PARSHVANATH CHARITABLE TRUST'S
A.P. SHAH INSTITUTE OF TECHNOLOGY
Department of Computer Science and Engineering
Data Science

Subject: SBL-OOPM **Class: SE-DS**

Semester: III **A.Y. 2022-2023**

Experiment No. 13

- **Aim :** To write a Java program to demonstrate status of key on Applet window such as KeyPressed, KeyReleased, KeyUp, KeyDown.

  Objectives : To will learn about Java applet program to demonstrate status of key on Applet window such as KeyPressed, KeyReleased, KeyUp, KeyDown from KeyListener Interface.
- **Prerequisites :** Students should know disadvantages of Procedure oriented programming language & the need of OOPs concepts to overcome those disadvantages.
- **Software used :** jdk 1.6.0
- **Theory :**

Java Applet

Applet is a special type of program that is embedded in the webpage to generate the dynamic content. It runs inside the browser and works at client side.

Advantage of Applet

There are many advantages of applet. They are as follows:

- It works at client side so less response time.
- Secured
- It can be executed by browsers running under many plateforms, including Linux, Windows, Mac Os etc.

Drawback of Applet

- Plugin is required at client browser to execute applet.

Lifecycle methods for Applet:

The java.applet.Applet class 4 life cycle methods and java.awt.Component class provides 1 life cycle methods for an applet.

java.applet.Applet class

For creating any applet java.applet.Applet class must be inherited. It provides 4 life cycle methods of applet.

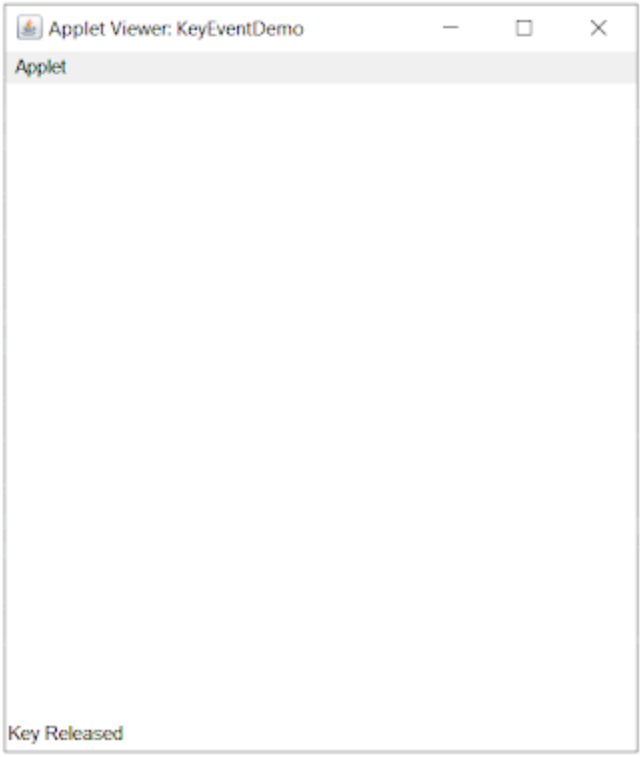
1. **public void init():** is used to initialized the Applet. It is invoked only once.
2. **public void start():** is invoked after the init() method or browser is maximized. It is used to start the Applet.

3. **public void stop():** is used to stop the Applet. It is invoked when Applet is stop or browser is minimized.
4. **public void destroy():** is used to destroy the Applet. It is invoked only once.
   java.awt.Component class

Que. Write a program to demonstrate status of key on Applet window such as KeyPressed, KeyReleased, KeyUp, KeyDown

```
import java.awt.*;
import java.applet.*;
import java.awt.event.*;
public class KeyEventDemo extends Applet implements KeyListener
{
   String msg = "";

   public void init()
   {
      addKeyListener(this);
   }

   public void keyReleased(KeyEvent k)
   {
      showStatus("Key Released");
      repaint();
   }

   public void keyTyped(KeyEvent k)
   {
      showStatus("Key Typed");
      repaint();
   }

   public void keyPressed(KeyEvent k)
   {
      showStatus("Key Pressed");
      repaint();
   }

   public void paint(Graphics g)
   {
      g.drawString(msg, 10, 10);
   }
}

/*
  <applet code="KeyEventDemo" height="400" width="400">
```

```
  </applet>
*/
```



CONCLUSION : Summaries what you understood from this lab.