

PROJECT SPECIFICATION

PID Controller**Compilation**

CRITERIA	MEETS SPECIFICATIONS
Your code should compile.	<p>Code must compile without errors with <code>cmake</code> and <code>make</code>.</p> <p>Given that we've made CMakeLists.txt as general as possible, it's recommend that you do not change it unless you can guarantee that your changes will still compile on any platform.</p>

Implementation

CRITERIA	MEETS SPECIFICATIONS
The PID procedure follows what was taught in the lessons.	It's encouraged to be creative, particularly around hyperparameter tuning/optimization. However, the base algorithm should follow what's presented in the lessons.

Reflection

CRITERIA	MEETS SPECIFICATIONS
Describe the effect each of the P, I, D components had in your implementation.	<p>Student describes the effect of the P, I, D component of the PID algorithm in their implementation. Is it what you expected?</p> <p>Visual aids are encouraged, i.e. record of a small video of the car in the simulator and describe what each component is set to.</p>
Describe how the final hyperparameters were chosen.	Student discusses how they chose the final hyperparameters (P, I, D coefficients). This could be have been done through manual tuning, twiddle, SGD, or something else, or a combination!

Simulation

CRITERIA	MEETS SPECIFICATIONS
The vehicle must successfully drive a lap around the track.	<p>No tire may leave the drivable portion of the track surface.</p> <p>The car may not pop up onto ledges or roll over any surfaces that would otherwise be considered unsafe (if humans were in the vehicle).</p>
