

Extra Bonus Opportunity

In this extra bonus opportunity, please start to draft the **reflections for your learning experiences** you have had for the

- (1) Learn from the posted videos. We have many videos on D2L. Pick some and watch. What you have learnt from those videos. Please watch five of them and use a table to summarize the videos.

| Video Name | Video URL | What you have learnt from the video | Any questions not answered through the videos? |
|---|---|--|---|
| Arduino Prototyping Techniques #104: Perfboard | https://www.youtube.com/watch?v=a3wDEcORRR4 | Perfboards are used as a long-term solution for connections made on a breadboard Is perforated board where all the connections are soldered in place Board is easily cut-able Do not solder a microcontroller or an integrated circuit to the perfboard. Use a socket Perma perf board can be used to build the circuit like it is on a breadboard - then the circuit can be directly soldered | What is an example of a circuit built on a perfboard? |
| Circuit Board Prototyping: Breadboards, Padboards, Stripboards and More | https://www.youtube.com/watch?v=0Mu2L9z1MH8 | For two elements that are not adjacent, the lead of one component can be bent and then soldered on top Flux cleaner should be used Stripboards are the same as padboards, only that the vertical | When is it better to use two holes per pad than one? |

| | | | |
|--|---|--|--|
| | | columns are connected - helpful for IC's | |
| The beauty of LC Oscillations | https://www.youtube.com/watch?v=2_y_3_3V-so | When an inductor and a capacitor are connected, there is an exchange of energy where each element does not store their own energy With an inductor, the capacitor is charged with the opposite polarity after it reaches the maximum current per time period. Current direction also changes | |
| The Best Protection for your circuit is NOT a fuse... but a resettable fuse? | https://www.youtube.com/watch?v=sFOKOVWj9p8 | Small glass fuses can be used to interrupt the flow of current Resettable fuse increases resistance as temperature rises & faster than traditional fuses to activate | |
| From Idea to Schematic to PCB: How to do it easily! | https://www.youtube.com/watch?v=35YuILUlfgs | Steps are: to have an idea, to build a paper schematic with all the required elements, to build an actual schematic using Easy EDA, and to turn to PCB mode & make the PCB | |

(2) Provide me some feedback for how to make our class better, any feedback will be highly appreciated to make sure you are successful for our class.

I wish that the class periods were shorter (55 minutes to 1hr 25 min) & there were 2 lecture periods rather than 1 long lecture period.

