# Front End Engineering-II

# Project Report

# Semester-III (Batch-2023)

# Card Match Mania

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# Card Match Mania: An Interactive Memory Card Game

## Description

Card Match Mania is an engaging and fun card game designed to test and improve your memory skills. The objective is simple: match pairs of cards with identical images. Players take turns flipping over two cards at a time, trying to find matching pairs. If a match is found, the player keeps the pair and gets another turn. If not, the cards are turned back over. The game continues until all pairs have been matched. It enhances memory, concentration, and cognitive skills. The game can be customized with themed decks, timed challenges, or advanced matching criteria to add variety and increase difficulty. Memory Match Mania is not just a game; it’s a delightful way to exercise your brain and have fun at the same time. The website offers a variety of features to ensure an enjoyable and stimulating experience, including multiple difficulty levels, various themes.

## Technologies Used

## HTML

1. CSS
2. JAVASCRIPT

## Market Competitors

1. Purble Place: It is a classic memory and logic game that comes inbuilt in Windows operating systems, primarily designed for children. It’s Purble Pairs is the one that is most similar to a memory card game. The game increases in difficulty as players progress, providing a fun and engaging way to improve memory skills.
2. Lumosity: It is a well-known competitor in the realm of brain-training and memory games. It offers a variety of games designed to improve cognitive skills such as memory, attention, flexibility, speed of processing, and problem-solving. Unlike traditional memory card games, Lumosity provides a scientific approach to brain training, with its games being developed based on extensive cognitive research.
3. Elevate: It is another major competitor in the brain-training and cognitive enhancement space. Like Lumosity, Elevate offers a range of games and activities designed to improve various cognitive skills. However, Elevate distinguishes itself with a strong focus on enhancing specific abilities such as communication, analytical skills, and comprehension.

**Target Audience**

1. Children: They are our main target audience as memory card game is highly beneficial for young children as they help in improving concentration, developing cognitive skills, and enhancing memory. These games can be entertaining and educational, making learning fun for kids.
2. Students: As students often have stressful lives and need to study throughout the day, memory card games can provide a valuable break. The game can offer a more interactive way to engage with learning materials, helping students relax while still enhancing their cognitive skills.

## Key Features

1. Memory Challenge: The core challenge of a memory card game is to remember the locations of the cards and match pairs by flipping over two cards at a time. If the cards do not match, they are turned face-down again.
2. Difficulty Levels: Memory card games often feature different difficulty levels. These levels can vary the size of the grid, or the number of card pairs. The player can itself select the level of difficulty according to his capability.
3. Free of cost and Ad-Free: As nowadays all games contain ads and to remove that you have to take premium. This game is ad free and you can play it for free.
4. Themes and Variations: Memory card games can come in various themes and variations. These themes might include animals, numbers, letters, shapes, or popular characters. The choice of themes can make the game more engaging for specific audiences.
5. Count Moves: Another feature of the game is that it counts the number of moves a player has played to finish the game. One card flip counts as one move. It makes player desperate to finish the game in a lesser number of moves as he can and player challenges itself.
6. Timer: A timer feature is added in the game so that it enhances gameplay by adding a time-based challenge. The timer tracks the duration of each game session, allowing players to compete against the clock to match all the cards. It starts when the game starts and ends when game is completed.

**Comparison between Competitors**

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| **Purble Place** | **Elevate** | **Card Match Mania** |
| It has three mini-games in it. | It is a brain training app that has many games. | It has only one game and has all focus on it. |
| It’s target audience are mainly primary children. | It’s target audience are adults. | It’s target audience is students. |
| It is free. | It requires subscription for full access. | It is free. |
| It does not track time and moves. | It tracks time and moves in some of its game. | It tracks time and moves used to complete game. |
| It focuses on teaching basic cognitive skills. | It focuses on providing a wide range of scientifically designed brain training exercises. | It focuses on enhancing memory and concentration in a fun and casual format. |