Task

You have been tasked to construct an evidence guide of your learning. The subject of the evidence guide is defaulted to the construction of learning material for other students to consume (see below) -- however the subject can be negotiated with the teacher for individual interest or skills.

The subject of the evidence (the learning material) can be collaborated on together in teams of 2 ± 1 but the evidence guide of your learning is individual.

An evidence guide is a centrally located document which contains evidence of your growing knowledge and understanding of the content taught in this course. By default, you are required to submit the subject matter that you are using to base your evidence on and your evidence guide itself.

An evidence guide document is, generally, represented on a document that consists of short, and sharp, responses to high level questions. Historically, this document has been a PowerPoint document but this year the focus is on creating Markdown Documents.

**Topics for learning material** (choose one, all continuing content must be chosen before we can allow for duplicate choices).

### Continuing students

* Motor Controllers
* RF communication
* Servo Motors
* Esplora Board integration
* DPad / Joystick
* I2C communication between Arduinos
* Flatpack design on OnShape and Using a flat pack design on the laser cutter
* 3D design to hold components on OnShape andUsing a 3D design on the 3D printer
* Soldering a small circuit

### New year students may choose from here as well

* Replicating a project from T1 on a physical Arduino (Traffic Light,
* Centre Detector, Train Crossing
* Sending and Receiving Serial Communications

### Each topic of learning must include the following at a minimum

* Some sort of explicit instruction on the topic
* At least 2-4 (group size +1) worked example for any major thought you are trying to express
* At least 2-4 (group size +1) practice question for each worked example.
* At least 1 challenge question which incorporates the majority the knowledge from above.

### ****Evidence Guide:****

Students must respond to the following questions:

* What was the design process that you used ensure that you met all of required elements to produce your learning material?
* How did your understanding of digital solutions inform your choice band/or your learning solution?
* What is at least one example of how existing knowledge or understanding framed novel learning?