

*After multiple attempts, my narrations for the slides failed to properly record. Given the video was relatively short, I've written this document with some supplemental notes with regards to this week's lab.*

This week's lab focuses on displaying data read from various sensors on an LCD display in your kit. You are to complete the 'Displays' portion of the Online Project, displaying the motor speed, coolant level, and battery temperature for the electric vehicle testbed you are developing. The deliverables include your report on this week's assignment and a short video demonstrating the functionality of your sensors and display.

The slides mostly present the components from the kit you will use, showing the connection diagrams to make building the circuit easier. Some notes:

- As always, if you are unfamiliar with any of the components, I recommend reviewing their ratings and other appropriate specs to avoid unsafe, potentially damaging, circuits.
- The LCD display has 2 rows, allowing 16 characters each. You have 3 different measurements you wish to display. You need to figure out a way of clearly displaying them.
- If you haven't already, I recommend reviewing the example in the Lesson Video on Displays. If you are able to replicate this, you are mostly left with adjusting the text and properly integrating the sensor data.
- Check the values you are reading from your sensors. They likely aren't the actual water level / temperature, but values which can be converted into what you are looking for. You will need to do a little research to figure out how to get the appropriate values to print on your display.
- The slides discuss both DHT11 temperature and humidity sensor module and the thermistor provided in your kit. This was simply meant to show you what is available to you. You will need to decide which component is most useful for your design.