LAB101Assignment

Type: LongAssignment

Code: C.L.P0003

LOC: 120 Slot(s): 3

Title

Simple Slot Machine.

Background Context

This is a simple slot machine which does not resemble the real machines in a casino. However, it does demonstrate the concept of probability in an actual slot machine.

Program Specifications

Write a program that allows the user to play a simplified version of a slot machine. The user starts with \$10. At the beginning of the program the user is given the following choices:

- 1) Play the slot machine.
- 2) Save game
- 3) Cash out.

Each play costs 25 cents. For each play, the slot machine will output a random three-digit number, where each digit ranges from 0 to 9. (This can be done by generating three separate integers in between 0 and 9, inclusive.) The result of playing the slot machine should be outputted along with what the user won. Here is a chart to indicate the winners earnings:

Combination Winnings
2 of a kind (such as 676 or 112) 50 cents
3 of a kind (000, 111, ..., 999) \$10.00

(Thus technically, you make a net earnings of 25 cents if you get a 2 of a kind and a net earnings of \$9.75 when you get 3 of a kind.)

If a player runs out of money, automatically cash them out and tell them that they have no money left. (Thus, a player, after losing who has 0 cents left should not be prompted with the menu at all. Rather, they should simply be presented with a message to end the game.) Otherwise, when a player chooses to cash out, thank them for playing and output how much money they have left.

Function details:

- 1. The choice entered by the user for the menu will always be valid.
- 2. If you choice 2, save your money to file. And restore the money in the play next time .
- 3. If you have no money to play any to more, say good bye.

Expectation of User interface:

```
You have $10.00.
 Choose one of the following menu options:
 1) Play the slot machine.
 2) Save game.
 3) Cash out.
 The slot machine shows 046.
 Sorry you don't win anything.
 You have $9.75.
 Choose one of the following menu options:
 1) Play the slot machine.
 2) Save game.
 3) Cash out.
 1
 The slot machine shows 933.
 You win 50 cents!
 You have $10.00.
 Choose one of the following menu options:
 1) Play the slot machine.
 2) Save game.
 3) Cash out.
 The slot machine shows 444.
 You win the big prize, $10.00!
 You have $19.75.
 Choose one of the following menu options:
 1) Play the slot machine.
 2) Save game.
 3) Cash out.
 Your money had saved!
 1) Play the slot machine.
 2) Save game.
 3) Cash out.
 3
Thank you for playing! You end with $19.75! 0
```

Guidelines