package projects;

import java.awt.Color;

import java.awt.Font;

import java.awt.Frame;

import java.awt.Image;

import java.awt.Toolkit;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.awt.event.KeyEvent;

import java.awt.event.KeyListener;

import java.awt.event.WindowAdapter;

import java.awt.event.WindowEvent;

import java.text.SimpleDateFormat;

import java.util.Calendar;

import javax.swing.BorderFactory;

import javax.swing.ImageIcon;

import javax.swing.JButton;

import javax.swing.JLabel;

import javax.swing.JOptionPane;

import javax.swing.JProgressBar;

import javax.swing.JTextArea;

import javax.swing.Timer;

public class Digit\_to\_text extends Thread{

static Timer t;

static JProgressBar pb2,pb1;

static Frame f1,f2,f3;

static String sp\_n,time,day;

static boolean loopcontrol=true;

static SimpleDateFormat format;

static SimpleDateFormat dayformat;

static JLabel ml2,ml3;

static Calendar calender;

static Image icon;

public static void main(String[] args) {

f1=new Frame("DIGIT TO TEXT");

icon=Toolkit.getDefaultToolkit().getImage("D:\\NumberTOWordConverter\\images\\logo4.jpg");

ImageIcon image1=new ImageIcon("D:\\NumberTOWordConverter\\images\\b8.jpg");

JLabel i1=new JLabel(image1);

i1.setBounds(0,0,832,550);

ImageIcon image2=new ImageIcon("D:\\NumberTOWordConverter\\images\\b15.png");

JLabel i2=new JLabel(image2);

i2.setBounds(20,40,139,90);

ImageIcon image3=new ImageIcon("D:\\NumberTOWordConverter\\images\\b13.jpg");

JLabel i3=new JLabel(image3);

i3.setBounds(344,170,250,186);

i3.setBorder(BorderFactory.createLineBorder(new Color(0,0,0),3));

JLabel l1=new JLabel("NANDHA ENGINEERING");

l1.setBounds(180, 15, 560, 100);

l1.setForeground(new Color(0,0,0));

l1.setFont(new Font("Lucida Fax",Font.BOLD,33));

JLabel l2=new JLabel("COLLEGE");

l2.setBounds(240, 58, 560, 100);

l2.setForeground(new Color(0,0,0));

l2.setFont(new Font("Lucida Fax",Font.BOLD,33));

JLabel l3=new JLabel("(Autonomous)");

l3.setBounds(402, 65, 160, 100);

l3.setForeground(new Color(0,0,0));

l3.setFont(new Font("Lucida Fax",Font.ITALIC,15));

JLabel l4=new JLabel("DEPARTMENT OF");

l4.setBounds(40, 180, 360, 100);

l4.setForeground(new Color(0,0,0));

l4.setFont(new Font("Lucida Fax",Font.BOLD,30));

JLabel l5=new JLabel("CSE");

l5.setBounds(127, 237, 360, 100);

l5.setForeground(new Color(0,0,0));

l5.setFont(new Font("Lucida Fax",Font.BOLD,43));

JLabel l6=new JLabel("Digit to Text Converter");

l6.setBounds(160, 350, 600, 100);

l6.setForeground(new Color(0,0,0));

l6.setFont(new Font("Lucida Fax",Font.BOLD,25));

JLabel l7=new JLabel("Java Project");

l7.setBounds(230, 390, 300, 100);

l7.setForeground(new Color(0,0,0));

l7.setFont(new Font("Lucida Fax",Font.BOLD,25));

pb1=new JProgressBar();

pb1.setValue(0);

pb1.setForeground(new Color(0,255,0));

pb1.setBackground(new Color(60,60,60));

pb1.setBounds(110, 470, 420, 30);

pb1.setBorder(BorderFactory.createLineBorder(new Color(0,0,0),3));

pb1.setFont(new Font("Bahnschrift SemiBold",Font.BOLD,15));

pb1.setStringPainted(true);

f1.add(l1);

f1.add(l2);

f1.add(l3);

f1.add(l4);

f1.add(l5);

f1.add(l6);

f1.add(l7);

f1.add(i2);

f1.add(i3);

f1.add(pb1);

f1.add(i1);

f1.setSize(630,550);

f1.setLayout(null);

f1.setVisible(true);

f1.setIconImage(icon);

f1.setLocationRelativeTo(null);

f1.setBackground(new Color(255,255,255));

f1.addWindowListener(new WindowAdapter(){

public void windowClosing(WindowEvent e) {

f1.dispose();

}

});

fill1();

}

static void fill1(){

int c=0;

try {

Thread.sleep(1300);

} catch (InterruptedException e1) {

// TODO Auto-generated catch block

e1.printStackTrace();

}

while(c<=100) {

pb1.setValue(c);

try {

Thread.sleep(100);

} catch (InterruptedException e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

c+=1;

}

f1.dispose();

frame2();

}

static void frame2() {

f2=new Frame("DIGIT TO TEXT");

ImageIcon image1=new ImageIcon("D:\\NumberTOWordConverter\\images\\b16.jpg");

JLabel i1=new JLabel(image1);

i1.setBounds(0,0,826,550);

JLabel l1=new JLabel("PROJECT:");

l1.setBounds(30, 15, 150, 100);

l1.setForeground(new Color(0,0,0));

l1.setFont(new Font("Lucida Fax",Font.BOLD,20));

JLabel l2=new JLabel("Digit to Text Converter");

l2.setBounds(96, 55, 400, 100);

l2.setForeground(new Color(0,0,0));

l2.setFont(new Font("Lucida Fax",Font.BOLD,19));

JLabel l3=new JLabel("PURPOSE:");

l3.setBounds(30, 105, 160, 100);

l3.setForeground(new Color(0,0,0));

l3.setFont(new Font("Lucida Fax",Font.BOLD,20));

JLabel l4=new JLabel("Object Oriented Programming Languages does not ");

l4.setBounds(96, 150, 760, 100);

l4.setForeground(new Color(0,0,0));

l4.setFont(new Font("Lucida Fax",Font.BOLD,19));

JLabel l5=new JLabel("have a default library function for convert Digit to Text");

l5.setBounds(49, 180, 760, 100);

l5.setForeground(new Color(0,0,0));

l5.setFont(new Font("Lucida Fax",Font.BOLD,19));

JLabel l6=new JLabel("so, this project will be solve this problem and it is also");

l6.setBounds(49, 210, 760, 100);

l6.setForeground(new Color(0,0,0));

l6.setFont(new Font("Lucida Fax",Font.BOLD,19));

JLabel l7=new JLabel("like as a default library function.");

l7.setBounds(49, 240, 600, 100);

l7.setForeground(new Color(0,0,0));

l7.setFont(new Font("Lucida Fax",Font.BOLD,19));

pb2=new JProgressBar();

pb2.setValue(0);

pb2.setForeground(new Color(0,255,0));

pb2.setBackground(new Color(60,60,60));

pb2.setBounds(110, 450, 420, 30);

pb2.setBorder(BorderFactory.createLineBorder(new Color(0,0,0),3));

pb2.setFont(new Font("Bahnschrift SemiBold",Font.BOLD,15));

pb2.setStringPainted(true);

pb2.setVisible(false);

t=new Timer(10,new ActionListener() {

int x=0;

@Override

public void actionPerformed(ActionEvent e) {

pb2.setValue(x+=1);

try {

Thread.sleep(50);

} catch (InterruptedException e1) {

e1.printStackTrace();

}

if(x==105) {

t.stop();

frame3();

f2.dispose();

}

}

});

JButton b1 =new JButton("GET START");

b1.setBounds(190,350,250,40);

b1.setBackground(new Color(0,250,154));

b1.setForeground(new Color(0,0,0));

b1.setBorder(BorderFactory.createLineBorder(new Color(0,0,0),2));

b1.setFont(new Font("Lucida Fax",Font.BOLD,16));

b1.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent ae) {

pb2.setVisible(true);

t.start();

}

});

f2.add(l1);

f2.add(l2);

f2.add(l3);

f2.add(l4);

f2.add(l5);

f2.add(l6);

f2.add(l7);

f2.add(b1);

f2.add(pb2);

f2.add(i1);

f2.setSize(630,550);

f2.setLayout(null);

f2.setVisible(true);

f2.setIconImage(icon);

f2.setLocationRelativeTo(null);

f2.setBackground(new Color(255,255,255));

f2.addWindowListener(new WindowAdapter(){

public void windowClosing(WindowEvent e) {

f2.dispose();

}

});

}

static void frame3() {

Frame f3=new Frame("DIGIT TO TEXT");

ImageIcon image1=new ImageIcon("D:\\NumberTOWordConverter\\images\\b24.jpg");

JLabel i1=new JLabel(image1);

i1.setBounds(0,-11,1037,583);

JLabel ml1=new JLabel("DIGIT TO TEXT CONVERTER");

ml1.setBounds(205, 15, 650, 100);

ml1.setForeground(new Color(225,225,225));

ml1.setFont(new Font("Lucida Fax",Font.BOLD,37));

JTextArea mta1=new JTextArea();

mta1.setBounds(530,160,200,95);

mta1.setBackground(new Color(153,204,255));

mta1.setFont(new Font("Lucida Fax",Font.BOLD,25));

mta1.setBorder(BorderFactory.createTitledBorder(BorderFactory.createLineBorder(new Color(0,0,0),5),"DIGIT"));

mta1.setForeground(new Color(0,0,0));

mta1.setLineWrap(true);

mta1.setWrapStyleWord(true);

mta1.addKeyListener(new KeyListener() {

@Override

public void keyTyped(KeyEvent e) {

sp\_n= new String(mta1.getText());

int l\_pn=sp\_n.length();

char c=e.getKeyChar();

if(Character.isLetter(c)) {

mta1.setEditable(false);

JOptionPane.showMessageDialog(f3,"Enter Number Only...!", "Note",JOptionPane.ERROR\_MESSAGE);

}else {

mta1.setEditable(true);

}

if(l\_pn>14) {

mta1.setEditable(false);

JOptionPane.showMessageDialog(f3,"Number Overflow...!", "Note",JOptionPane.ERROR\_MESSAGE);

}

}

@Override

public void keyPressed(KeyEvent e) {

mta1.setEditable(true);

}

@Override

public void keyReleased(KeyEvent e) {

mta1.setEditable(true);

}

});

JTextArea mta2=new JTextArea();

mta2.setBounds(530,318,310,185);

mta2.setBackground(new Color(153,204,255));

mta2.setFont(new Font("Lucida Fax",Font.BOLD,18));

mta2.setBorder(BorderFactory.createTitledBorder(BorderFactory.createLineBorder(new Color(0,0,0),5),"TEXT"));

mta2.setForeground(new Color(0,0,0));

mta2.setLineWrap(true);

mta2.setWrapStyleWord(true);

mta2.setEditable(false);

JButton mb1 =new JButton("CONVERT");

mb1.setBounds(530,270,90,32);

mb1.setBackground(new Color(32,178,170));

mb1.setForeground(new Color(0,0,0));

mb1.setBorder(BorderFactory.createLineBorder(new Color(0,0,0),3));

mb1.setFont(new Font("Lucida Fax",Font.BOLD,15));

mb1.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

try {

long digit=Long.valueOf(mta1.getText());

String text=DigitToText(digit);

mta2.setEditable(true);

mta2.setText(text);

mta2.setEditable(false);

}catch(Exception en) {

mta2.setText("Digit Invalid");

}

}

public String DigitToText(long n) {

long limit=1000000000000l;

long cn,t=0;

if(n==0) {

return("Zero");

}

String ft[]= {"","One","Two","Three","Four","Five","Six","Seven","Eight","Nine","Ten","Eleven","Twelve","Thirteen","Fourteen","Fiften","Sixteen",

"Seventeen","Eighteen","Nineteen"};

String[] tn= {"","","Twenty","Thirty","Forty","Fifty","Sixty","Seventy","Eighty","Ninety"};

String[] ml= {"","Trillion","Billion","Million","Thousand"};

if(n<20) {

return (ft[(int)n]);

}

String answer="";

for(long i=n;i>0;i=i%limit,limit=limit/1000) {

cn=i/limit;

while(cn==0) {

i=i%limit;

limit=limit/1000;

cn=i/limit;

t++;

}

if(cn>99) {

int ad=(int)cn/100;

answer=answer+(ft[ad]+" Hundred ");

}

cn=cn%100;

if(cn>0&&cn<20) {

answer+=(ft[(int)cn]+" ");

}else if(cn%10==0&&cn!=0) {

answer=answer+(tn[(int)cn/10]+" ");

}else if(cn>20&&cn<100) {

answer+=(tn[(int)cn/10]+" "+ft[(int)cn%10]+" ");

}

if(t<4) {

answer+=(ml[(int)++t]+" ");

}

}

return answer;

}

});

JButton mb2 =new JButton("RESET");

mb2.setBounds(640,270,90,32);

mb2.setBackground(new Color(220,20,60));

mb2.setForeground(new Color(0,0,0));

mb2.setBorder(BorderFactory.createLineBorder(new Color(0,0,0),3));

mb2.setFont(new Font("Lucida Fax",Font.BOLD,15));

mb2.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

mta1.setText("");

mta2.setText("");

}

});

format=new SimpleDateFormat("hh:mm a");

ml2=new JLabel();

ml2.setBounds(169, 142, 400, 100);

ml2.setForeground(new Color(0,225,0));

ml2.setFont(new Font("Times New Roman",Font.BOLD,27));

dayformat=new SimpleDateFormat("dd(E)-MM-yyyy");

ml3=new JLabel();

ml3.setBounds(165, 167, 400, 100);

ml3.setForeground(new Color(0,0,255));

ml3.setFont(new Font("Times New Roman",Font.BOLD,15));

f3.add(ml1);

f3.add(mta1);

f3.add(mb1);

f3.add(mb2);

f3.add(mta2);

f3.add(ml2);

f3.add(ml3);

f3.add(i1);

f3.setSize(900,580);

f3.setLayout(null);

f3.setVisible(true);

f3.setIconImage(icon);

f3.setLocationRelativeTo(null);

f3.setBackground(new Color(255,255,255));

f3.addWindowListener(new WindowAdapter(){

public void windowClosing(WindowEvent e) {

f3.dispose();

loopcontrol=false;

}

});

Digit\_to\_text o=new Digit\_to\_text();

o.start();

}

public void run() {

day=dayformat.format(Calendar.getInstance().getTime());

ml3.setText(day);

while(loopcontrol) {

time=format.format(Calendar.getInstance().getTime());

ml2.setText(time);

try {

Thread.sleep(1000);

} catch (InterruptedException e) {

e.printStackTrace();

}

}

}

}