

Flip & Match



Statement of Purpose



Modern twist on the classic memory-card mechanic

Cognitive training while
Entertaining



Fuse fun with meaningful progression

Risks and Rabbit Holes

● Potential Risks:

- **Logistics**
 - Mechanics like rules, points, and concept of matching not being clearly defined
 - Leaves the potential of confusion, could waste time resolving undefined foundation of game
- **Assumptions**
 - Thinking complex implementations such as UI effects and animations are easy to include
 - Assumptions without proper testing can lead to delays stemming from bugs if UI effects don't work as intended
- **Unknowns**
 - Not fully considering edge cases
 - If we ignore odd states of the game, this could snowball into unintended behaviors and further delay producing a useable game

● Rabbit Holes:

- **Overcomplicating Power-Ups and Card Effects**
 - **Risk:** Feature complexity overwhelms design and slows coding
- **Polishing Too Early**
 - **Risk:** Spending too much time perfecting UI before the gameplay is stable
- **Feature Creep**
 - **Risk:** Continuously adding features without focus, causing project delays
- **Multiplayer Sync Issues**
 - **Risk:** Trying to implement multiplayer too early causes technical problems before the core game is ready

System Diagram

Same device



In this flip-and-match game, players pick two cards at a time from a randomized board. If the selected cards match, they are removed, and the player earns points. If the cards do not match, the player must try again. The game continues until the board is empty, and the final score is displayed. For the MVP version, the game is designed for one player on the same device.

Wireframe

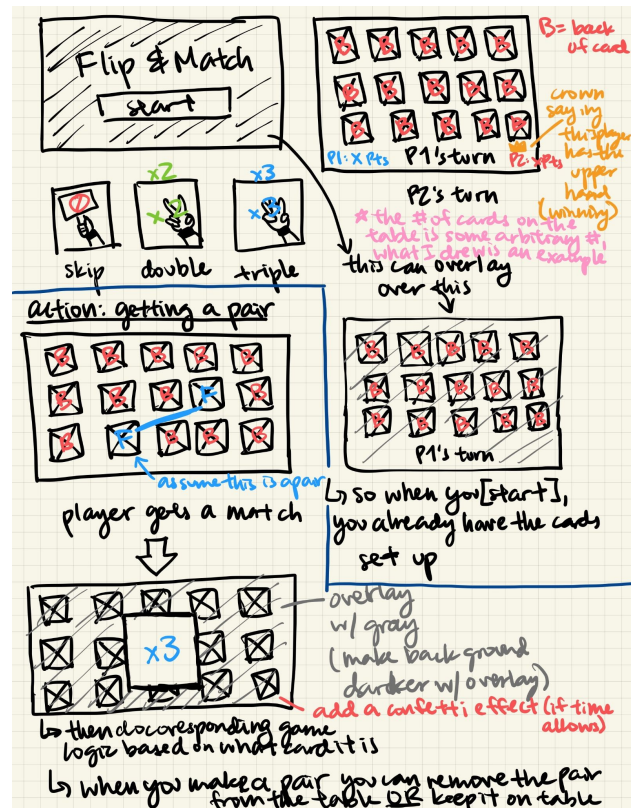
Game contents

- Timer
- Player points
- Power ups

Special cards:

- Double
- Triple
- Earn double/triple points when matched

Bright colors



Game Layout

B = back of card

Player's Turn

Timer

B	B	B	B	B
B	B	B	B	B
B	B	B	B	B

Player 1: 10pts

Player 2: 0pts

Color palette

Bright colors:

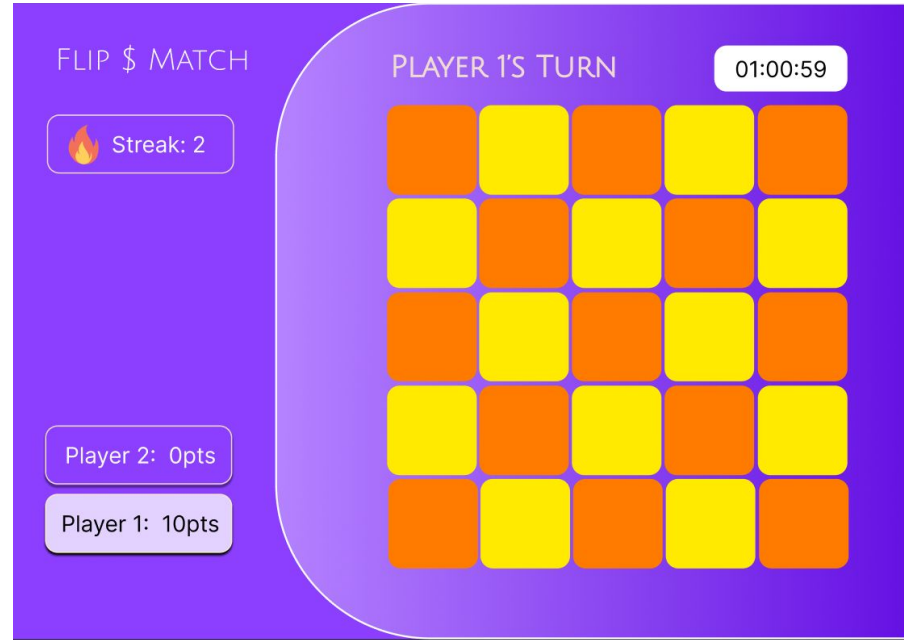
Card color 1:	Card color 1:	Background color
ffea00	ff7b00	5a00e0
ff00bb	0077ed	002147
ff7b00	006d77	faedcd

Wireframe

Starting page



Game layout



User Persona (1)

Name: Freddy Collins

Age: 29

Occupation: Graphic Designer



About: Freddy is a 29-year-old graphic designer from Lucerne, Switzerland. He takes on many projects at a time and uses mental games as a way to reset during breaks. With a packed schedule and lots of screen time, he's picky about how he spends his downtime. He enjoys casual brain games that feel like mental warm-ups, rather than those that feel like chores.

Goals:

- Improve mental stamina and memory for creative work
- Find a relaxing break
- Build consistent brain training habit

Motivations:

- Games that feel purposeful
- Keeping his mind sharp
- Productive break

Frustrations:

- Games that aren't very challenging
- Repetitive levels that feel like another job
- Lack of variety

User Persona (2)

Name: Joseph Smith

Age: 20

Occupation: Student

About: Joseph is a sophomore college student studying Computer Science. Between classes or during boring lectures, Joseph likes to go on his phone and pass time by playing casual video games. He enjoys games that are laid back and simple, rather than complex ones.

Goals:

- Wants a quick way to unwind between and during classes and study breaks
- Play games that are mentally stimulating but low-pressure and simple
- Enjoys tracking progress and competing against friends for fun

Dislikes:

- Repetitive games that get boring fast
- Apps that have too many advertisements and complicated menus
- When games are required to be played online only



User Persona (3)

Name: Jane Doe

Age: 24

Occupation: Marketing Specialist



About: Jane is a 24-year old marketing specialist from New York City. She enjoys playing mobile games to entertain herself when she has gaps in her schedule. With a preference for applications with simple interfaces, she prefers her games to gradually increase in difficulty. She likes the challenge and the feeling of triumph when she beats moves on to the next level in a game.

Goals:

- Relieve her mind from her busy work schedule and hectic life
- Improve her memory in an easy, casual way that is easy to incorporate into her daily life

Motivations:

- An intuitive game interface
- A challenge and reward system that keeps her engaged with the game

Frustrations:

- Games that plateau and lose their initial hype
- Complex interfaces that cause her to lose track of her initial purpose of playing a simple game
- Lack of progression in the game's challenge levels

More ideas

- Different card effects
 - Each card could have different effects such as +2 points, making opponents points go down, or stealing points from opponent.
- Card combination:
 - if you collect a specific set of cards(2~4 different cards) by matching them, you can activate a set effect that either lasts until the end of the game or a big one time effect.
 - Ever lasting effects could include: 1 extra points every time you match a card from now on, or opponent cannot take points away from you now on
 - One time effects could be halving opponents cards(but has to match and collect 4 different specific set of cards), or making opponent skip one of their rounds so you can go twice.
 - The power of the effect should have a positive correlation with the difficulty to collect the card sets(harder sets to collect should have more powerful effects)
- Possibility to locally add more players