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**MIDDLE EAST TECHNICAL UNIVERSITY**

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

EE493 – Weekly Progress Report #16

POTATO INTEGRATED TECHNOLOGIES

A close up of a clock

Description generated with high confidence

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**What has been done:**

In this week we implemented our range test for the command system after receiving the delivery of the antenna. Even though we conducted the same test in design laboratory we couldn’t have obtained the desired outcomes. However, with this new antenna we managed to control our robot from the top floor of E-block when the robot is placed close to the canteen in D-block. We are planning to conduct the same test by connecting a bypass capacitor between the Vcc and GND pins of the transmitter side Arduino. We are expecting to see improved performance even though this current range is enough for the command part.

We also optimized our motor code so that it can achieve smooth start and brake. We also tuned it’s speed by considering the sizes of the playfield. Later touchups can be made in the future regarding our final product.

Furthermore, we also bought spacers for the physical structure of our robots’ chassis, step-up & down regulators, and 3s LiPo battery with 1350 mAh capacity to drive the DC motors. This one has a greater capacity so that we do not need to charge the batteries that often.

**Next week’s plan**:

* Second layer of the robot will be integrated with the first layer using the spacers
* Regulator tests will be done.
* Shooting subsystem will be tested with step-up regulator.