

```
1 import javax.swing.JFrame;
2 import java.awt.Font;
3 import java.awt.GridLayout;
4 import java.awt.event.ActionEvent;
5 import java.awt.event.ActionListener;
6 import javax.swing.JOptionPane;
7 import javax.swing.JLabel;
8 import javax.swing.JTextField;
9 import javax.swing.JButton;
10 import java.util.ArrayList;
11
12 public class ComputerSwingApp {
13     static ArrayList<Computer> computers = new ArrayList<Computer>();
14
15     // Parse List For Message Output
16     static String ParseList(ArrayList<Computer> list, int offset) {
17         int last = list.size() - 1;
18         if (!list.isEmpty()) {
19             if ((last - offset) > 0) {
20                 return list.get(last - offset).toString() + ParseList(list,
offset + 1);
21             } else
22                 return list.get(last - offset).toString();
23         } else
24             return "list is empty";
25     }
26
27     // Append Computer to ArrayList
28     static void AddComputer(Computer computer) {
29         computers.add(computer);
30         JOptionPane.showMessageDialog(null, "Computer Inserted", "Computers",
JOptionPane.INFORMATION_MESSAGE);
31     }
32
33     // Clear all Computers from ArrayList
34     static void ClearComputers() {
35         computers.clear();
36     }
37
38     // List All Computers in Dialog Box
39     static void ShowComputers() {
40         JOptionPane.showMessageDialog(null, ParseList(computers, 0),
"Computers", JOptionPane.INFORMATION_MESSAGE);
41     }
42
43     // Run App Window
44     static void initialize() {
45         // Labels
46         JLabel address_label = new JLabel("Computer Lab IP Address:");
47         JLabel value_label = new JLabel("Value:");
48
49         // Input Fields
50         JTextField address_input = new JTextField("");
51         JTextField value_input = new JTextField("");
52
53         // Buttons
54         JButton add_btn = new JButton("+");
55         JButton clear_btn = new JButton("Clear");
56         JButton show_btn = new JButton("Show Computers");
```

```
57 JButton exit_btn = new JButton("Exit App");
58
59 // Set Fonts
60 Font font = new Font("Arial", Font.BOLD, 20);
61 address_label.setFont(font);
62 value_label.setFont(font);
63
64 address_input.setFont(font);
65 value_input.setFont(font);
66
67 add_btn.setFont(font);
68 clear_btn.setFont(font);
69 show_btn.setFont(font);
70 exit_btn.setFont(font);
71
72 // Frame
73 JFrame frame = new JFrame();
74 frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
75 frame.setSize(800, 400);
76 frame.setVisible(true);
77 frame.setLayout(new GridLayout(4, 2 /* , 10, 10 */));
78
79 // Compose Frame
80 frame.add(address_label);
81 frame.add(address_input);
82
83 frame.add(value_label);
84 frame.add(value_input);
85
86 frame.add(add_btn);
87 frame.add(show_btn);
88 frame.add(clear_btn);
89 frame.add(exit_btn);
90
91 // Button Action Listeners
92 // ADD BUTTON
93 add_btn.addActionListener(new ActionListener() {
94
95     @Override
96     public void actionPerformed(ActionEvent e) {
97
98         AddComputer(new Computer(address_input.getText(),
99 value_input.getText()));
100         address_input.setText("");
101         value_input.setText("");
102     }
103 });
104
105 // SHOW BUTTON
106 show_btn.addActionListener(new ActionListener() {
107
108     @Override
109     public void actionPerformed(ActionEvent e) {
110         ShowComputers();
111     }
112 });
113 // CLEAR BUTTON
114 clear_btn.addActionListener(new ActionListener() {
115
```

```
116         @Override
117         public void actionPerformed(ActionEvent e) {
118             ClearComputers();
119         }
120     });
121     // EXIT BUTTON
122     exit_btn.addActionListener(new ActionListener() {
123
124         @Override
125         public void actionPerformed(ActionEvent e) {
126
127             System.exit(0);
128         }
129     });
130 }
131
132 public static void main(String[] args) {
133     initialize();
134 }
135
136 }
137
```