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```
%{
The data sets for LAB 3 is now uploaded in the comment section of your prelab submission.

As mentioned today, each one of you have received 2 files. The file named as "Line_Circle" is the default trajectory of this project and the s
Each of the mentioned files include two sets of measurements: "LLI.mat" and "PP.mat" which refer to Lead-Lag-Integrator and Pole Placement con
The students who did not submit their custom trajectory by the deadline today only received the Line_Circle file, and they will loose the poin

Instruction on the format of provided data:

Each file is a structure with 5 structure fields. The data that you need for your lab report can be accessed as:

Time: lli.X.Data

Actual (measurement) x position: lli.Y(1).Data

Actual (measurement) y position: lli.Y(2).Data

Reference (command) x position: lli.Y(3).Data

Reference (command) y position: lli.Y(4).Data
%}
```

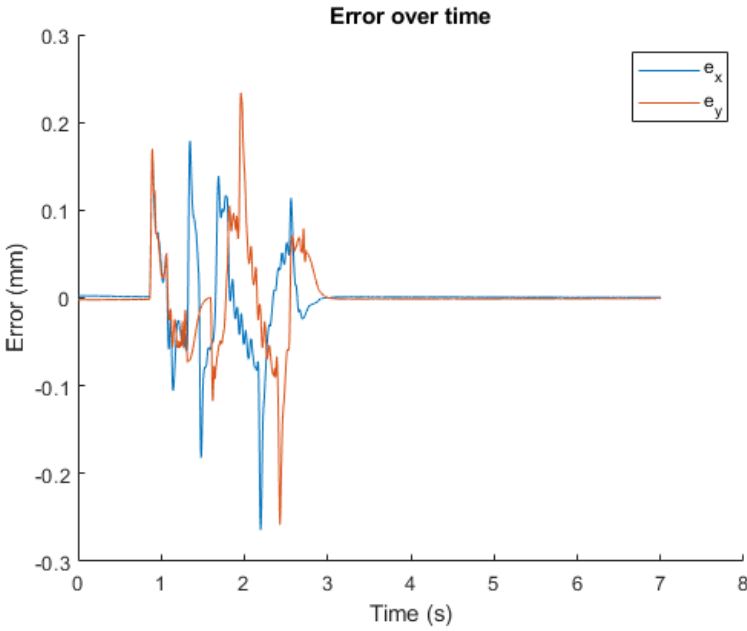
set up

```
name = 'lli.mat';
lli = load(name);
time = lli.lli.X.Data;
x_act = lli.lli.Y(1).Data;
y_act = lli.lli.Y(2).Data;
x_ref = lli.lli.Y(3).Data;
y_ref = lli.lli.Y(4).Data;
```

E1

```
e_x = x_ref - x_act;
e_y = y_ref - y_act;

clf();
hold on;
plot(time, e_x);
plot(time, e_y);
legend('e_x', 'e_y');
title('Error over time');
xlabel('Time (s)');
ylabel('Error (mm)');
saveas(gcf, 'E1.png');
```



Published with MATLAB® R2020b