

# Servo Motors Feedback System Algorithm

## Electronic parts:

- 1) 2 Servo motors
- 2) 1 Potentiometer
- 3) 1 Arduino Uno

## Steps:

- 1) Connect two servo motors with two digital pins on Arduino
- 2) Connect a potentiometer into an analog pin on Arduino
- 3) Connect all to the 5V pin on Arduino and the Ground pin
- 4) Include servo library to control servo motors
- 5) Include EEPROM library to save the potentiometer (first servo) position
- 6) Declare all pins in the Arduino sketch void setup
- 7) Start the work in void loop
- 8) The potentiometer (which consist the first servo hand in real robot) will be moved
- 9) The value of the potentiometer will be read in actual range (0-1023)
- 10) The value of the potentiometer will be converted into the servo angle range (0-180)
- 11) The converted value will be saved in the EEPROM index using put fun because it's an integer
- 12) The value of the EEPROM index will be read using get fun because it's an integer and name it as a variable
- 13) Using write function of servo library the two motors (in reality only the second bc first is already moved by the user) will move according to the variable value