**Documentation Manual**

**Intro**

The memory puzzle game is a game that tests the user’s memory and brainpower to remember where a label is on a specific card. The game starts off by asking the player to choose a label from a letter and a number. The label is retrieved from a text file that contains letters from A-Z and numbers from 1-100. Each card is drawn on a 3-3 grid. Each card has a different label and color randomly assigned to it. However, there are only 3 shapes. The total number of a particular shape appearing on the grid is unpredictable because they are created at random.

**Levels**

There are four levels in this game. Each level will get relatively harder. However, the position of the cards does not change so the player has an upper hand to recognize where each card is located as the level goes on. The difference is, in most cases, the player will be asked a different label each time, and the way the cards appear makes it difficult for a player to easily follow and recall the correct shape and color. When playing this game, it is best for players to put in full focus and concentration.

**How to play**

This is a demo of how to play the game. The user enters a label. Then a grid of cards will appear on the screen in different ways for each level for a pre-defined amount of time and disappear. Then a new window appears, asking the user what the shape and color is for the label being asked. The user gets to choose between these shapes: *Triangle, Square, and Circle*. The user gets to choose between these colors: *blue, green, yellow, white, grey, red, purple, orange, and pink*. Then if they get the shape right, they get a plus 2 for their score. If they get the color right, they get a plus 3 to their score. If they get both right, they get a plus 5 to their score. These scores will be counted and displayed at the end with their total score. The game also keeps track of the record so users can see their improvements while playing again and again.

**Possible challenges and benefits**

For beginners, it might be challenging to get used to the game as they may see that they could not find any correct answers. However, as they play more, they will get better at the game. Since this game test’s your ability to remember, continuously playing can also improve your memory.

**Limitations**

In this game, luck plays a major role. In some cases, players may perform very well if they get lucky by focusing on some part of the grid and luckily getting asked from those sections. Also, the player may be asked the *same label*, although in most cases this is unlikely. The player also needs to correctly spell the shapes and colors in the entry boxes, although it is not case sensitive.