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1  /*
2  * Programmer:  Chad Philip Johnson
3  * Date Created:  Wednesday, October 03rd, 2012
4  * Date of Last Modification:  Thursday, October 04th, 2012
5  *
6  * Description:
7  * Driver.class provides a framework for an instance of Assistant.class
8  * and allows a user to execute the various subroutines offered by that
9  * class.  Driver.class depends on Assistant.class for necessary
10 * program subroutines and CinReader.class to handle user input.
11 */
12
13 import java.util.*;
14 import java.math.*;
15
16 /**
17 * Driver.class provides a framework for an instance of Assistant.class
18 * and allows a user to execute the various subroutines offered by that
19 * class.  Driver.class depends on Assistant.class for necessary
20 * program subroutines and CinReader.class to handle user input.
21 *
22 * @author Chad Philip Johnson
23 * @version 1.0
24 */
25
26 public class Driver {
27
28     /**
29     * Run the program
30     */
31     public static void main( String[] args )    {
32
33         // Welcome message (appears only once)
34         System.out.print( "\nWelcome to SimpleAssistant v1.0!\n\n" );
35
36         // Create an instance of Assistant.class
37         Assistant assistant      = new Assistant();
38
39         // Holds user input
40         char charUserSelection;
41
42         do {
43
44             // Display the current date
45             System.out.println( "The current date and time is " + new Date().toString() );
46             // Display a random joke every time the main menu is printed
47             System.out.print( "\nRandom Joke:\n" );
48             assistant.randomJoke();
49
50             System.out.println( "Please choose what you would like to do for today:" );

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51     System.out.println( "\tGas (M)ileage Calculator" );
52     System.out.println( "\tTo-Do (L)ist" );
53     System.out.println( "\t(G)rade Calculator" );
54     System.out.println( "\t(N)umber Guessing Game" );
55     System.out.println( "\t(H)angman Game" );
56     System.out.println( "\t(Q)uit" );
57
58     // Read user input
59     charUserSelection = assistant.driverKeyboard.readChar();
60
61     switch( charUserSelection ) {
62         // Execute mileage calculator subroutine when user enters 'm' or 'M'
63         case 'm':
64         case 'M':
65             assistant.mileageCalculator();
66             break;
67
68         // Execute to-do list subroutine when user enters 'l' or 'L'
69         case 'l':
70         case 'L':
71             assistant.todoList();
72             break;
73
74         // Execute grade calculator when user enters 'g' or 'G'
75         case 'g':
76         case 'G':
77             assistant.gradeCalculator();
78             break;
79
80         // Execute number game when user enters 'n' or 'N'
81         case 'n':
82         case 'N':
83             assistant.numberGame();
84             break;
85
86         // Execute hangman game when user enters 'h' or 'H'
87         case 'h':
88         case 'H':
89             assistant.hangmanGame();
90             break;
91
92         // Exit program when user enters 'q' or 'Q'
93         case 'q':
94         case 'Q':
95             charUserSelection = 'q';
96             break;
97
98         // Print error message when user inputs an invalid character
99         default:
100            System.out.print("The selection \"" + charUserSelection + "\" is not a valid option. Please select from the

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101         available choices (in parentheses).\n\n");
102     }
103
104     // Continue menu loop until user has entered 'q' or 'Q'
105     } while( !( charUserSelection == 'q' || charUserSelection == 'Q' ) );
106
107     // Farewell message (appears only after the user decides to exit the program)
108     System.out.print( "\n\nThank you for using Simple Assistant v1.0!  Have a mediocre day!\n\n" );
109
110     return;
111 }
112
113
114 }
```