```
 1 /*-----------------------------\
 2 |Nick Rebhun                  |
 3 |Project 06                   |
 4 |Computer Science 182         |
 5 |05/31/2011                   |
 6 |                             |
 7 \-----------------------------*/
 8
 9 package project6;
10
11 /***************************************************************
12
13 Project Number 6 - Comp Sci 182 - Data Structures
14 Start Code - Build your program starting with this code
15
16 Copyright 2005 Christopher C. Ferguson
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18
19 ***************************************************************/
20
21 import javax.swing.*;
22 import java.awt.*;
23 import java.awt.event.*;
24
25 public class PrimeHash extends JFrame implements ActionListener {
26
27 private static int win_xpos=0,win_ypos=0;// place window here
28 private static int win_xsize=1000,win_ysize=700;//  window size
29
30 // Private state variables.
31
32 private Font boldfont = new Font ("TimesRoman",Font.BOLD,18);
33 private Font plainfont = new Font ("TimesRoman",Font.PLAIN,12);
34
35 private JButton hashbutton,findbutton, insbutton, delbutton, exitbutton;
36 private JPanel northPanel;
37 private MyJPanel centerPanel;
38 private JTextField hashsizefield;
39
40 private HashTable potato;
41
42 private String thetext = "101";
43 private String[] names = { "fred" , "barney", "tom", "jerry", "larry", "moe","curly",
44 "betty" , "wilma", "bart", "homer", "marge", "maggie", "lisa",
45 "pebbles" , "bambam", "smithers", "burns", "milhouse", "george", "astro",
46 "dino" , "mickey", "minnie", "pluto", "goofy", "donald", "huey",
47 "louie" , "dewey", "snowwhite", "happy", "doc", "grumpy", "sneezy",
48 "dopey" , "sleepy", "bambi", "belle", "gaston", "tarzan", "jane",
49 "simba" , "scar", "mufasa", "ariel", "flounder", "bugs", "daffy",
50 "elmer" , "foghorn", "chickenhawk", "roger", "jessica", "hank", "bobby",
51 "peggy" , "spot", "pongo", "perdy", "buzz", "potatohead", "woody",
52 "chuckie" , "tommy", "phil", "lil", "angelica", "dill", "spike",
53 "pepe" , "speedy", "yosemite", "sam", "tweety", "sylvester", "granny",
54 "spiderman" , "batman", "superman", "supergirl", "robin", "jimmy","olsen",
55 "thing" , "flash", "silversurfer", "xmen", "pokemon", "joker", "wonderwoman"
56 };
57
58
59 ///////////MAIN//////////////////////////
60
61 public static void main(String[] args){
62         PrimeHash tpo  = new PrimeHash();
63
64         tpo.addWindowListener(new WindowAdapter() {   // this exits the program when X box
```

clicked

```
65               public void windowClosing(WindowEvent e) {
66                   System.exit(0);
67               }
68           });
69  }
70
71  ///////////CONSTRUCTOR/////////////////////
72
73  public PrimeHash () {
74
75          northPanel = new JPanel();
76
77
78          northPanel.add(new Label("Enter a hashtable size: "));
79          hashsizefield = new JTextField(thetext,20);
80          northPanel.add(hashsizefield);
81
82          hashbutton = new JButton("CreateHash");     // create hash table button
83          northPanel.add(hashbutton);
84          hashbutton.addActionListener(this);
85
86          ///*
87
88          findbutton = new JButton("Find");            // create find button
89          northPanel.add(findbutton);
90          findbutton.addActionListener(this);
91
92          insbutton = new JButton("Insert");           // create insert button
93          northPanel.add(insbutton);
94          insbutton.addActionListener(this);
95
96          delbutton = new JButton("Delete");           // create delete button
97          northPanel.add(delbutton);
98          delbutton.addActionListener(this);
99
100          //*/
101
102          exitbutton = new JButton("Exit");            // create exit button
103          northPanel.add(exitbutton);
104          exitbutton.addActionListener(this);
105
106          getContentPane().add("North",northPanel);
107
108          centerPanel = new MyJPanel();
109          getContentPane().add("Center",centerPanel);
110
111          // need more init stuff? try here.
112          setSize(win_xsize,win_ysize);
113          setLocation(win_xpos,win_ypos);
114          setVisible(true);
115  }
116
117  ///////////BUTTON CLICKS ////////////////////////////
118
119  public void actionPerformed(ActionEvent e) {
120          if (e.getSource()==exitbutton) {
121              dispose(); System.exit(0);
122          }
123
124          if (e.getSource()==hashbutton) {
125              int size = Integer.parseInt(thetext);
126              potato = new HashTable (size);
127
```

```
128              repaint();
129          }
130
131          if (e.getSource()==findbutton) {
132              potato.find(thetext);
133          }
134
135          if (e.getSource()==insbutton) {
136              potato.insert(null);
137          }
138
139          if (e.getSource()==delbutton) {
140              potato.insert(null);
141
142          }
143
144          if (e.getSource()==findbutton) {
145
146          }
147
148
149 } // end actionPerformed
150
151 class MyJPanel extends JPanel {
152
153  ///////////    PAINT  ///////////////////////////////
154    public void paintComponent (Graphics g) {
155
156          g.setFont(plainfont);
157          g.drawString("Hash Crash: " + "Should be at: " + "Found at: ", 20,30);
158
159    }
160 } // End Of MyJPanel
161
162 }     // End Of PrimeHash
```