ReadMe-Arduino PID

Our system presents an inverted pendulum using Arduino Uno and PID library.

Description

To use the system all you need to do is to connect the Arduino to your computer. To reset the system, you should push the red Butten when holding the pendulum on 0 degree. After that you can insert the goal degree between -15 to 15 degree and the program will start to fix the error degree until reaching the goal degree.

Getting Started

Dependencies: Arduino IDE include the PID library and the encoder package via Sketch -> include library-> zip :https://github.com/PaulStoffregen/Encoder

Installing: For further information, use the link attach below-
https://docs.arduino.cc/software/ide-v2/tutorials/getting-started/ide-v2-downloading-and-installing

Executing program

- Open the Arduino IDE Program -> click "file" -> click "open" -> choose the file from the relevant folder on your computer -> connect the Arduino Uno device by USB ->click "verify" button ->click "Upload" button

Help

- **Please note, do not execute the program before you connect the tongs to the table!**

Authors

Daniel Mani- @manidani4149, Daniel Magnezi - @danielmagnezi, Nitay Man- @NitayMan, Ofri Seroussi- @ofris