**Indian Institute of Information Technology, Allahabad**

**Object Oriented Methodology (OOM)**

**Mini Project-11**

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**OOM Mini Project #11: Applets Communication**

**Abstract of the project:**

In this project, you have to design two applets on the same Webpage that can communicate with each other using applet context. One applet will display different Shapes {Circle, Rectangle and Triangle} randomly and second applet that decide the color of the shapes. Here are some important steps that you have to follow:

1. Write a class named ShapeColorApplet that extends Applet. Add a field called ShapeSize, and a field of type String called ShapeName.
2. Add a method called setShapeSize ( ) that has different parameters depending on radius, sides of triangle rectangle (you choose your own). Use the getShapeSize ( ) method of initialize the ShapeSize field.
3. Add the start ( ) and stop ( ) methods to the ShapeColorApplet class having them display and stop in change of color in different shapes.
4. Within the start ( ) method use the showStatus ( ) method of the AppletContext interface to display the text “showing shape\_name\_size”, where the Shape\_size is the value of the field ShapeSize and its color.
5. Save and Complie the ShapeApplet.
6. Write a class named EnterShapeApplet that extends JApplet. Add two JButton fields play and Stop. And a TextField field called ShapeName. Also, add a field of type AppletContext.
7. Within init ( ) method initialize component fields. Also, initialize ApplerContextfield, then instantiate a new ColorListner object, passing the reference of the ShapeName textfiled and the AppletContextField.
8. Save your EnterShapeApplet class, and write a new class named ColorListner that implements ActionListener.
9. Write an HTML page named shapecolor.html. Add the ShapeColorApplet and EnterShapeApplet applets to the page, using two separate <applet> tags.
10. View the shapecolor.html page in your Web browser. You should be able to enter a shapename representing a shape, change the color of the shape by clicking the Play button, and stop it by clicking the Stop button.

**Specific Technology**

Java, Applet

**Project Tasks**

Use case analysis, Design, Implementation, and User Interface

### Submission

### The project presentation has to be done by each member to show periodically the progress and the complete project submission should contain the following:

* UML diagrams:-Use Case diagram, Class diagram, CRC diagram(s), illustrating the design of your program.

### All the Java source code should necessary to compile and execute.