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1 package oregonTrail;
2
3 import java.awt.*;
4
5 /**
6  * Main class containing all game logic for switching between panels and instantiating
7  * panels
8  * @authors Corbin Hibler, Lukas Dunbar, Ray Otto, Ethan Vaughn
9  * @date 2024-04-09
10 */
11 public class OregonTrail {
12
13     private JFrame frame;
14     private Travel travelState;
15     public final Wagon WAGON;
16     public final StartupPanel STARTUP_PANEL;
17     public final TravelPanel TRAVEL_PANEL;
18     public final TrailMenuPanel TRAIL_MENU_PANEL;
19     public final FortPanel FORT_STRONG_PANEL;
20     public final SecondFortPanel FORT_OREGON_PANEL;
21     public HuntingPanel huntingPanel;
22
23     /**
24      * Launch the application.
25      */
26     public static void main(String[] args) {
27         EventQueue.invokeLater(new Runnable() {
28             public void run() {
29                 try {
30                     OregonTrail window = new OregonTrail();
31                     window.frame.setVisible(true);
32                 } catch (Exception e) {
33                     e.printStackTrace();
34                 }
35             }
36         });
37     }
38
39     /**
40      * Create the application.
41      */
42     public OregonTrail() {
43         // Create wagon and preload items
44         WAGON = new Wagon();
45         WAGON.addItem(new Item("Apple Vinegar"));
46         WAGON.addItem(new Item("Bacon"));
47         WAGON.addItem(new Item("Water"));
48         WAGON.addItem(new Item("Bullets"));
49         WAGON.setTotalFoodWeight(350);
50         WAGON.addItem(new Item("Cast Iron Stove"));
51
52         STARTUP_PANEL = new StartupPanel();
53         TRAVEL_PANEL = new TravelPanel(this);
54         travelState = new Travel(this);
55         TRAIL_MENU_PANEL = new TrailMenuPanel(this);
56         FORT_STRONG_PANEL = new FortPanel(this, new ImageIcon(this.getClass
57             ().getResource("/images/FortStrong.jpg")));
58         FORT_OREGON_PANEL = new SecondFortPanel(this, new ImageIcon(this.getClass
59             ().getResource("/images/FortOregon.jpg")));
60     }
61 }
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60         initialize();
61     }
62
63     /**
64      * Opens a new panel and closes previous panel
65      * @param panelOpen The panel to be opened
66      * @param panelClose The panel to be closed
67      * @author Corbin Hibler
68      * @date 2024-04-08
69      */
70     public void openPanel(JPanel panelOpen, JPanel panelClose) {
71         frame.getContentPane().remove(panelClose);
72         frame.getContentPane().add(panelOpen);
73         frame.getContentPane().validate();
74         frame.getContentPane().repaint();
75     }
76
77     /**
78      * Getter method for instantation of Travel class
79      * @return the travelState
80      */
81     public Travel getTravelState() {
82         return this.travelState;
83     }
84
85     /**
86      * Initialize the contents of the frame.
87      */
88     private void initialize() {
89         frame = new JFrame();
90         frame.setBackground(Color.GRAY);
91         frame.setTitle("Oregon Trail");
92         frame.setBounds(100, 100, 839, 544);
93         frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
94         frame.getContentPane().setLayout(new BorderLayout());
95         // Always start program maximized!
96         frame.setExtendedState(frame.getExtendedState() | JFrame.MAXIMIZED_BOTH);
97
98         // TODO: Separate image logic into its own class with images stored
99         // TODO (optional): Make automatic parsing of image files in directory and
100         //                      automatically create JLabels from them. Perhaps we could
101         //                      also have a CSV file which contains the appropriate
102         scaling for each image.
103
104         // Show logo and team name
105         frame.getContentPane().add(STARTUP_PANEL, BorderLayout.CENTER);
106
107         Timer startupTimer = new Timer(StartupPanel.STARTUP_TIME, new ActionListener()
108         {
109             public void actionPerformed(ActionEvent arg0) {
110                 // After startup screen is finished, display first panel
111                 frame.getContentPane().remove(STARTUP_PANEL);
112                 frame.getContentPane().add(TRAVEL_PANEL);
113                 // The image must be added separate from the panel because
114                 LoadWagonPanel uses
115                 // a Grid Layout, and the image won't fit nicely
116                 // Update frame
117                 frame.getContentPane().validate();
118                 frame.getContentPane().repaint();
119             }
120         });
121     }

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116
117     }
118     });
119     startupTimer.setRepeats(false);
120     startupTimer.start();
121 }
122
123 }
124
```