

Programming Level 3 Test

This test should be administered under the supervision of a senior
programmer (level 4)

Applicants should be able to provide an explanation as to how any code that
they have written works

Applicant's name _____ Date _____

____ All work done for this test should be committed to the repo using a new
branch on the repo used for the level 2 test

____ Create a method `scanFile`, which reads each line of a file and stores it in
an `ArrayList`

____ Code Unicorn (See below).

Tester's Name _____ (print)

I have not assisted the applicant in the taking of this test and have been as fair
as I can.

Tester Signature_____

Unicorn

Port numbers don't matter but should be plausible

All major code changes need to be commented/javadoc'd and committed to GitHub. All commit messages should be descriptive of all changes made.

Github repository should contain a ReadMe that describes what the codebase is for. Do not plagiarise this document. All code not auto generated by vscode needs to be written by the individual taking this test.

4 wheels, one motor/Talon per wheel

Arcade Drive with Strafe

Joystick Controllers

Grabber mechanism uses 1 piston to open/close, 1 to raise/lower

Piston 1: Out = Close

Piston 2: Out = Raised

Opening the Grabber when raised will drop the ball into the Shooter

Uses a SparkMax to operate a lift which stops at a signal from a separate Limit Switch at the highest and lowest points

Forward on the Motor = Up

Limit Switch true = tripped

Shooter uses a Talon controlled motor to wind up, uses a Piston to hold in place, second Piston disengages Motor, Should not fire while motor is engaged

Piston 1 In = Fire

Piston 2 Out = Motor disengage

Motor Reverse = wind up