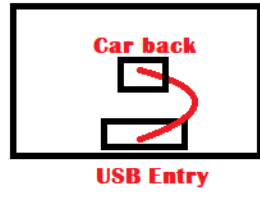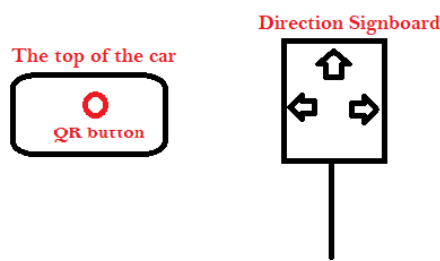# User Manual

1. In order to **turn on/off** the car, connect/disconnect the USB cable to/from the battery which located at the rear end of the car.

After connecting the cable, the car will make a peep sound informing you about successful connection.

2. It's time to scan! After building the maze according to **Game Rules and Instructions**. Hold the Direction Signboard & scan the required barcode by **pressing at QR button.** (Located at the top of the car)

At the end of each direction scan, a direction LED will turn on informing you about successful scanning. (All the LEDS are located at the top of the car).
(In case you missed a direction you can rescan the barcodes by scanning end and long pressing the start button).

3. We almost there! After scanning all of the direction barcodes it's the time to scan the _End barcode._

4. Place the car at the maze & press at start button (located at the top of the car) & enjoy.

5. **More buttons,**

   1. After the start of the game, the start button will be used as stop button, you can stop the move of the car when it is moving forward and only then.

   2. You can reset the car only it is in stop mode, a long press at the "start button" will reset the car. All of the LEDs will turn on informing you about reset action.

Game Rules and Instructions

Game Description:

This Project is about a robotic car that can solve a maze by the help of the user.

The car always drives forward until it is stuck with a junction, then it do the next move according to the data provided by the user.

The data contains directions that are encoded as a QR code, the car will scan all the directions before entering the maze and save them aside to use when getting stuck in a junction.

there is an option to rescan the directions in case there was an error with the scan order or the car isn't able to continue as the given data.

Junction:

- a place or point of meeting.
- a conflict points for the car or a meeting which require the car to change his direction.

Maze Rules

1. there're three classes of walls that you're allowed to use.
   30 cm, 50 cm, 100cm.

   though that 30 & 50 cm walls support inner or edges walls, the 100 cm will be used only for edges.

2. The wide of each street at the maze have to be between 35 – 40 cm. it's your responsibility to check them.

3. There should not be more than one junction that the car move forward sequently more than once.

   Example of legal mazes: