

```

1  import java.io.*;
2  import java.util.*;
3
4  import javax.swing.*;
5  import java.awt.*;
6  import java.awt.event.*;
7
8  /**
9   * NNEED TO HAVE HANGMAN PICS
10  * This Hangman Game was create to be the final challenge once the player
11  * has traversed through the game map and has made it through all the smaller
12  * challenges. The Hangman Gui works by doing most of the work in the
13  * as the action listner is a continuous loop itself depending on the number of
14  * clicks.
15  * The way it works (AS OF NOW AND SUBJECT TO UPDATE)is that we have given the user
16  * the freedom
17  * to continue inputing things even though it is determined that they have won or
18  * lost. There
19  * had to be several changes seeing as how the gui reacts differently with its use
20  * of
21  * textfield/listeners instead of scanners
22  */
23 public class THangmanGui{
24
25     //variables that are not data types
26     private String phrase;
27     private final static int MAX_ERRORS = 7;
28     private int errors;
29     private String gueDisplay;
30     private Boolean wonLost;
31
32     //objects for gui
33     private JPanel test;
34     private JFrame frame;
35     //above are temps
36     private JTextField letterInput;
37     private ImageIcon room;
38     private JLabel img;
39     private JLabel instructionsTxt;
40     private JLabel gameTxt;
41     private JLabel question;
42     private JLabel currentGuesses;
43     private JLabel errorsLeft;
44     private JLabel incorrectInput;
45
46     //data that needs to be accessed by the ActionListener
47     private LinkedList<String> uniqueLetters;
48     private LinkedList<String> guesses;
49     private LinkedList<String> correctGuesses;
50
51     public THangmanGui(String p){ //will take in the frame and the panel
52
53         phrase = p.toLowerCase();
54         errors = MAX_ERRORS;
55         gueDisplay = displayDisguise(guesses);
56         wonLost = false;
57
58         //temporary-----
59         test = new JPanel();
60         frame = new JFrame();
61
62         frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
63         frame.setPreferredSize(new Dimension(870,700));
64
65         frame.setTitle("Adventure Time");
66         //frame.setResizable(false);
67         //temporary-----
68
69         letterInput = new JTextField(20);
70         room = new ImageIcon(hangmanGraphics(MAX_ERRORS));
71         JLabel img = new JLabel(room);
72         instructionsTxt = new JLabel("");
73         gameTxt = new JLabel("");
74         question = new JLabel("");
75         currentGuesses = new JLabel("");
76         errorsLeft = new JLabel("");
77         incorrectInput = new JLabel("");
78
79         uniqueLetters = makeUniqueLetters();
80         guesses = new LinkedList<String>();
81         correctGuesses = new LinkedList<String>();
82
83     }
84
85     /**
86     * @return string of a jpg picture
87     */
88     public String hangmanGraphics(int w){
89         String s = "hangmanPic" + w + ".jpg";
90         return s;
91     }

```

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90
91
92 /**
93  * @return LinkedList holding the letters(no duplicates)
94  * of the phrase
95  */
96 public LinkedList<String> makeUniqueLetters(){
97     LinkedList<String> uqLetters = new LinkedList<String>();
98
99     String temp = phrase.replace(" ", ""); //makes sure no spaces are considered a
character that needs to be guesses
100     int i = 0;
101     while (temp.length() > 0 ){
102
103         String ch = Character.toString(temp.charAt(0)); //gets the first character
always and turns it into a string
104         uqLetters.add(ch);
105
106         temp = temp.replace(ch, ""); //gets rid of all characters that equal the first
character preventing duplicates
107         i++;
108     }
109     return uqLetters;
110 }
111
112
113 /**
114  * @return String that disguises the letters of the phrase and shows
115  * the letters that the user has correctly guessed
116  */
117 public String displayDisguise(LinkedList<String> foundLetters){
118     String s = "";
119
120     System.out.println("Entering");
121
122     for (int i = 0; i < phrase.length(); i++){
123
124         String charact = Character.toString(phrase.charAt(i));
125
126         if (foundLetters != null){
127             if (foundLetters.contains(charact)){
128                 s += charact;
129             }else if (phrase.charAt(i) == ' '){
130                 s += "&nbsp;&nbsp; &nbsp;  &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&";
131             }else {
132                 s += " _ ";
133             }
134         }else if (phrase.charAt(i) == ' '){
135             s += "&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&";
136         }else {
137             s += " _ ";
138         }
139     }
140
141     return s;
142 }
143
144
145
146
147 /**
148  * @return boolean SUBJECT TO CHANGE
149  * AS THE GUI CHANGES EVERYTHING
150  */
151 public boolean playHangman(){
152
153
154     //test.add(img);
155
156
157     instructionsTxt.setText("<html>You are almost there! All you have to do now is
158 win this game by guessing the"+
159 correct letters in the phrase and without getting more
160 than 7 letters wrong."+" Your boo's life hangs by a thread. Hurry" +
161 " up and save him!</html>");
162     test.add(instructionsTxt);
163
164
165     gameTxt.setText("<html><font size = '5' face = 'Courier New'>"+ gueDisplay +
166 </font></html>");
167     test.add(gameTxt);
168
169     question.setText("What is your guess?");
170     test.add(question);
171
172     currentGuesses.setText("<html>Guesses So Far : "+ guesses+"</html>");
173     test.add(currentGuesses);
174
175     errorsLeft.setText("<html>Errors Left : "+ errors+"</html>");
176     test.add(errorsLeft);
177
178 /Users/s160540/Desktop/FINALPROJECT_lluo_jaguilar_avalle/FinalProject/THangmanGui.java 2

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178     test.add(incorrectInput);
179
180     frame.add(test);
181     frame.setVisible(true);
182
183     eventBox eveB = new eventBox();
184     letterInput.addActionListener(eveB);
185     test.add(letterInput);
186
187
188
189
190
191     return wonLost;
192 }
193
194 /**
195  * ActionListener where most of the game goes on
196  * Game continues on as the user continues
197  * and user has the liberty to stop or not at any time
198  */
199
200 public class eventBox implements ActionListener{
201     public void actionPerformed(ActionEvent eveB) {
202         System.out.println("enters the action");
203         String input = letterInput.getText().toLowerCase();
204
205         if(guesses.contains(input) || !Character.isLetter(input.charAt(0)) || input.
206 length() > 1 || input.charAt(0) == ',') {
207             incorrectInput.setText("<html>*** Invalid input. Make sure to check that
208 the input is"+
209                                     "one letter and has not been used before.</html>");
210         }else{
211             incorrectInput.setText("");
212             guesses.add(input);
213
214             if(uniqueLetters.contains(input)){
215                 correctGuesses.add(input);
216                 gueDisplay = displayDisguise(correctGuesses);
217             }else{
218                 errors--;
219             }
220
221             //img.setIcon(new ImageIcon(hangmanGraphics(0)));
222             gameTxt.setText("<html><font size = '5' face = Courier New'>" + gueDisplay
223 + "</font></html>");
224             currentGuesses.setText("<html>Guesses So Far : " + guesses+"</html>");
225             errorsLeft.setText("<html>Errors Left : " + errors + "</html>");
226
227         }
228
229         if(gueDisplay.equals(phrase)){
230             wonLost = true;
231             //change icon to a winner thing??
232
233             //i dont think this one is needed???-----
234         }else if(errors == 0){
235             //have a you lose sorrry text?
236             System.out.println("you lose");
237         }
238
239         frame.getContentPane().validate();
240         frame.getContentPane().repaint();
241
242     }
243
244 }
245
246
247 public static void main(String[] args){
248     // System.out.println(Character.isLetter(""));
249     //Character.isLetter(gue.charAt(0))
250
251     THangmanGui x = new THangmanGui("Hello World");
252
253     System.out.println(x.playHangman());
254 }
255
256 }

```