User Documentation - Simon

Kevin Wu CSC258 - Assembly Project | Mar 01 2023
1+ Players | Ages 7+

How good is your memory? Watch the colours, remember the order, and press the right buttons! Test your skills in this fun but challenging game and see how far you can get!

Starting the game:

Open Ripes.exe and click the File tab on the top left, then click Load Program (or, simply press the Ctrl+O keys simultaneously). Select "Source file" for the File type and click the button labelled "Open..". Select the starter.s file from where you downloaded it, then click OK.

Next, make sure you are using the Single-cycle processor by selecting it in the menu brought up with the button pictured left located under the File tab.

To set up the program, you must go to the I/O tab on the left side of the program and change some settings. Double-click on the "LED Matrix" device to get an LED matrix if there is not already one. This is the window that will light up with colours for the game, so make sure you can see it. To the right, you should see a panel "LED Matrix 0" with parameters "Height", "Width", and "Size". Set the height and width to 2 and 2. Set the size to a value that makes it easy for you to distinguish the LEDs.

Next, double-click on the "D-Pad" device to get a D-pad if there is not already one. This is an interactive window with buttons that you can press to give the game input.

Two windows for the matrix and D-pad will pop up. You can interact with the D-pad by clicking the buttons. If you click the D-pad window, it should be highlighted, which indicates that you can use WASD controls as well.

Once everything is set up, you are ready to play! Simply look for the Fast Execution button located at the top toolbar. Click it to immediately begin the game.
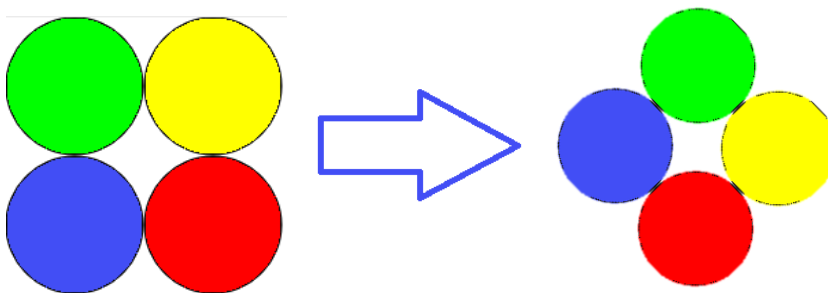
How to Play:

When you start the game, colours will light up one at a time in sequence on the LED matrix. Watch closely to see what colours light up, and the order which they light up. Out of the four colours (Green, Yellow, Blue, and Red), a random colour is chosen each time for the sequence.

Wait for the pause where the LEDs stop lighting up. Now it's your turn to replicate the order that was just displayed by pressing the directional buttons on the D-Pad.

You can choose to click the buttons on the D-Pad or use the WASD keys on the keyboard while focused on the D-Pad interface. Please note that there are short delays between lighting LEDs, and if your input did not display, simply click it again.

You can think of the LEDs rotated by 45 degrees clockwise to match the D-Pad controls. The D-Pad button that you press will light up the corresponding LED each time you guess it correctly. If you press the wrong colour, that LED will flash red and end the game.

UP - Green
DOWN - RED
LEFT - BLUE
RIGHT - YELLOW

__End of a round:__
If you guess the entire sequence correctly, you have the choice to start again, but with one additional colour added to the sequence and with less time to remember the order.

At the end of each round, you will be prompted to enter whether or not you want to start over or quit the program. Simply type one of the two options (0 to quit, 1 to start again) and press enter.
Please enter only 0 or 1 or else there may be unexpected behaviour.

 If you would like to restart the entire program, simply press the restart arrows, located at the top left. Then press the Fast Execution (double arrows).

Please exit the game properly by entering 0 during the final prompt at the end of a game/round. Interrupting the process in the middle may cause unexpected behaviour.

Thanks so much for playing!