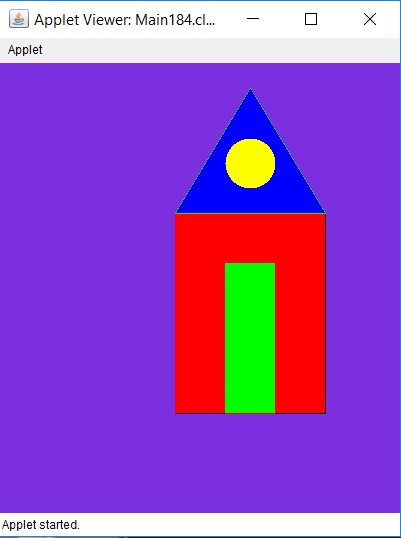
**catch(InterruptedException Ex)**

**{**

**}**

**}**

**OUTPUT :**

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