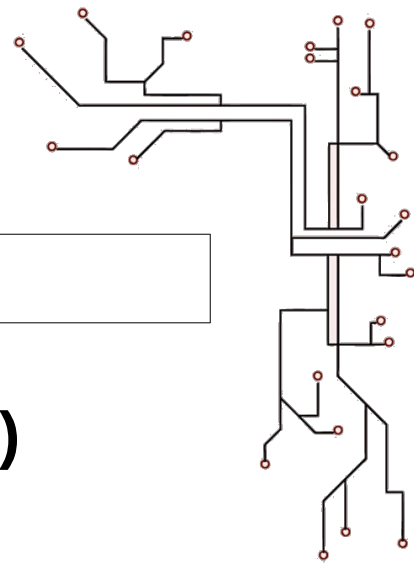


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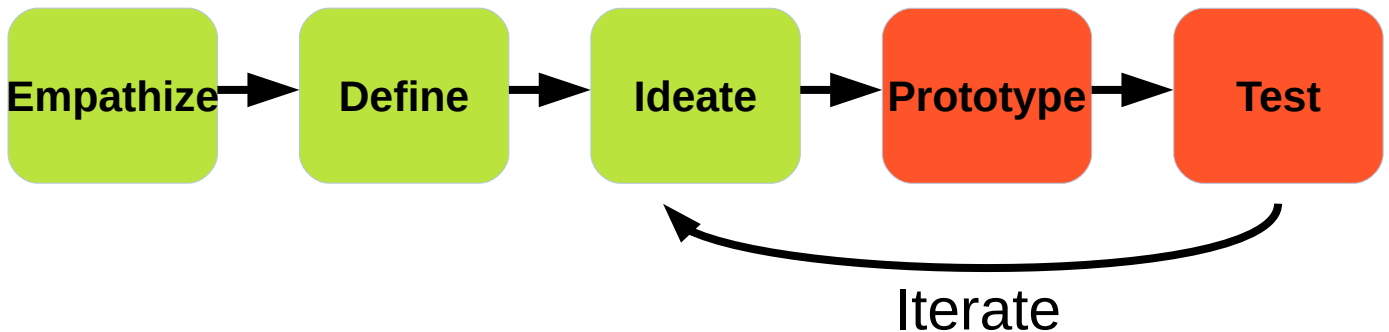
Name:		Class:	
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Lesson 10 (Prototype / Test)

Slides – <https://a9i.sg/huayi>

mBlock – <https://ide.mblock.cc> (start mLink too!)

Design Thinking



Start Creating Solution

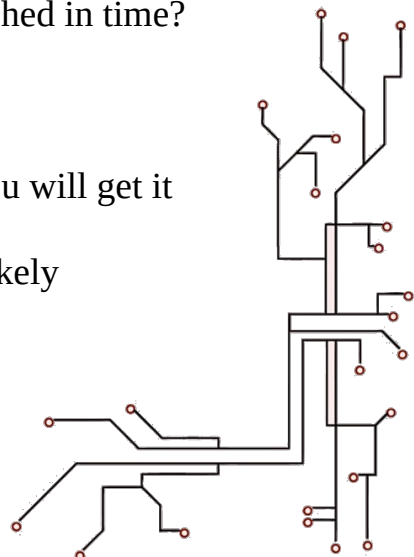
- Review Problem Statement & Solution Design
- Work with your team to fabricate your device
- Test early & often

Keep In Mind

- User is the most important member of the design team
- If they are not around, empathize & test from their viewpoint
- Be open to criticism, feedback and creative destruction
- Time to make hard decisions – what can realistically be finished in time?

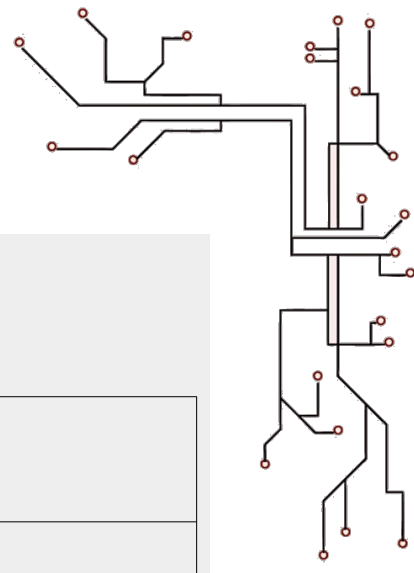
Shopping List

- Sensors, Actuators, Fabrication Materials, Tools, and more...
- The earlier you identify what you'll need, the more likely you will get it in time for your prototyping and testing
- Don't ask for everything, but guess what you'll need most likely



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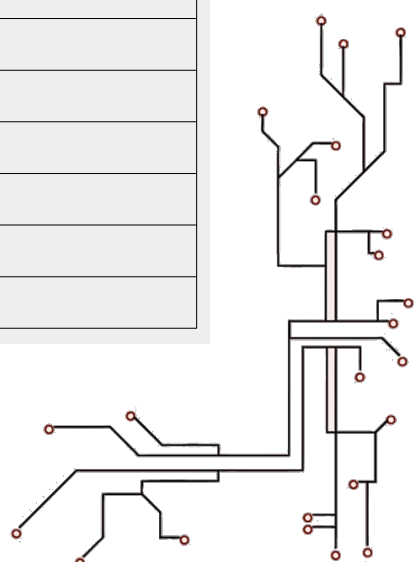
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ALP Project (Shopping List)

Make sure to keep this; you'll need to include it in your ALP report.

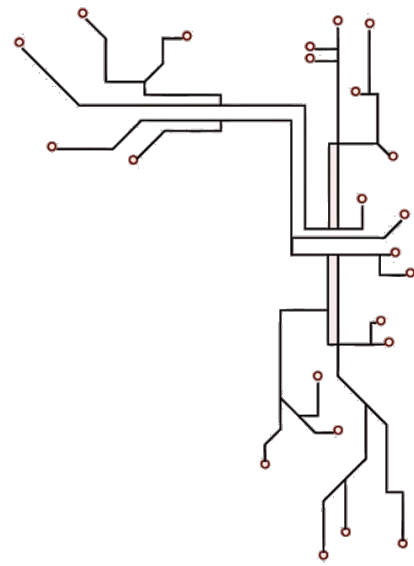
Category (Sensor, Actuator, Fab, Tool, Other)	Item Description, Amount, if relevant



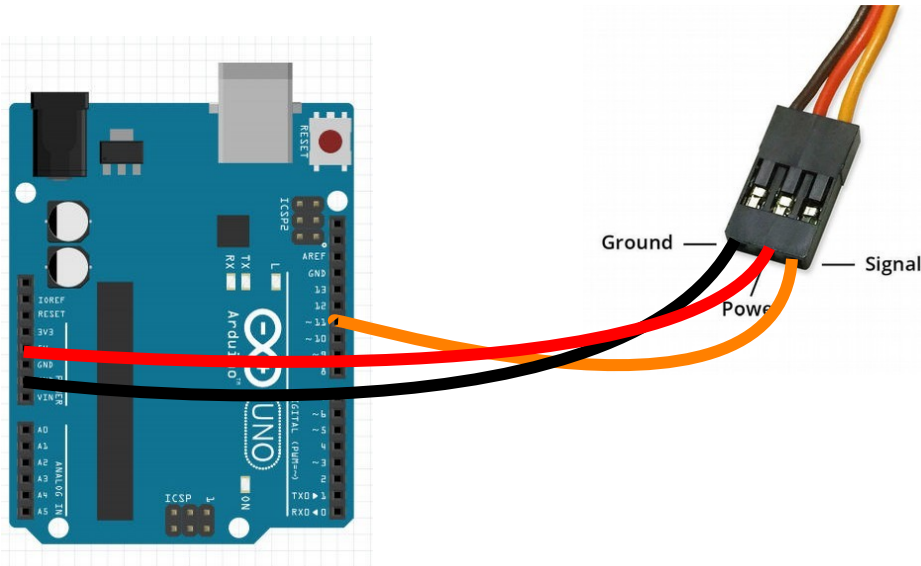
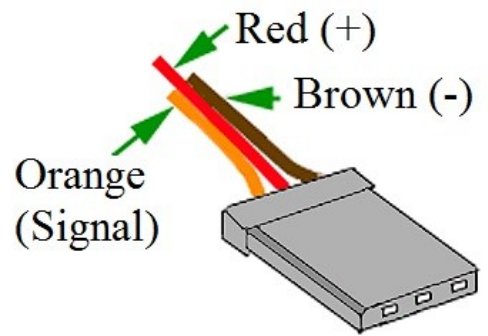
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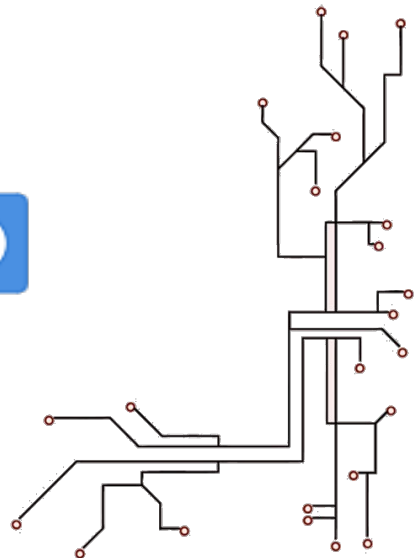
Servo Motor



Servo Wire	Arduino Pin
Red (+)	5V
Brown (-)	Gnd
Orange (S)	Any ~PWM I/O Pins



Use the special Servo Pin blocks to set angle (0-180°):



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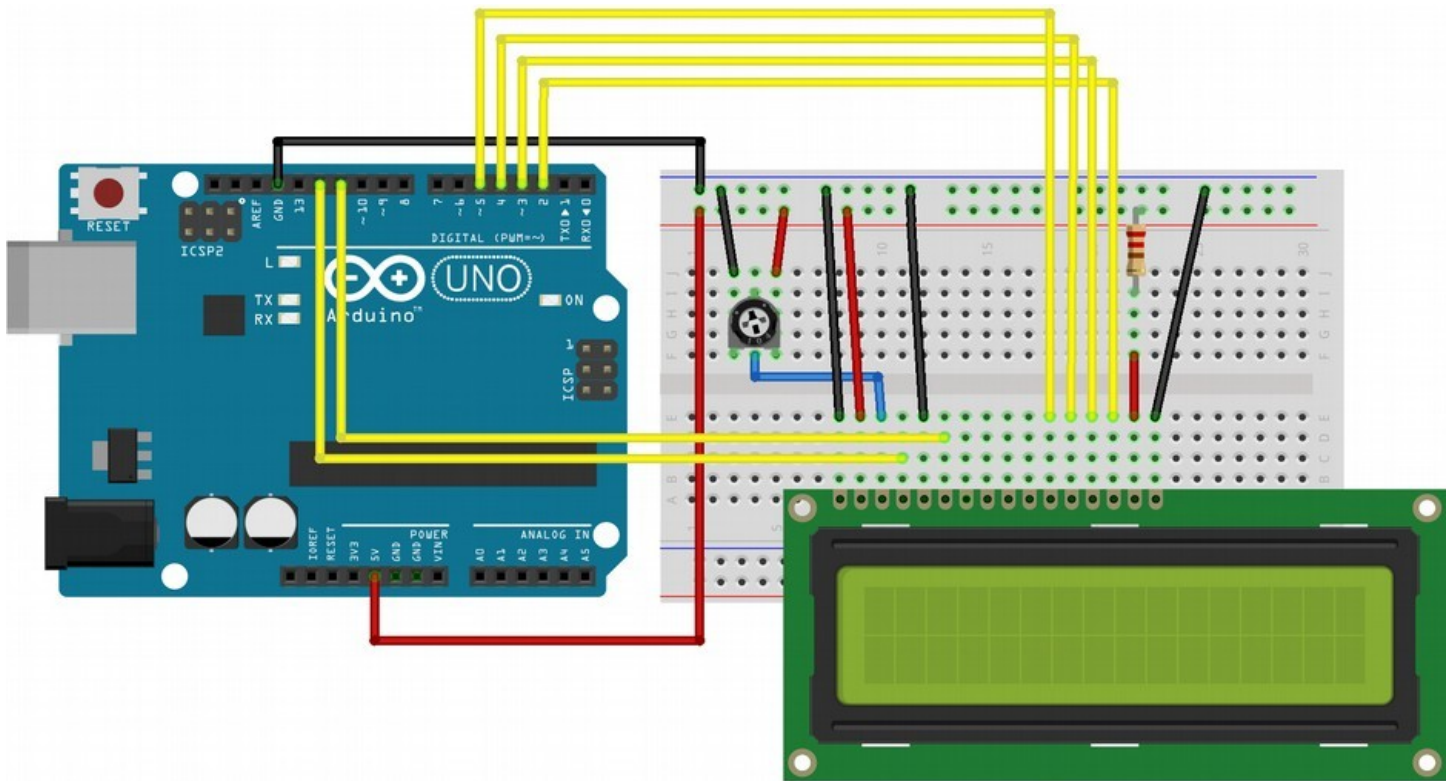
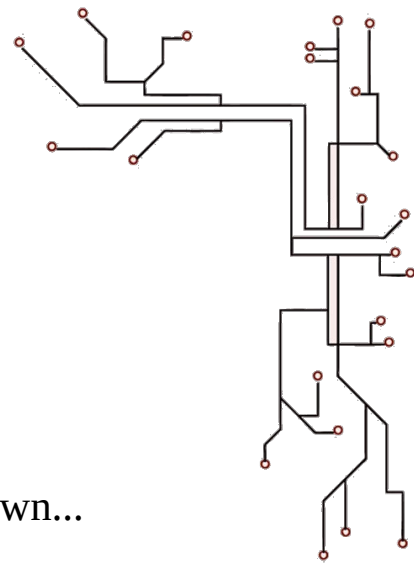
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LCD

See - <https://www.arduino.cc/en/Tutorial/HelloWorld>

Use same **330 ohm resistor**...

For our **Potentiometer** – wiring slightly different than shown...



CodeDojo CDG LCD Extension

