

AUTODESK
Instructables

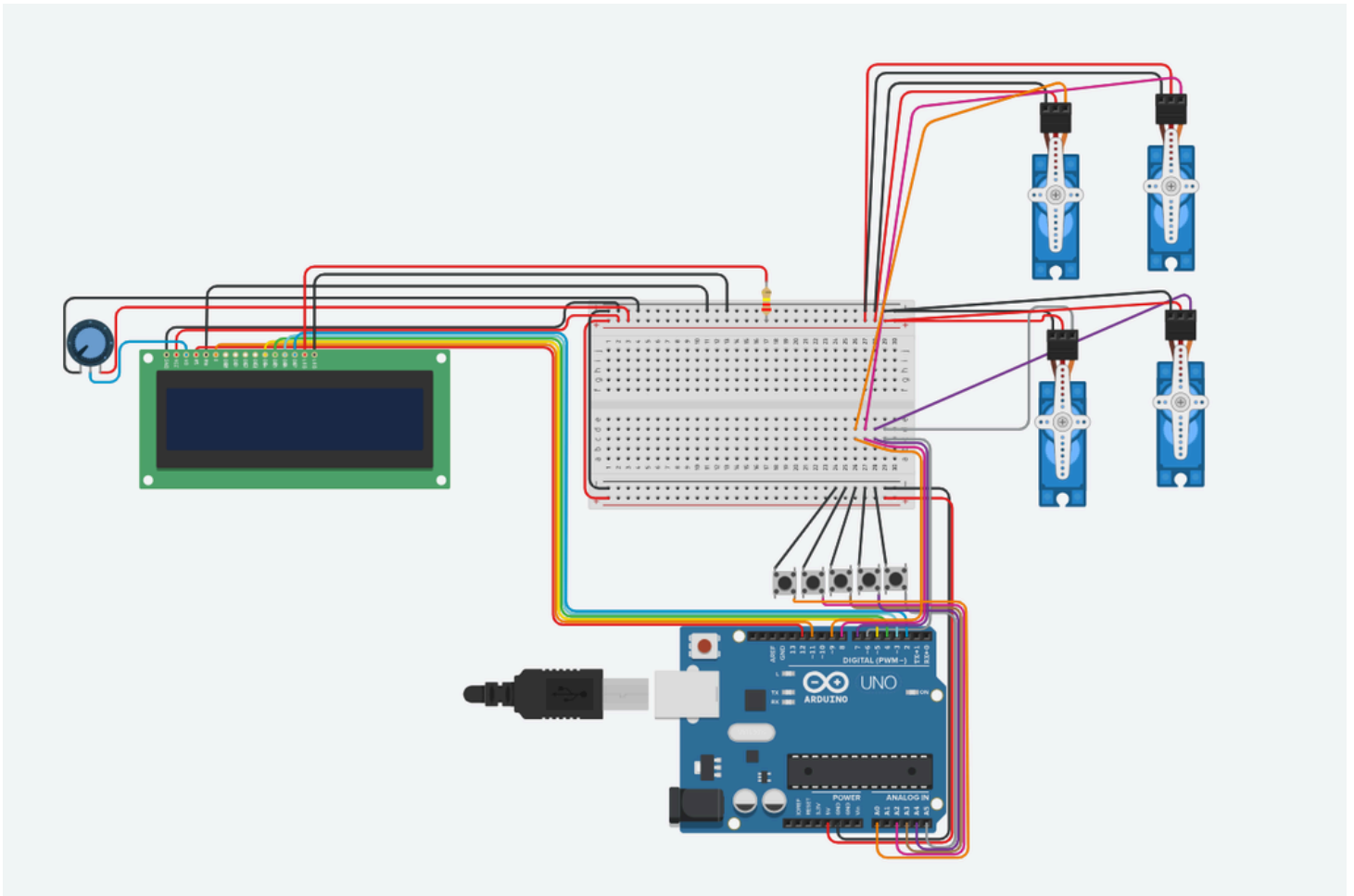
Code for ME 208 Project

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Introduction: Code for ME 208 Project



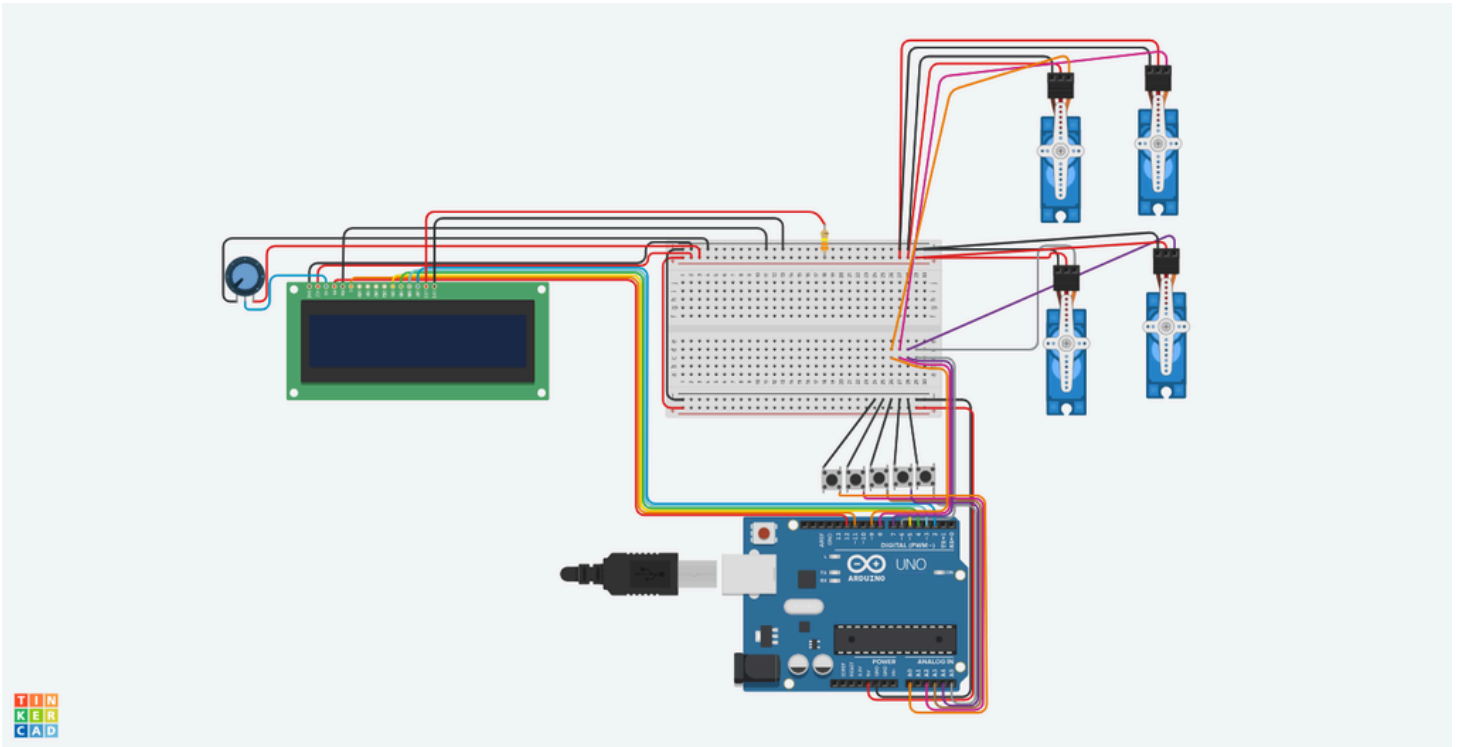
[Tinkercad Projects »](#)

A detailed explanation of where the wires and various parts go. Reminder the button colors and wire colors aren't important only the location is.

Supplies

- Arduino Uno Kit
- Additional wires
- An extra button

Step 1: Code Explanation



-Start by grounding your breadboard (black wire in one of the bottom negative to ground and red to 5V and the plus on the bottom).

Buttons (These buttons will be freestanding and inserted into slots so they will not be on the breadboard while creating):

Step 1) Take a button and either solder or hot glue two wires to opposite sides of the buttons (as shown on the photo since they are directly connected.). One side will go to the negatively charged part of the breadboard on the bottom. The other will go to A5/A4/A3/A2/A0 (all will get used for repeating).

Step 2) repeat this so you end up with 5 total buttons

Servos(These will also be freestanding):

Step 1)Ground the servo to the top of the breadboard using the middle and left pins on the servo.

Step 2)Plug a wire into the right side of the servo and plug the other end into a row on the breadboard (the location doesn't matter really we ended up using row D).

Step 3)Take another wire and plug it into the row directly below the servo wire on the breadboard. The other end will be plugged into 6/7/8/9 (all will get used for repeating)

Step 4)Repeat until all four servos are used

Display Monitor:

Step 1) Using two wires plug one side into ground/power and the others into the positive/negative top side of the breadboard (ground=negative and power=positive)

Step 2) Because the tinkercad is hard to read I will simply be putting which wires go to where end to end

-DB4 to 5

-DB5 to 4

-DB6 to 3

-DB7 to 2

Step 3) Use a wire and solder or hot glue to connect a resistor to the wire and insert the end with the resistor to the positive top side of the breadboard and the other end to LED anode.

-Another wire will go from LED cathode to the negative top side.

-Another wire will go from Read/Write to the negative top side of the breadboard.

-Wire will go from register select to 12

-Wire will go from enable to 11

Step 4) The potentiometer shown on the tinkercad is off the board however you can build it physically on the board as long as the wires are in series with the potentiometer. Ground both positive and negative cords which are on the left (negative) and the right (positive). Finally a wire will be placed in the middle of the potentiometer so it is in series and will be connected to contrast on the display monitor.