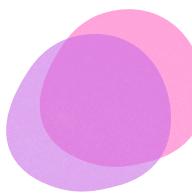
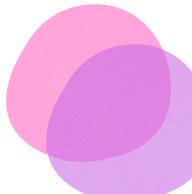
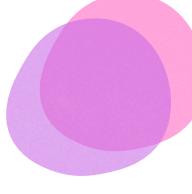


# KOLORIZE

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# MAIN POINTS

-  The game
-  The logic
-  Working
-  Conclusion

# KOLORIZE

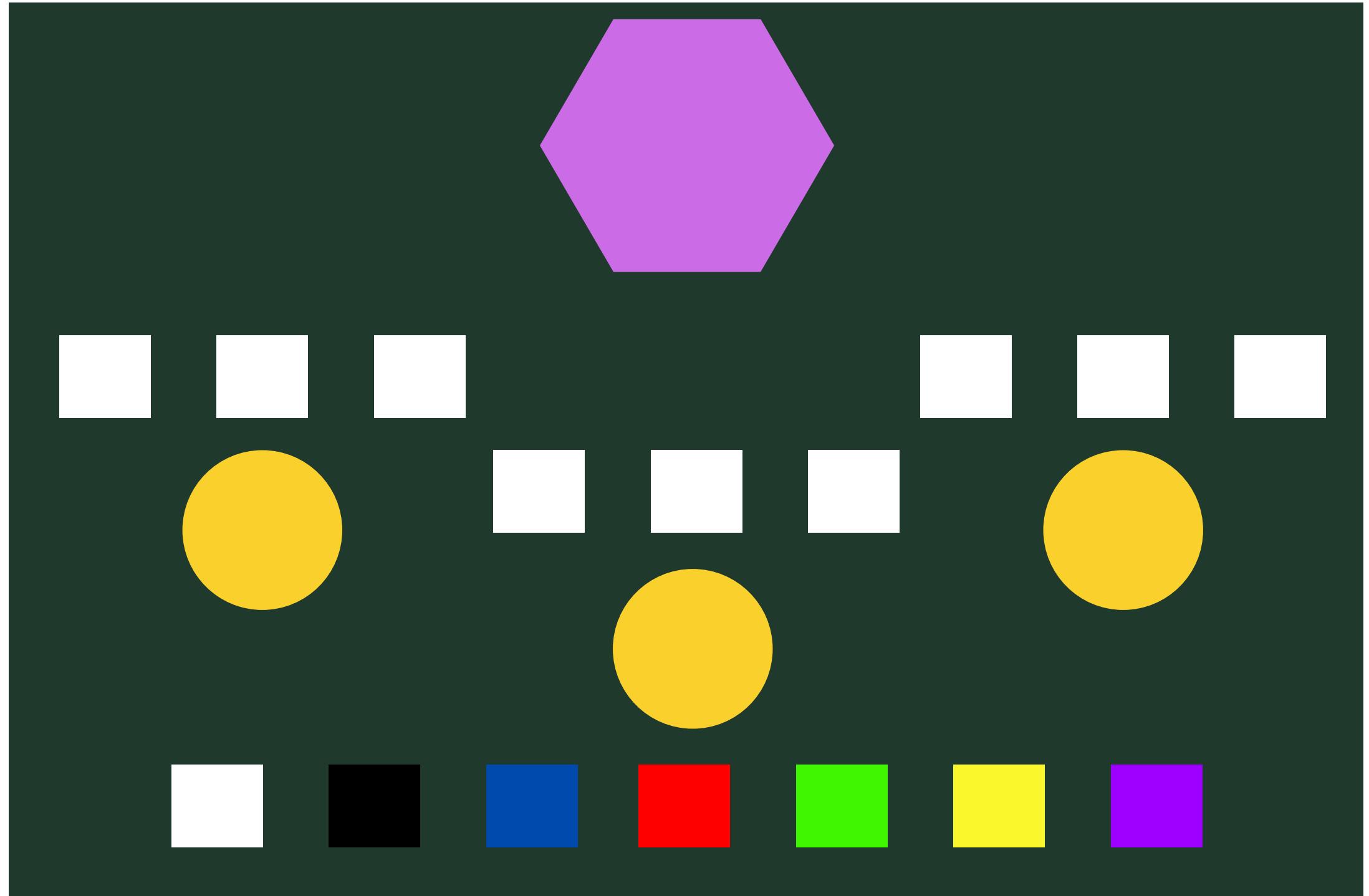
A fun and challenging puzzle  
that tests your color-mixing skills  
and your ability to understand  
and manipulate ratios.



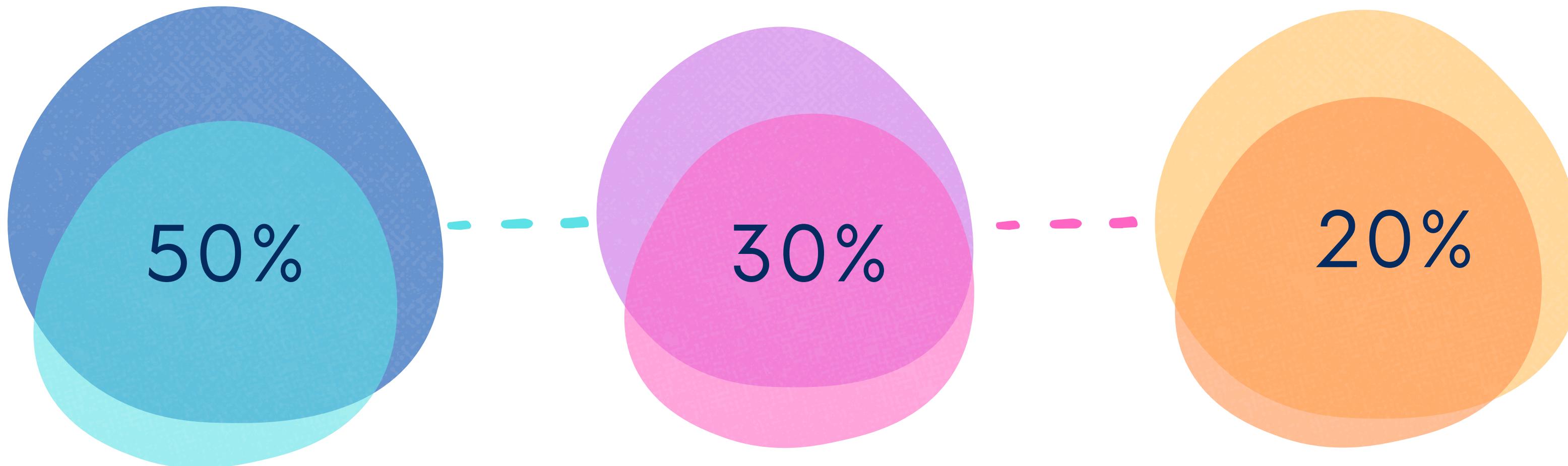
# THE GAME

In the game user has three attempts to guess the right combination of three colors to create the target color. The challenge is that the 3 colors are divided into a ratio of 5:3:2. Player needs to mix and match the colors in the correct proportions to achieve the desired target color.

# THE DESIGN



# THE COLOR MIXING



# THE COLOR MIXING

1. Define a list of weights [0.5, 0.3, 0.2]
2. Extract the RGB components of each color using slicing and convert them from hexadecimal to decimal
3. Multiply each component by its corresponding weight and sum them up.
4. Divide the sum by the total weight to get the weighted average.
5. Convert the weighted average back to hexadecimal
6. Pad each component with leading zeros
7. Concatenate the padded components to form the final hex color value.

# LOGIC OF GAME

1. It initializes a variable called count to keep track of the number of correct positions.
2. It starts iterating through the user\_list three times using a for loop.
3. Inside the loop, it gets the color value from the current node of the user\_list.
4. It starts iterating through the target colors using another loop.
5. If the user's color matches the target color, it prints a message indicating that the color is correct and at the correct position, and increments the count variable.
6. If the user's color is not in the target colors, it prints a message indicating that the color is not in the target colors and removes the color from the user's list using a method called deletenode on the display\_list.
7. After each iteration, it moves to the next node in the user's list.
8. Once all iterations are complete, the function finishes execution



**LET'S PLAY**  
**THANK YOU**