2018 SDSU Program Design Competition

Concentration – The Classic Memory Game

Basic game:
The playing board is divided into 36 squares. Player 1 selects two squares. If the two have a matching image on the reverse side, the player gets points. If there is no match, the squares are flipped back to the starting position and play is passed to Player 2. This player attempts to find a match. The game continues until all the squares have been matched. The score for each player is noted.

The extra challenge:
When all squares are matched, a larger image will be revealed on the board. This image could be, for example, a question that the winning player must answer. The image could be a puzzle or equation to solve. An example of a puzzle might be a rebus. This is a device that uses pictures to represent words or parts of words. For example, the first rebus below translates to 'Too funny for words.' The second reads 'Take me out to the ballgame.'

You, as the designer, decide how a player wins, taking into account the score from the matching and the correct or incorrect answering of the question.

Program design:
You can design this game for either human-to-human or human-to-computer, or both. You can develop this game using any software tools available to you: any language and any platform. The presentation must be able to display on a projector with a 1024 X 768 resolution.

Your work will be judged on:
1. Correctness of the solution
2. Uniqueness of the design
3. Apparent ability to hold student interest
4. Completeness of solution
5. User-interface design

Presentation of the project
All team members are encouraged to participate during the presentation. All parts of the presentation and source code must be placed on a USB drive and submitted to the program design competition committee on the day of the competition. If you have any questions regarding the problem, please do not hesitate to ask Dr. Myounggyu Won or Jerry Cooley (myounggyu.won@sdstate.edu or jerry.cooley@sdstate.edu).

Good luck, and have fun!