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**MIDDLE EAST TECHNICAL UNIVERSITY**

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

EE493 – Weekly Progress Report #14

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 our main concern is Critical Design Review Report, or CDRR in short. Until Friday we spent most of our time writing the report and correcting some small mistakes on it. However, despite our caution on the report writing phase, we forgot to place 3D drawings on the report as an appendix in the collection phase of the report.

Before we submit the report, we do not have much time for working on the robot. On the other hand, we know that we absolutely need to test the range of the command module, since there is no way back after we submit CDRR. So, we build a test setup where we create commands using joystick connected to Arduino and send with connected module. Then we receive the signal with another module connected Arduino and directly print the command with “Serial Print” function of Arduino. In the tests, we successfully sent command from the entrance of Block E to Capstone Design Lab. This result is enough for the project and, we know that the range can be enhanced by using different type of antenna and better signal encoding.

At last, with the start of a new week we started to work on our past codes. Since, these codes are written only perform the desired operation, they need to be optimized. We start the optimization from the motor codes. Our past motor code only had full power and halt options. In this week we add soft start and soft stop into our motor code so, the transition between full power and stop became smoother. This balanced transition also protects the physical parts from the wear down.

**Next week’s plan**:

* New range test will be done between cafeteria and VLSI Lab.
* Will continue on the optimization of the motor code.
* The physical structure of the robot will be enhanced.