

AIM OF THE PROJECT:-

To built a system which is able to handle and play the dinosaur game on chrome web page

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COMPONENTS USED:-

- 1 .Servo motor
2. LDR
- 3 .Bread board
4. Arduino Uno
5. 10K Ohm resistor
6. Jumper wires

EXPLANATION OF CODE WITH RESPECT TO PROJECT:-

Connect the pin no.-9, ground and 5V of Arduino to the servo motor through jumper wires. Then using bread board connect the ground ,3.3V and A0 of Arduino to LDR via breadboard and resistor. The LDR here senses the intensity and provides the value to compare it with the threshold-intensity and gives the command to servo motor to rotate at the unpress_angle or press_angle(defined below).the figure is given below..

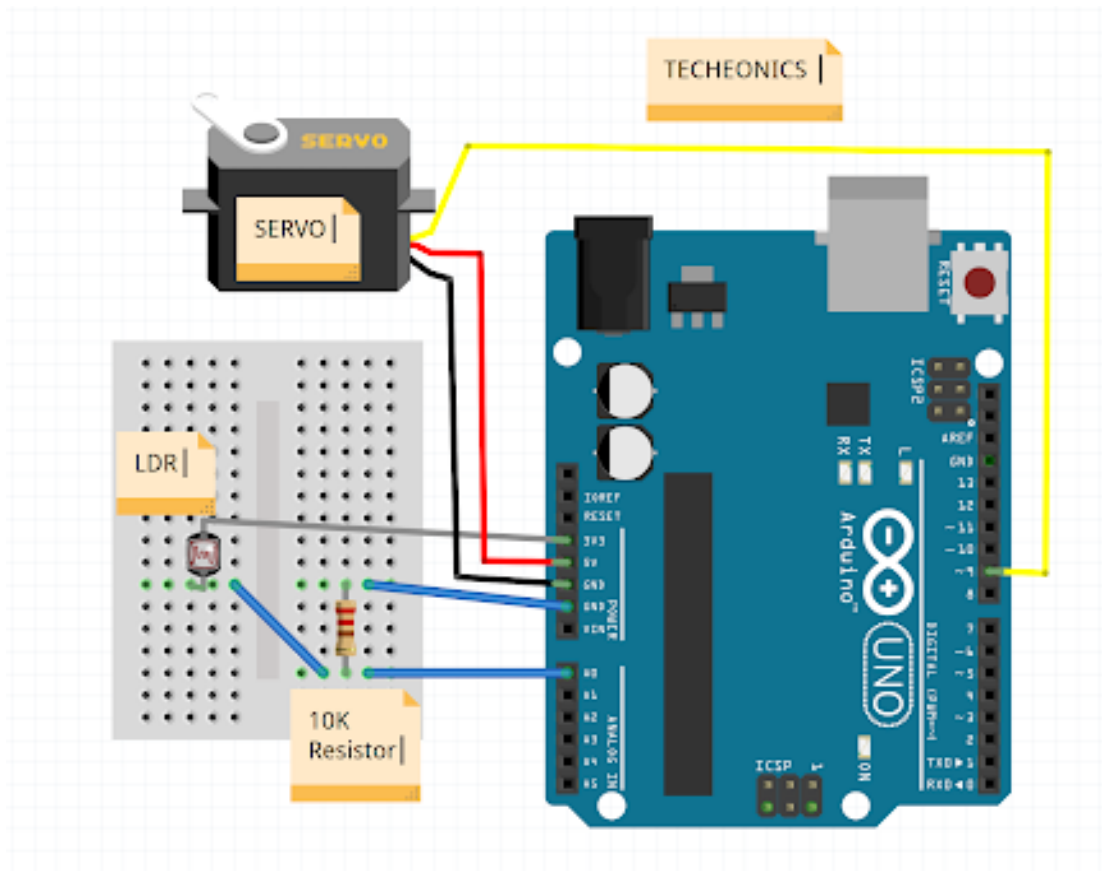
As we have to control a servo motor so the code includes Servo.h header file. Then I have defined 3 constant values that are threshold , unpress_angle and press_angle. And I have assigned them to values 250, 70 and 36 respectively. Then I have created a myservo object of Servo.

Then in setup function I gave attached the myservo object of Servo to pin no.-9 of Arduino. Then the unpress angle is assigned to the myservo object as initial value.

Then in loop function again myservo is kept in unpress condition(means the servo motor is kept in unpress condition). Then a delay of 1 milli seconds is given in oder to check the below condition after every 1 milli seconds of time delay. Then when the condition satisfies that when the analog value of A0 is less than threshold value the the myservo is set to press condition(means the servo motor is set to move throught an angle of press_angle) ans it is set for an delay of 110 milli seconds. After finishing this condition then the program again and again runs the loop function.

CIRCUIT DIAGRAM:-

Only the LDR is not connected on bread board instead it is connected with jumper wires manually directly to the LDR. Then the LDR is set to the screen for sensing.



LIMITATIONS AND POSSIBLE SOLUTIONS:-

1. When the dark mode comes the applied code will not let anymore to be applied to the easy handling of the dinosaur game. It can be overcome by using another sensor for sensing the dark mode(dark background) and again initializing the values to suitable values for easy going of game.
2. When ever the bird comes at certain height it becomes a problem it can be overcome by using another sensor and placing it at suitable place on the screen so that it can sense the bird and give command to the servo motor to press_angle.
3. At certain level the dinosaur will run at a faster speed and it can be overcome by changing the delay time.

BIBLIOGRAPHY:-

1. Tutorial for coding in Aurdino from Youtube.
2. Arduino Programming Notebook, Author-Brian W. Evans.
3. Other links from google for coding in arduino for dinosaur game.