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1 Progress

- Lane detection tests were conducted with different disturbances on different locations of the path. Possible detection errors were again analysed. An example case can be seen at *Figure 1*.

Figure 1: Possible Problem on the Path and the Algorithm Output

- The chassis parts were drawn in Solidworks. And the placements of the components on top of the chassis were discussed. The main components can be seen from the *Figure 2*. The mounting bracket for the motor can be seen at *Figure 3*.
- Initial consideration on system modelling via Bump Test were discussed. A simulink model was drawn for the expected overdamped system with pure delay. The model can be seen from the *Figure 4*.

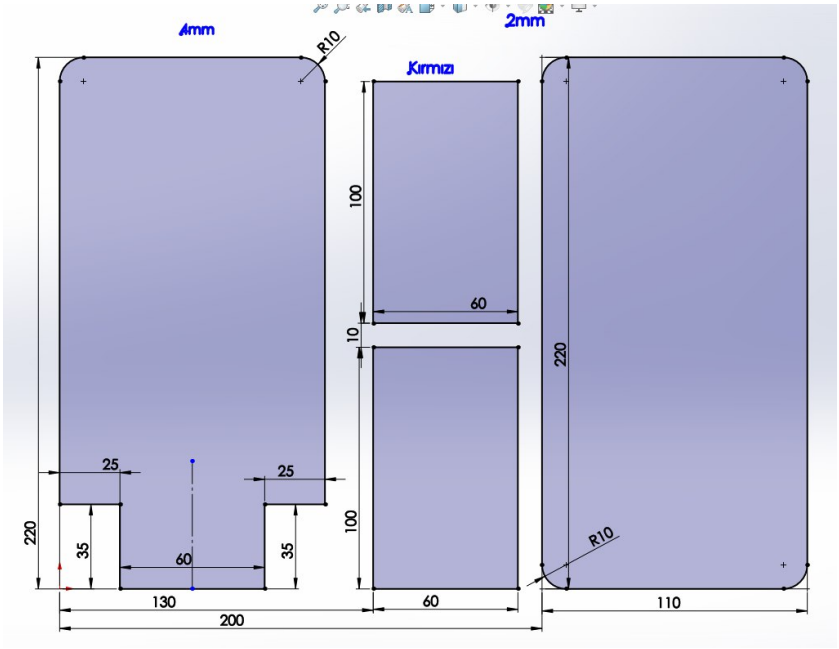

Figure 2: Main Components of the Chassis

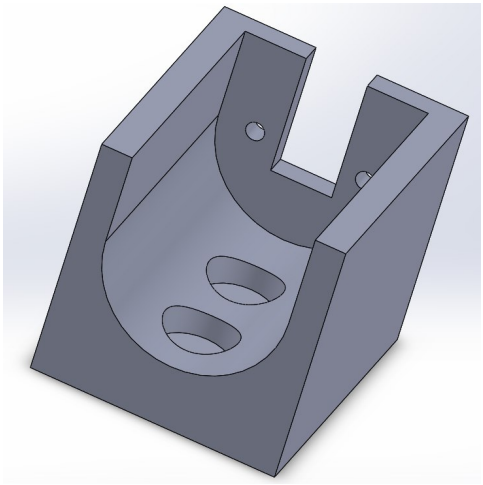

Figure 3: Mounting Bracket for the Motor

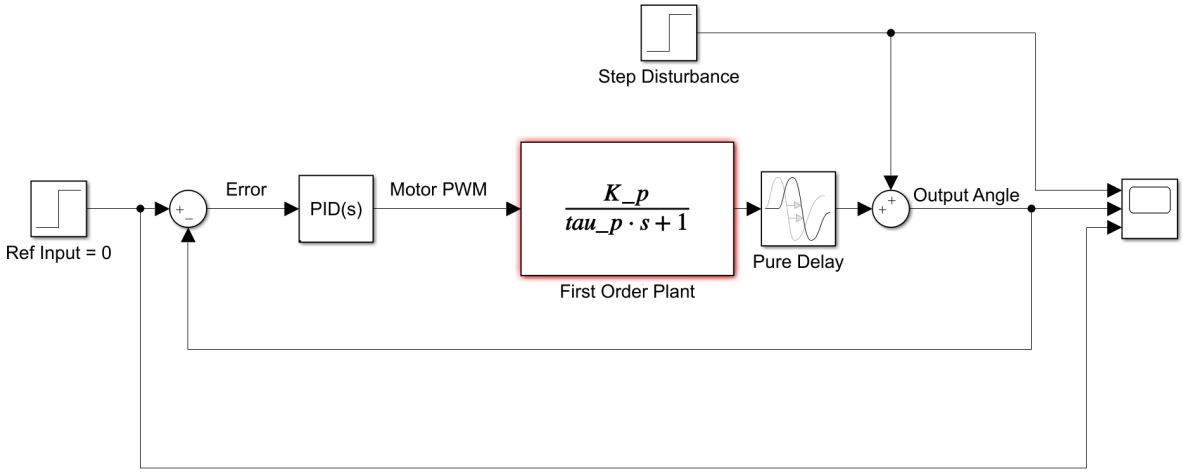

Figure 4: A Simulink Model for the Expected Overdamped System

2 Plans

- New chassis will be built.
- Initial attempts to tune PID controller for the lateral movement of the vehicle.

3 Problems

- The method for getting step response step response. Two alternatives can be seen from *Figures 5 & 6*.

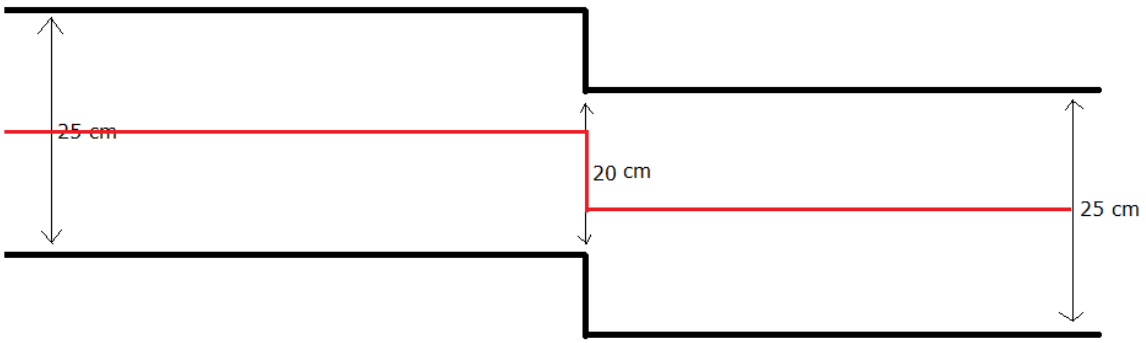

Figure 5: A Bump Test Set-Up for Distance Control System

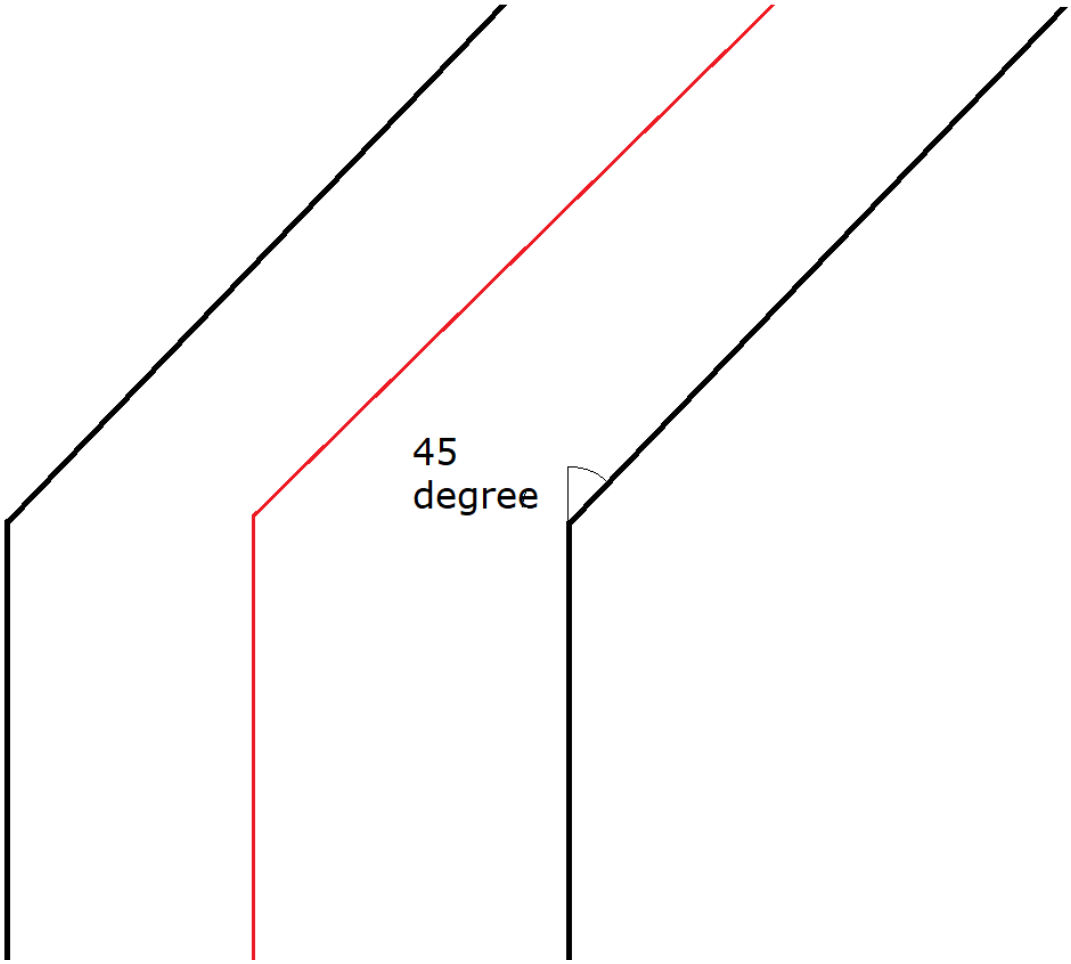

Figure 6: A Bump Test Set-Up for Angle Control System