What we learned in the labs

- Initially we didn't possess a good understanding of how to use the solenoids to perform wireless energy transfer.

- So before we decided to test out lighting an LED with two solenoids. We realized that we needed to meet a threshold voltage of 1.4 volts to light the LED and that with our current setup that wasn't possible. We also realized that the wire that we may be using the wrong type of wire. For the purpose of wireless energy transfer, magnet wire, is optimal.

<http://www.instructables.com/answers/knowledge-about-wire-which-use-in-solenoid/>

We could not find any in the lab.

So we decided to rethink our progress moving forward. At the moment we would just like to figure out how to control our functional prototype of the TENS unit wirelessly.

<http://www.instructables.com/id/Spark-Core-no-need-to-write-an-iPhone-app/>

We have decided that for our first wireless prototype we will just use a spark core and its web interface to control inputs to the TENS unit to control frequency and to record data.

<http://www.target.com/p/icyhot-smart-relief-tens-therapy-back-pain-starter-kit/-/A-15024787?ci_src=17588969&ci_sku=15024787&ref=tgt_adv_XS000000&AFID=google_pla_df&CPNG=PLA_Health%2BBeauty_Priority%2BShopping&adgroup=Health%2BBeauty_Priority+TCINs&LID=700000001170770pgs&network=g&device=c&location=9004058&gclid=CjwKEAiA1JuyBRCogJLz4J71kj0SJADsd6QRzFKzBGOPoSoWTs6uakDYw0utLnUW-jYwp4j6doVclxoChKDw_wcB&gclsrc=aw.ds>

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