Weekly Project Report

20 November, 2018

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TrailBot

**Progress**

* IR beacon constructed with constant IR LED.
* Final power switch installed.
* Priming complete on lower portion of body.
* Final sensors installed and mounted.
* Accessory mounting assembly began.
* Presentation and report documents began.

**Plans**

* Implement a 38-kHz IR transmitter into beacon, to better communicate with 38-kHz receivers.
* Complete priming and painting of lower body.
* Finish construction of accessory mounting.
* Prime and paint upper body.
* Performance testing.
* Finish presentation

**Issues**

* No issues this week.

**Schedule**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | W1 | W2 | W3 | W4 | W5 | W6 | W7 | W8 | W9 | W10 | W11 | W12 | W13 | W14 | W15 | W16 | Progress |
|  | 21-Aug | 27-Aug | 3-Sep | 10-Sep | 17-Sep | 24-Sep | 1-Oct | 8-Oct | 15-Oct | 22-Oct | 29-Oct | 5-Nov | 12-Nov | 19-Nov | 26-Nov | 3-Dec | **Total: 90.2%** |
| Design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **97.5%** |
| Chassis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 100% |
| Controller |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 100% |
| Software |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 90% |
| Sensors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 100% |
| Additional Functions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | TBD |
| Build |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **93.33%** |
| Chassis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85% |
| Controller |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 95% |
| Sensors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 100% |
| Test |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **90%** |
| Movement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 95% |
| Following |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85% |
| Obstacle detection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 90% |
| Additional Functions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | TBD |
| Present |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **80%** |
| Records |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 90% |
| Presentation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 70% |
| **Milestones** |  |  |  |  |  |  |  |  |  |  |  | **11/10** |  | **11/24** | **12/1** |  |  |

**Milestones**

1. Achieve robot mobility functions, including sensors, **Nov. 10**. **ACHIEVED**
2. Install carrier and peripherals, to complete the body, **Nov. 24**.
3. Verify all functions in comprehensive operational test, including all components, **Dec. 1**.