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1  /*-----*/
2  * Author:      Dan Cassidy
3  * Date:        2015-07-18
4  * Assignment:  HW4-1
5  * Source File: GameController.java
6  * Language:    Java
7  * Course:      CSCI-C 490, Android Programming, MoWe 08:00
8  -----*/
9  import java.awt.event.ActionEvent;
10 import java.awt.event.ActionListener;
11
12 /**
13  * Controller class for the Tic Tac Toe game. Bridges the model (Game class) and the view (GameView
14  * class) and associates user generated events with model (data) actions.
15  *
16  * @author Dan Cassidy
17  */
18 public class GameController
19 {
20     private GameModel theGame; // Model.
21     private GameView theView; // View.
22
23     /**
24      * 3-parameter constructor.
25      *
26      * @param numRows The number of rows the game board will have.
27      * @param numColumns The number of columns the game board will have.
28      * @param winLength The length of the sequence required to win the game.
29      */
30     public GameController(int numRows, int numColumns, int winLength)
31     {
32         // Set up the model and the view.
33         theGame = new GameModel(numRows, numColumns, winLength);
34         theView = new GameView(theGame.getRows(), theGame.getColumns());
35         theView.setWinningConditionsLabelText(theGame.getWinLength() + " in a row wins");
36         theView.setStatusLabelText(theGame.getStatusString());
37
38         // Add listeners to the view.
39         theView.addResetButtonActionListener(new ActionListener()
40         {
41             public void actionPerformed(ActionEvent evt)
42             {
43                 theGame.reset();
44                 theView.reset();
45                 theView.setStatusLabelText(theGame.getStatusString());
46             }
47         });
48         theView.addBoardButtonActionListener(new ActionListener()
49         {
50             public void actionPerformed(ActionEvent event)
51             {
52                 int row = Integer.parseInt(event.getActionCommand()) / theGame.getColumns();
53                 int column = Integer.parseInt(event.getActionCommand()) % theGame.getColumns();
54
55                 theGame.playMove(row, column);
56                 theView.setBoardButtonText(row, column, theGame.getSpaceString(row, column));
57                 theView.setStatusLabelText(theGame.getStatusString());
58                 if (theGame.getStatus() != GameModel.Status.IN_PROGRESS)
59                     theView.setBoardEnabled(false);
60             }
61         });
62     }
63 }
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61         });
62     }
63
64     /**
65      * Show the view.
66      */
67     public void showView()
68     {
69         theView.setVisible(true);
70     }
71 }
72
```