ECSE 211 Group 2
Test Report

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1 Test 1

Hardware Version: Mark II – Arm length is 60 centimeters.

Software Version: Modified Lab 5 Code – Modified to make it easier to adjust the swing time between launches. Otherwise the code is identical.

Procedure: We will adjust the swing time and fire the ball to determine the best swing time for the motor.

Results: In each trial the ball fell short of the target.

Swing Time /ms	Successful?
500	N
550	N
600	N
650	N

Notes: The battery voltage was 7.8 Volts

2 Test 2

Hardware Version: Mark II – Arm length is 50 centimeters.

Software Version: Modified Lab 5 Code – Identical to Test 1

Procedure: We will adjust the swing time and fire the ball to determine the best swing time for the motor.

Expected Results: We expect to see the ball enter the target.

Results: Our initial swing time selection of 500 milliseconds fired the ball perfectly into the target. Out of the 10 trials conducted, the ball passed through the target seven times.

Notes: The battery voltage was 7.6 Volts

3 Test 3

Hardware Version: Mark II – Identical to Test 2.

Software Version: Modified Lab 4 – The navigation class was modified to move the robot more quickly. Otherwise the code is identical.

Procedure: The robot will be placed on the field and made to cross two gaps. A 1 & 5 millimeter gap.

Expected Results: The back wheel of the robot will fail to cross gap and get stuck.

Results: The robot managed to pass over both gaps without problems.

Notes: The battery voltage was 7.8 Volts