

```
1:  /*
2:
3:  Jared Dyreson
4:  CWID: 889546529
5:  ZipWindow.java ->
6:
7:  */
8:
9:  import javax.swing.JFileChooser;
10: import javax.swing.filechooser.FileSystemView;
11:
12: import java.awt.*;
13: import java.awt.event.*;
14: import java.lang.Math;
15: import java.text.MessageFormat;
16: import javax.swing.*;
17: import javax.swing.JFrame;
18:
19: import java.io.*;
20: import java.util.*;
21: import java.util.ArrayList;
22: import java.util.Arrays;
23: import java.util.List;
24:
25: // TODO
26: // contents of the zip needs to be displayed in the middle of the screen
27: // Name          Size          Type          Modified
28: // -----
29: // [filename]    [file size]    [mime type]    [last modified]
30: //
31: // better format the buttons
32: // add functionality to the drop down options
33: //      mapping the about page and creating a new empty archive
34: // create the functionality for appending to the archive
35: // create the functionality for dumping the archive
36:
37: public class ZipWindow extends JFrame implements ActionListener{
38:     // Auto generated with caffeine and cups.service
39:     final int FRAME_WIDTH = 959, FRAME_HEIGHT = 1052;
40:
41:     JPanel file_manipulation_buttons = new JPanel();
42:     JPanel menu_panel = new JPanel();
43:
44:     JButton extract_button = new JButton("Extract");
45:     JButton add_files = new JButton("+");
46:
47:     JButton next = new JButton("<--");
48:     JButton previous = new JButton("-->");
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49:         JButton home_button = new JButton("Root folder");
50:         JButton about = new JButton("about");
51:         JButton list_contents = new JButton("list contents");
52:
53:         JLabel location_label = new JLabel("Location:");
54:
55:         JTextField path_in_archive = new JTextField();
56:
57:         JToolBar toolbar = new JToolBar();
58:
59:         String[] menu_options = {"File", "Edit", "View", "Help"};
60:         String[] file_menu_options = {"New Archive", "Open", "Extract Files", "Close"};
61:         List<String> file_manifest = new ArrayList<>();
62:         List<JPanel> contents_of_nth_depth = new ArrayList<>();
63:
64:         JMenuBar menu_bar = new JMenuBar();
65:         ZipBackend zipper = new ZipBackend();
66:
67:     public ZipWindow() {
68:         super("Zip Viewer");
69:
70:         setSize(FRAME_WIDTH, FRAME_HEIGHT);
71:         setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
72:         setLocationRelativeTo(null);
73:         add_files.addActionListener(this);
74:         extract_button.addActionListener(this);
75:         about.addActionListener(this);
76:         list_contents.addActionListener(this);
77:
78:         toolbar.setRollover(true);
79:         for(int i = 0; i < menu_options.length; ++i){
80:             menu_bar.add(new JMenu(menu_options[i]));
81:         }
82:
83:         toolbar.add(menu_bar);
84:
85:         file_manipulation_buttons.setLayout(new FlowLayout());
86:         file_manipulation_buttons.add(extract_button);
87:         file_manipulation_buttons.add(add_files);
88:         file_manipulation_buttons.add(about);
89:         file_manipulation_buttons.add(list_contents);
90:
91:         menu_panel.setLayout(new BorderLayout(2, 1));
92:         menu_panel.add(toolbar, BorderLayout.WEST);
93:         menu_panel.add(file_manipulation_buttons, BorderLayout.EAST);
94:         this.add(menu_panel, BorderLayout.NORTH);
95:
96:     }
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97:
98:     public String get_file(){
99:         String file_path = "";
100:         JFileChooser jfc = new JFileChooser(FileSystemView.getFileSystemView().getHomeDirectory());
101:         int returnValue = jfc.showOpenDialog(null);
102:         if (returnValue == JFileChooser.APPROVE_OPTION) {
103:             File selectedFile = jfc.getSelectedFile();
104:             file_path = selectedFile.getAbsolutePath();
105:         }
106:         return file_path;
107:
108:     }
109:     @Override
110:     public void actionPerformed(ActionEvent event){
111:         Object source = event.getSource();
112:         if(source == add_files){
113:             String path_to_file = get_file();
114:             file_manifest.add(path_to_file);
115:         }
116:         else if(source == extract_button){
117:             //String zip_destination_name =
118:             try{
119:                 zipper.zip_contents(file_manifest, "example.zip");
120:             }
121:             catch(Exception error){
122:                 System.out.println(error);
123:             }
124:         }
125:         else if(source == about){
126:             AboutPage about_page = new AboutPage();
127:             about_page.setVisible(true);
128:         }
129:         else if(source == list_contents){
130:             for(int i = 0; i < file_manifest.size(); ++i){
131:                 try{
132:                     FileHandler file = new FileHandler(file_manifest.get(i));
133:                     JPanel file_panel = new JPanel();
134:                     file_panel.setLayout(new FlowLayout());
135:                     file_panel.add(new JLabel(file.get_last_modified()));
136:                     file_panel.add(new JLabel(file.get_mime_type()));
137:                     contents_of_nth_depth.add(file_panel);
138:                     /*menu_panel.add(file_panel, BorderLayout.CENTER);*/
139:                     /*this.add(menu_panel, BorderLayout.CENTER);*/
140:                 }
141:                 catch(Exception error){
142:                     System.out.println(error);
143:                 }
144:             }
```

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145:
146:         }
147:     }
148:
149: }
```