

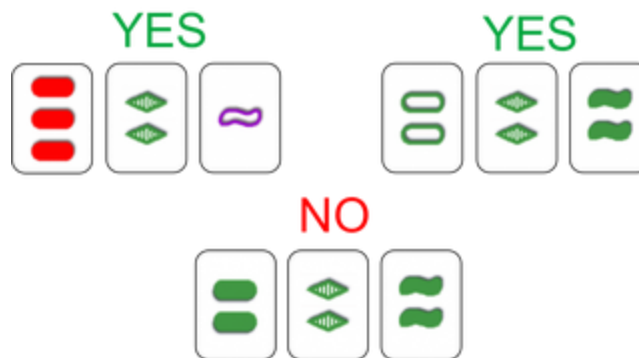
Set Game

We want to make a single-player version of Set game – the family game of visual perception! The game consists of a deck of cards with different symbols. The symbols vary in shape, color, number, and shading.



Twelve cards are laid on the table and the player's goal is to identify a "set" of 3 cards. A "set" consists of 3 cards in which each of the cards' features, looked at one-by-one, are the same on each card, or, are different on each card. All the features must separately satisfy this rule.

For example, the first 3 cards below are a set because the colors, shading, number, and shape are ALL different on all 3 cards. The second 3 cards are a set because the color and number are the same while the shading and symbols are completely different.



The last 3 cards are NOT a set because the cards on the left and the right are the fully shaded while the one in the middle is lined.

In our project, we hope to implement one or two hint buttons. The first hint button would highlight one card that is part of a set. The second hint button would highlight the second card in the same set. Hopefully, at that point, the player can find the third card!!

We will consider the option of making a two-player version, depending on timing and scope. We will design the project to allow for the addition of a second player (perhaps by creating a player class and other design decisions).

Workload Breakdown

1. GUI:

card & board design - **Eva**

layout design - **Eva**

mouse & key IO setting - **Pat* *Andrew**

2. Game Engine:

generating sets - **Eva**

generating the solutions - **Pat* *Andrew**

checking user's the result - **Andrew**

hint/reveal solution function - **Pat**

3. Testing:

unit test of all the above functions & logics / integration test - **shared by all**