APPLICATION 1: PID ACTION SIMULATOR

The application is designed to simulate the effects of P, I, D, PI, PID using MATLAB GUI. As the values of these control parameter changes for a function, one can monitor the effects in the adjacent graph in the GUI. A person can tune its system according to its requirements through this application.

To make this application and to execute it we only require MATLAB.

Steps to run the application:

1. Download the application folder from the website (https://sujoyroyskr.github.io/DynamicAnalytics/Pid.html).
2. Add the downloaded folder to your MATLAB directory.
3. Run PIDTuner.m file. This will run the MATLAB GUI application.
4. Change the Kp, Ki, Kd and see the effect of these controls in the adjacent graph.
5. Before closing the application, drop down the values of Kp, Ki, Kd to zero and click reset.

Screenshots of the application:

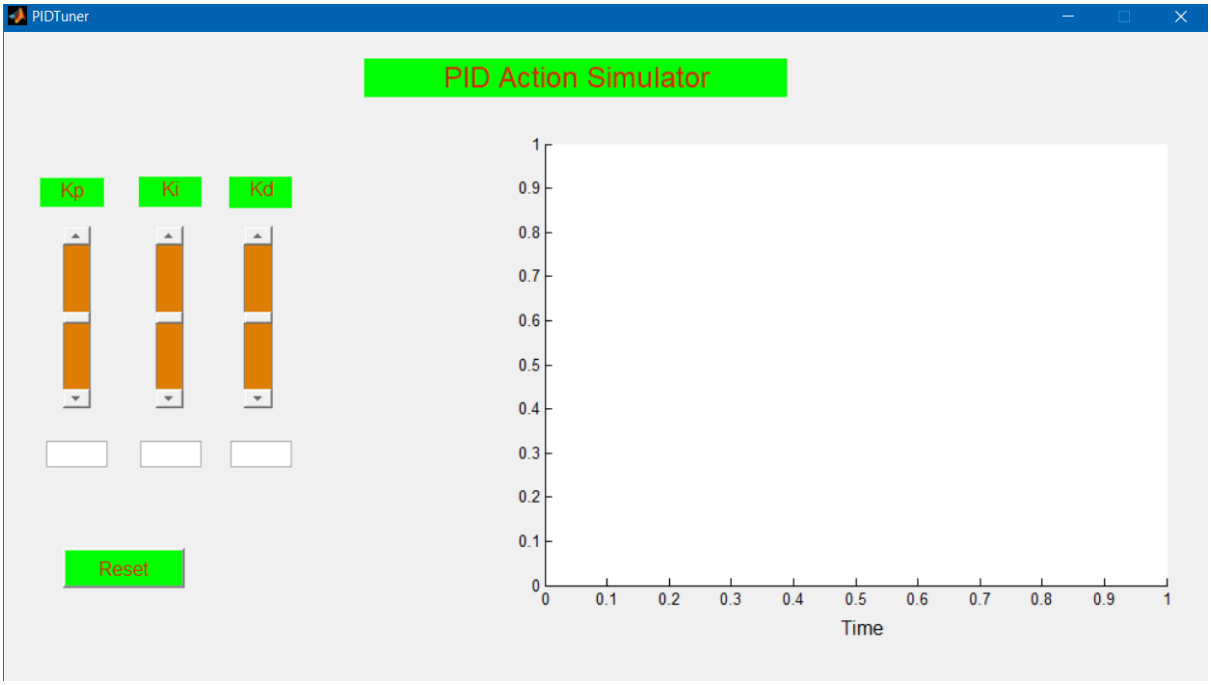

Fig 1: Application interface

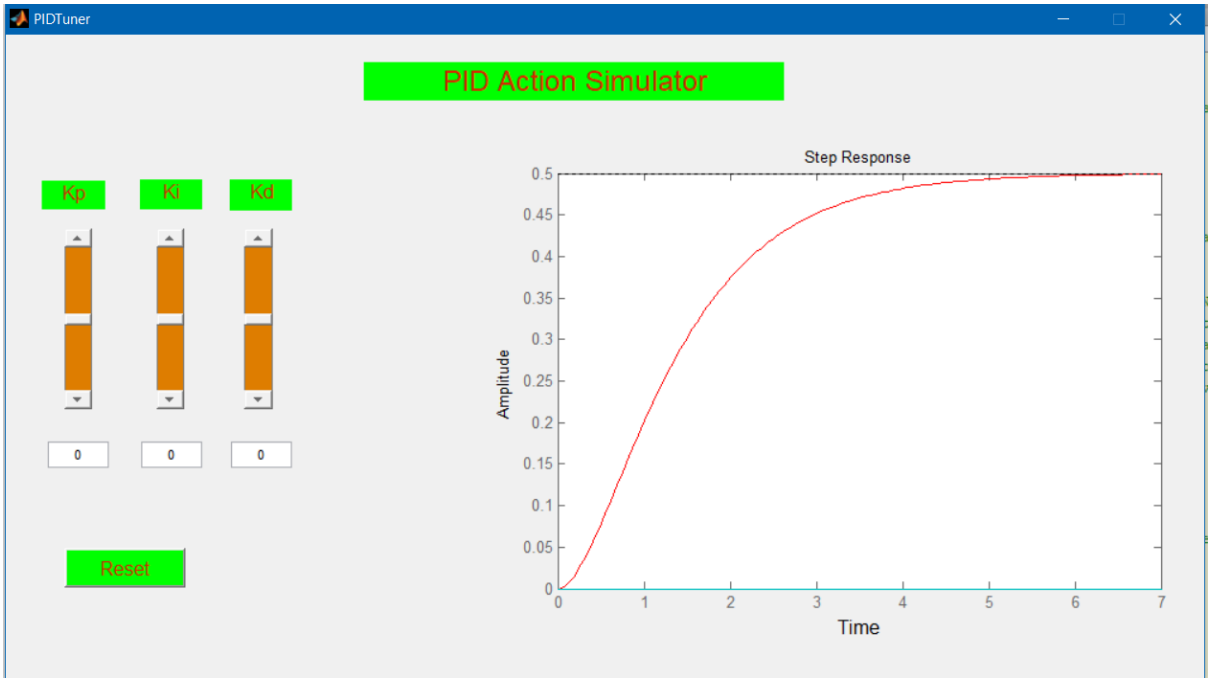

Fig 2: Step response without control

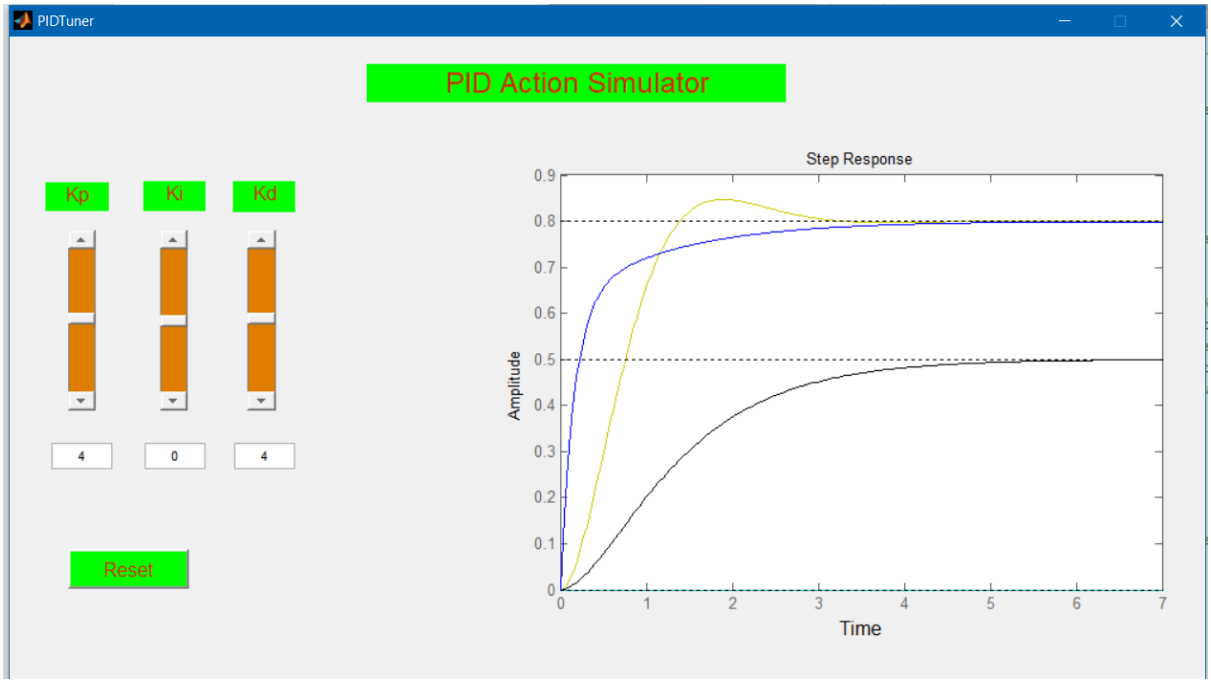

Fig 3: PD control

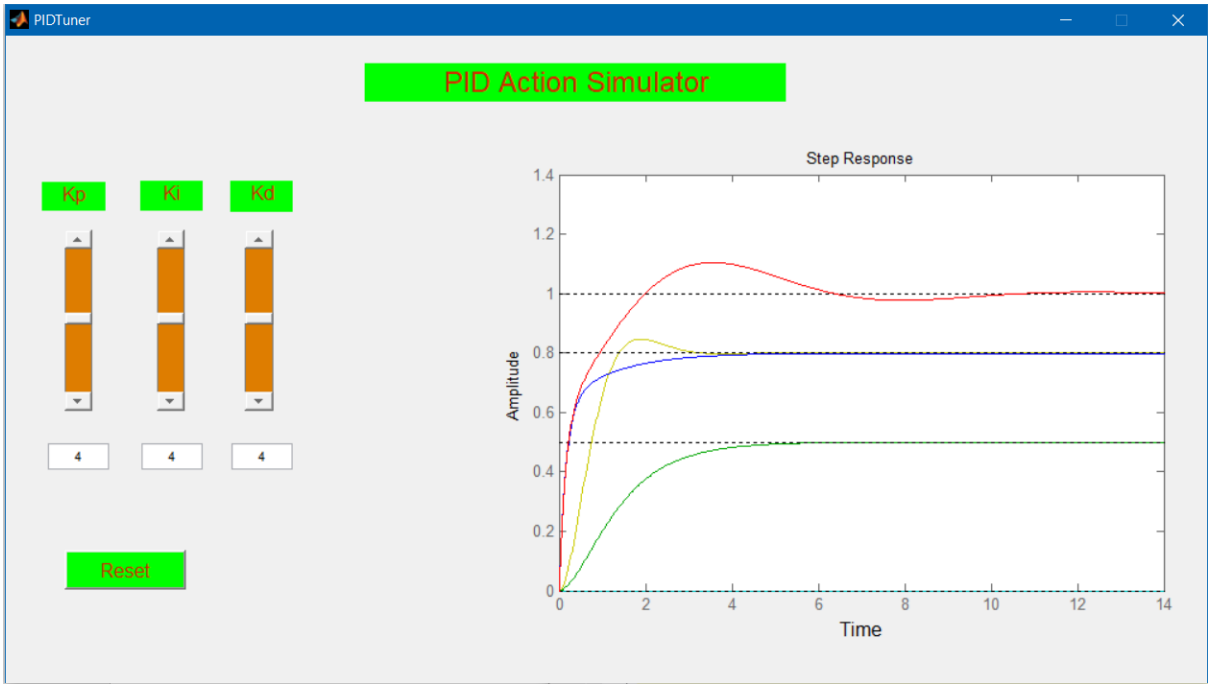

Fig 4: PID control