ABSTRACT

Simulator is a tool that serve to simulate a device, but that work is slower than the real situation. With the simulator, driving skill will be tested before eventually drive on the road. Driving simulator can be used to reduce the rate of accidents caused by novice drivers.

Driving Simulator has three main parts, there are Input System, Visual System and Output System which are connected. If three parts are put together it will made a system called moving simulator for driving training.

In this final project will be made simulator platform for Output System which have a measurement 1:2 that is moving depends on users input. Speed, steering wheel and rotation will be the input parts. Simulator work based on 2 DOF (Degree Of Freedom) which moving with Servo Motor and GY-521 for motion sensor. Furthermore, also applied Ackerman Steering Geometry teory for set the steering wheel degree and Sentrifugal teory to know tilt simulator which become Output System focus.

Keywords: Simulator Platform, 2 DOF, Output System