OVERVIEW

Software module to control the ackermann kinematic model of ACME robot using a PID based controller

CAPABILITIES

A PID controller for Ackermann steering mechanism simulating real world conditions while steering in industrial warehouse based environments

APPROACH

Inputs are taken from the user about target robot heading and velocity, then an error is estimated wrt the desired and current trajectory, using which the required wheel velocities and steering angle for the robot are calculaed

KEY MILESTONES

Phase 0: Project proposal with UML diagrams and quad chart

Phase 1: MVP implementation of the software and initial testing

Phase 2: Final robust testing of hte software and integration. Code documentation and optimization.