Student Name: Luke Walton

Project Title: PID Feedback Car Control

Description:

PID is a closed feedback loop using Proportional, Intergral, and Derivative calculation, designed to meet a numerical goal without overshooting.   
Top-Down map interface, car on the map.  
Click one point, and car travels there.  
Uses PID for turning exactly to the point and no further.  
Uses PID for acceleration exactly onto the point and no further.  
Introduce obstacles in the way that must be avoided / Adjust turning or speed (Sand traps, roads vs off-road, ice, different frictions)



What are the complex issues: (List algorithms/data structures):

PID Calculations  
Implementations to models via OOP  
Responsive UI to change constants and show status  
Multi-threading

What will you need to research/prototype:

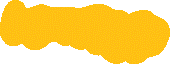
PID’s core calculations and how they come together to one value  
Multithreading

Give 2 rough front end sketch ideas

Icon

Description automatically generated If I can get multiple windows to work

P -----O-----  
I –O---------  
D O-----------  
  
Current Acceleration:  
--  
Current Calculation:  
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**Peer: Other Luke**

Good points:

Detailed description, clear design objectives and features needed in the project. Issues look complex enough to talk about them in great depth.

Difficulties:

You could probably research and prototype more of the program, like the Ui implementation and so forth. Speaking of, the UI could be a bit more detailed, explaining what each part does, for example.

**Peer: Alex**

Good points: Detailed description with real world applications.

Difficulties: UI could be more detailed.

**Peer:**

Good points:

Difficulties: