Duayenler Ltd. Şti. **November 19, 2018**
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November 12 - 19 Weekly Report

1 Progress

- [Team] Preparation of Proposal Report
- [Team] Solution alternatives for handshake protocol is discussed, proposed algorithmic state machine chart can be seen in *Figure 1*.
- [Team] For handshaking, Bluetooth and RF transceivers can be used. RF modules uses SPI interface whereas Bluetooth modules use UART. UART is somewhat problematic in booting of the realated device, as suggested on related forums. To make a first choice, pairwise comparison table is constructed as in *Table 1* .

	Fast Operation (0.14)	Robust and Reliable Operation (0.14)	Weight Balance (0.17)	Cost Effective (0.07)	User Friendly (0.05)	Power Consumption (0.22)	Reusability Potential (0.01)	Easy Implement ation (0.11)	Integration to Autonomous Systems (0.09)	Total
RF	10	8	10	8	0	8	0	8	8	60
	1,4	1,12	1,7	0,56	0	1,76	0	0,88	0,72	8,14
Bluetooth	6	8	10	6	0	4	0	4	8	46
	0,84	1,12	1,7	0,42	0	0,88	0	0,44	0,72	6,12

Table 1: Algorithmic State Machine Chart for Handshake Protocol

- [Team] Color sensor TCS3200 is tested to understand the use of sensors.
- [Team] The core chip of the color sensor TCS3200 can be used to construct a sensor array for color detection purpose (with SMD LEDs).

2 Plans

- [Team] Orders will be placed for Bluetooth and RF modules.
- [Team] Testing of the modules.
- [Team] Finding suitable camera choice for Raspberry Pis.

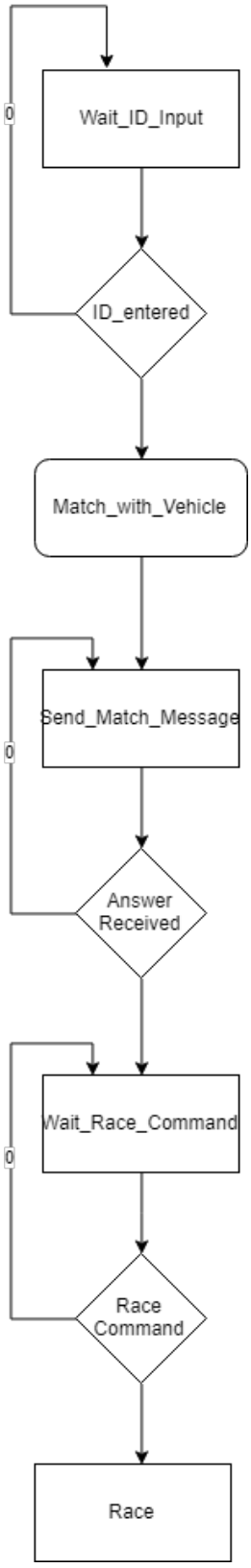

Figure 1: Pairwise Comparison Chart for Module Decision