Task 2: Specification

Our project is a memory matching card game that allows the players to log in with their credentials (case-sensitive) and play.

While in the game, players can select the level of difficulty. Easy mode displays 6 pairs of tiles in a 3x4 dimension. Medium mode displays 10 pairs of tiles in a 4x5 dimension. Hard mode displays 15 pairs of tiles in a 5x6 dimension. Extra hard mode displays 21 pairs of tiles in a 6x7 dimension. Players are also prompted to select a visual theme for the cards. (A random mode disables these options and generates a random set of cards).

The game has a timer and a move counter, to track the time and the number of moves that the player has spent in a game mode. It will also have a score counter to display the number of matches the player has currently made.There are also options to pause and reset the game.

The game should also have a leaderboard that records the top 10 highest scores among all players. Each difficulty has its own leaderboard. The leaderboard is based on the lowest total number of moves by a player. If there is a tie, time is used as the second criterion.