Software Requirements for Memory Game

Memory Game

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Overview

This document describes requirements for the software implementation of playing the classic game of Memory, with a twist. This software will allow a single player to count how long it takes for him to match up all the sets. A description of the game plus the requirements of this implementation are provided below.

The Game

The player is presented with a 6x6 grid of buttons. The player clicks on two buttons at a time and checks if the colors match. If they match the score and the number of turns will go up, if they do not match only the number of turns will go up, while the score will remain the same.

Software Implementation

UI elements

The software will present the Memory game with the UI elements listed below.
- 6x6 grid of buttons - when a button is clicked, a color will appear
- On the top of the screen there will be:
    - Start button
    - Next Turn button
    - Label to display the Turn Number
    - Label to display the Score
- Once all sets are found, a label will pop up displaying the number of tries.

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Game Process and Rules

- The game starts when the player clicks Start. Until then all clicks on buttons are ignored, and the Turn Number message is "Click Start to Play."
- After Start is clicked the message on the Turn Number and Score is changed to "0."
- During each turn the player will click 2 buttons that he thinks may be a set. If they match, both the Turn Number and the Score will increase, while if they don't the Score will remain the same.
- To start the next turn, the player will click the Next Turn button, and the colors from the previous turn will disappear if they were not a match.
- Once all the sets are made, all the buttons will be ignored, and the number of turns will be displayed.
- If the player clicks start in the middle of a game, then the game should interrupt and begin a new game.