K.RAMAKRISHNAN
COLLEGE OF TECHNOLOGY
An Autonomous Institution
Affiliated to Anna University Chennai, Approved by AICTE New Delhi,
ISO 9001:2015 & ISO 14001:2015 Certified Institution, Accredited with 'A+' grade by NAAC
Samayapuram, Tiruchirappalli – 621 112, Tamilnadu, India.

APPENDIX

```java
import java.awt.*;

import java.awt.event.*;

import java.text.SimpleDateFormat;

import java.util.Date;


public class DigitalClockAWT extends Frame {
    private Label timeLabel;

    private Choice formatChoice;

    private String timeFormat = "HH:mm:ss"; // Default 24-hour format


    public DigitalClockAWT() {
        // Set up the frame
        setTitle("Digital Clock");

        setSize(300, 150);

        setLayout(new BorderLayout());

        setResizable(false);

        setVisible(true);

        setBackground(Color.BLACK);


        // Time Label
        timeLabel = new Label("", Label.CENTER);

        timeLabel.setFont(new Font("Arial", Font.BOLD, 30));

        timeLabel.setForeground(Color.GREEN);

        add(timeLabel, BorderLayout.CENTER);
```

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```java
// Format Choice Panel

Panel choicePanel = new Panel();

choicePanel.setLayout(new FlowLayout());

formatChoice = new Choice();

formatChoice.add("24-Hour Format");

formatChoice.add("12-Hour Format");

choicePanel.add(new Label("Select Time Format:"));

choicePanel.add(formatChoice);

add(choicePanel, BorderLayout.SOUTH);


// Add a listener for format choice changes

formatChoice.addItemListener(new ItemListener() {

    public void itemStateChanged(ItemEvent e) {

        if (formatChoice.getSelectedItem().equals("12-Hour Format")) {

            timeFormat = "hh:mm:ss a"; // 12-hour format

        } else {

            timeFormat = "HH:mm:ss"; // 24-hour format

        }

    }

});


// Start the clock thread

Thread clockThread = new Thread(() -> {

    while (true) {

        updateTime();

        try {

            Thread.sleep(1000); // Update every second
```

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```java
        } catch (InterruptedException ex) {

            ex.printStackTrace();

        }

    }

});

clockThread.start();


// Close event for the window
addWindowListener(new WindowAdapter() {

    public void windowClosing(WindowEvent we) {

        System.exit(0);

    }

});

}


// Method to update the time
private void updateTime() {

    SimpleDateFormat formatter = new SimpleDateFormat(timeFormat);

    Date date = new Date();

    timeLabel.setText(formatter.format(date));

}


public static void main(String[] args) {

    new DigitalClockAWT();

}

}
```