



October, 21-29 Weekly Report

1 Progress

- [Erdem] Generally, DC motors types (for general robotics applications) are divided into 2, as listed below. Motors such as stepper and servo are omitted, since they are (possibly) not related with driving a vehicle.
 - Brushless DC Motors: Brushless DC motors do not use brushes. The rotor is a permanent magnet and the coils do not rotate, but are instead fixed in place on the stator. One advantage is energy efficient since there are no brushes to cause additional friction in the motor. Another advantage is durability, nothing to be broken inside. Moreover, the noise inside is lowered considerably which results in high torque and precision in controlling. These motors are mostly used in CD drivers and drones.
 - Brushed DC Motors: Brushed DC motors use the brushes to conduct current between the source and the armature. A variation of such motors is geared DC motors. They have a gear assembly attached to the motor. The speed of the motor is reduced with an increase in torque with the help of gear assembly. By usage of the gears, the speed of the DC motor can be reduced with an increase in torque. For controlling geared DC motors, L293D motor driver is normally used in hobby robots.
- [Erdem] Some important points on selecting the right motor are:
 - Electrical Characteristics: Op. voltage, max. current
 - Mechanical Characteristics: Motor type, torque (load, no-load), rpm
 - Battery: Battery should be capable of supplying required current

2 Plans

-



3 Problems

- Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

