import java.awt.BorderLayout;  
import java.awt.Color;  
import java.awt.Font;  
import java.awt.event.ActionEvent;  
import java.awt.event.ActionListener;  
import java.text.SimpleDateFormat;  
import java.util.Calendar;  
import javax.swing.BorderFactory;  
import javax.swing.JFrame;  
import javax.swing.JLabel;  
import javax.swing.JPanel;  
import javax.swing.SwingConstants;  
import javax.swing.Timer;

public class Digital\_clock extends JFrame {

private JLabel timeLabel;

private JLabel dateLabel;

public Digital\_clock() {

setTitle("Digital Clock");

setSize(500, 200);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setResizable(false);

// Create a panel to hold the time and date labels

JPanel panel = new JPanel();

panel.setBorder(BorderFactory.createEmptyBorder(20, 20, 20, 20));

panel.setLayout(new BorderLayout());

// Create a label to display the time

timeLabel = new JLabel();

timeLabel.setFont(new Font("Arial", Font.PLAIN, 60));

timeLabel.setHorizontalAlignment(SwingConstants.CENTER);

timeLabel.setVerticalAlignment(SwingConstants.CENTER);

timeLabel.setForeground(Color.RED);

// Create a label to display the date

dateLabel = new JLabel();

dateLabel.setFont(new Font("Arial", Font.PLAIN, 20));

dateLabel.setHorizontalAlignment(SwingConstants.CENTER);

dateLabel.setVerticalAlignment(SwingConstants.CENTER);

dateLabel.setForeground(Color.WHITE);

// Add the time and date labels to the panel

panel.add(timeLabel, BorderLayout.CENTER);

panel.add(dateLabel, BorderLayout.SOUTH);

// Set the panel's background color

panel.setBackground(Color.BLACK);

// Add the panel to the frame

add(panel);

// Use a Timer to update the time and date labels every second

Timer timer = new Timer(1000, new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) {

updateTimeAndDate();

}

});

timer.start();

}

private void updateTimeAndDate() {

// Get the current time and format it

Calendar calendar = Calendar.getInstance();

SimpleDateFormat timeFormatter = new SimpleDateFormat("HH:mm:ss");

String time = timeFormatter.format(calendar.getTime());

// Get the current date and format it

SimpleDateFormat dateFormatter = new SimpleDateFormat("EEE, MMM dd, yyyy");

String date = dateFormatter.format(calendar.getTime());

// Update the time and date labels

timeLabel.setText(time);

dateLabel.setText(date);

}

public static void main(String[] args) {

Digital\_clock clock = new Digital\_clock();

clock.setVisible(true);

}

}