User Interface for Coding Minion

Leds - To make light

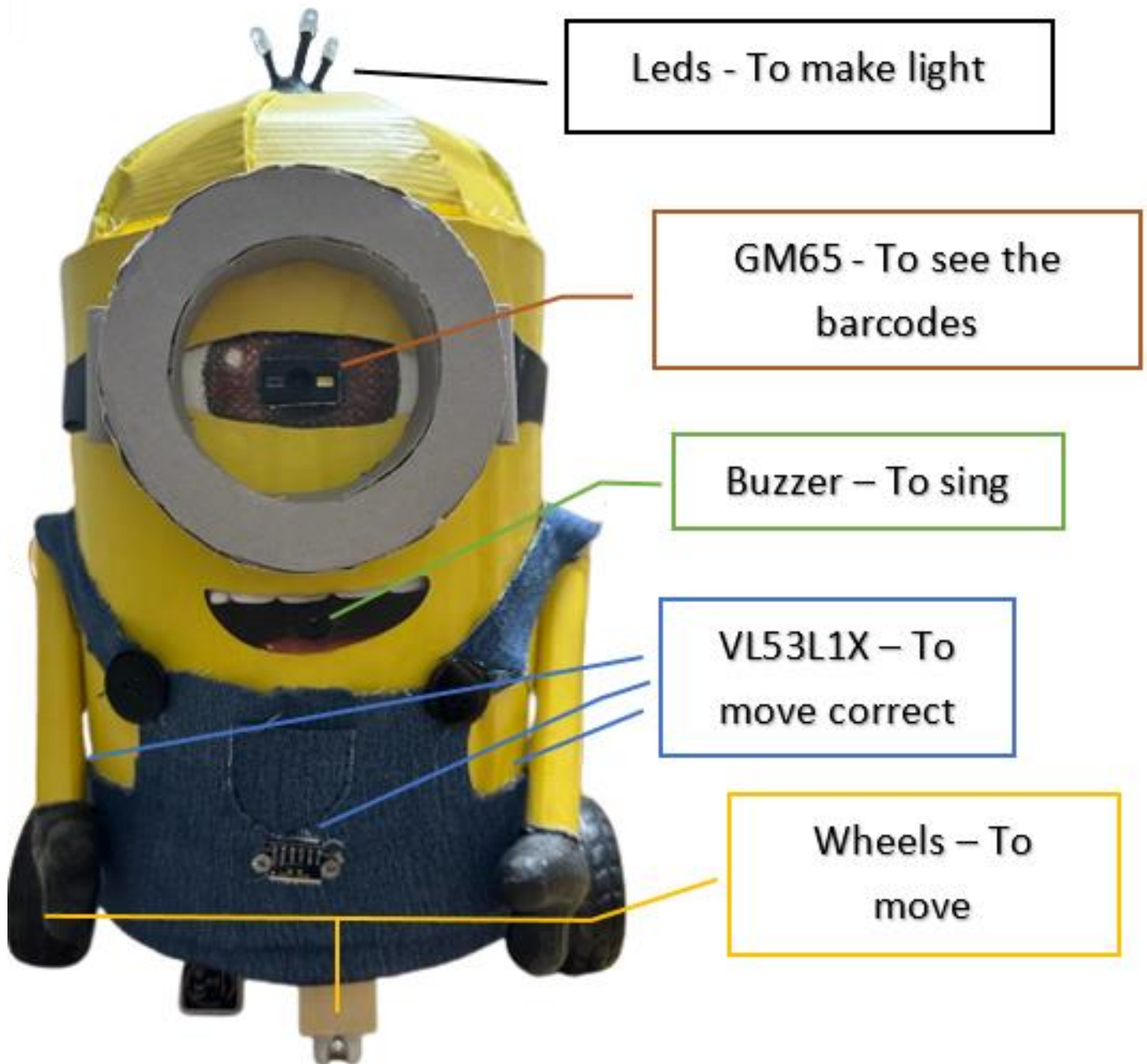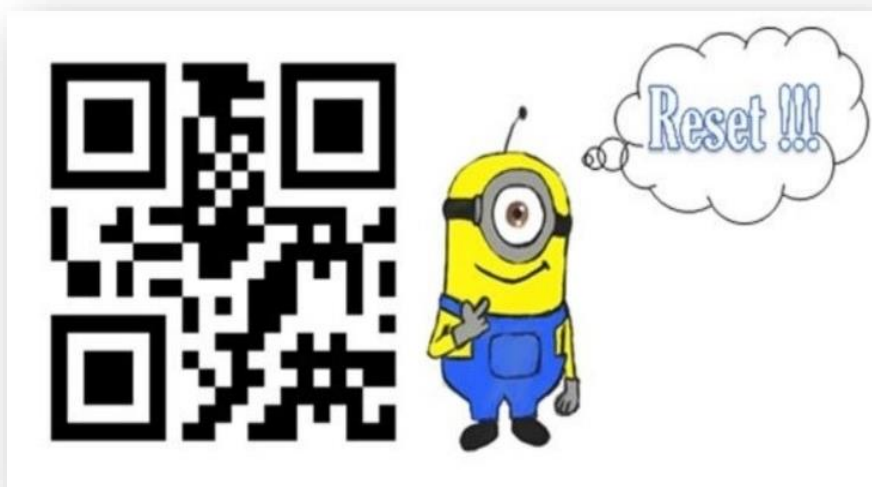GM65 - To see the barcodes

Buzzer – To sing

VL53L1X – To move correct

Wheels – To move

Notes about Coding Minion:

1. Our Coding Minion can work within two modes (you can choose one mode at the start by scanning the correct card).

2. You need to put the Coding Minion at the start of the maze.

3. You have to turn the battery on in order to turn it on.

4. Then you have to toggle the toggle switcher, in order to turn the motors of Coding Minion on/off.

5. Coding Minion can scan cards with his eye, you just need to put them in front of his eye.

6. If you have any problem while solving the maze you can scan the reset card, and start scanning from the beginning.

7. In Order to turn off, you have to toggle the switcher and then to turn off the battery (or the oppsite).

1. User self-solution mode:

1. To enter this mode, you have to scan the "start" barcode as seen at the picture below (after scanning the card you will see changes at the color of the three middle LEDs for seconds).

2. After that you have to scan directions cards (there are 4 "go left" cards, 4 "go right" cards and two "go forward" cards).

   Notes:

   - Every card has its own color so after scanning it you will see changes at the color of the three middle LEDs for seconds.
   - You can't scan the same card twice in a raw!!

3. Now you can scan "start moving" card, and the Coding Minion will start searching bananas.

4. As Coding Minion walking at maze you can see what his next move by looking at the color of the three middle LEDs (the color is the color of the last direction that had been done according to the user's solution).

5. If the Coding Minion has stopped at the middle of the maze (didn't reach the end), then you have scanned the wrong directions/solution, so it will sing a sad song, turn 180 degrees and go back to the start of the maze, so you can have another chance for solving the maze.

6. At the other hand, if the Coding Minion stopped outside the maze (right solution), then you won! so the Coding Minion will sing a nice song for you ☺.

2. Coding Minion self-solution mode:

By scanning the correct solution card (according to the current maze, you have 3), the Coding Minion will start moving aiming for caching bananas 🍌.

Note: You can observe its moves by looking at LEDs colors.