Program Design – PP10.17

## Input

1. In detail indicate what the inputs to this program are?

* There is 6 options for inputs such as setting a custom message, colors, fonts, scroll speed, and others

1. How do you validate the input

* I find it virtually impossible to create an invalid input

1. Pseudocode: Briefly explain how this section will look like

The program brings up a scrolling message and 6 panels.

## Processing

1. What is this program calculating?

* Nothing

1. Can we divide the calculations to the smaller “modules”

* N/A

1. Pseudocode: Briefly explain how this section will look like – Each module should have its own section.

* N/A

## Output

1. What will this program display to the users?

* The program displays a scrolling message and a control panel to the users

1. What kind of formatting this output will use (Currency with $ …)?

* It will display many buttons, checkboxes and sliders to manipulate the message more indepthly.

1. Pseudocode: Briefly explain how this section will look like

* This section is filled with implementation of the ActionListener and ChangeListener Interfaces along with many JPanel creator methods and creation void methods.

## Library

What Libraries do you need for this program?

import javax.swing.Timer;

import javax.swing.border.EtchedBorder;

import javax.swing.border.TitledBorder;

import javax.swing.event.ChangeEvent;

import javax.swing.event.ChangeListener;

import java.awt.BorderLayout;

import java.awt.Color;

import java.awt.Font;

import java.awt.GridLayout;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import javax.swing.JButton;

import javax.swing.JCheckBox;

import javax.swing.JComboBox;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JPanel;

import javax.swing.JSlider;

import javax.swing.JTextField;

## Initialization and constant variables

1. What variables need to be initialized?

private JLabel \_message;

private JTextField \_inputMessage;

private JButton \_confirmMessage;

private int \_delay = 100;

private Timer \_timer;

private JSlider \_delaySlider;

private JComboBox \_comboBox;

private JCheckBox \_italics;

private JCheckBox \_bold;

private JSlider \_redSlider;

private JSlider \_greenSlider;

private JSlider \_blueSlider;

private JPanel \_Color\_and\_Message;

private JButton \_reverseButton;

private boolean \_reverseEnabler = true;

1. What variables need to be defined as constant

private final static int ***FRAME\_WIDTH*** = 750;

private final static int ***FRAME\_HEIGHT*** = 500;

private final static String ***DEFAULT\_STRING*** =

"Somebody once told me the world is gonna roll me \n"

+ "I ain't the sharpest tool in the shed \n"

+ "She was looking kind of dumb with her finger and her thumb \n"

+ "In the shape of an \"L\" on her forehead \n"

+ "\n"

+ "Well, the years start coming and they don't stop coming \n"

+ "Fed to the rules and I hit the ground running \n"

+ "Didn't make sense not to live for fun \n"

+ "Your brain gets smart but your head gets dumb \n"

+ " \n"

+ "So much to do, so much to see \n"

+ "So what's wrong with taking the back streets? \n"

+ "You'll never know if you don't go \n"

+ "You'll never shine if you don't glow \n"

+ " \n"

+ "Hey, now, you're an all-star, get your game on, go play \n"

+ "Hey, now, you're a rock star, get the show on, get paid \n"

+ "And all that glitters is gold \n"

+ "Only shooting stars break the mold \n"

+ " \n"

+ "It's a cool place and they say it gets colder \n"

+ "You're bundled up now wait 'til you get older \n"

+ "But the meteor men beg to differ \n"

+ "Judging by the hole in the satellite picture \n"

+ " \n"

+ "The ice we skate is getting pretty thin \n"

+ "The water's getting warm so you might as well swim \n"

+ "My world's on fire. How about yours? \n"

+ "That's the way I like it and I'll never get bored \n"

+ " \n"

+ "Hey, now, you're an all-star, get your game on, go play \n"

+ "Hey, now, you're a rock star, get the show on, get paid \n"

+ "And all that glitters is gold \n"

+ "Only shooting stars break the mold \n"

+ " \n"

+ "Go for the moon \n"

+ "Go for the moon \n"

+ "Go for the moon \n"

+ "Go for the moon \n"

+ " \n"

+ "Hey, now, you're an all-star, get your game on, go play \n"

+ "Hey, now, you're a rock star, get the show on, get paid \n"

+ "And all that glitters is gold \n"

+ "Only shooting stars \n"

+ " \n"

+ "Somebody once asked could I spare some change for gas \n"

+ "I need to get myself away from this place \n"

+ "I said yep, what a concept \n"

+ "I could use a little fuel myself \n"

+ "And we could all use a little change \n"

+ " \n"

+ "Well, the years start coming and they don't stop coming \n"

+ "Fed to the rules and I hit the ground running \n"

+ "Didn't make sense not to live for fun \n"

+ "Your brain gets smart but your head gets dumb \n"

+ " \n"

+ "So much to do, so much to see \n"

+ "So what's wrong with taking the back streets? \n"

+ "You'll never know if you don't go \n"

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+ "Only shooting stars break the mold \n"

+ " \n"

+ "And all that glitters is gold \n"

+ "Only shooting stars break the mold";