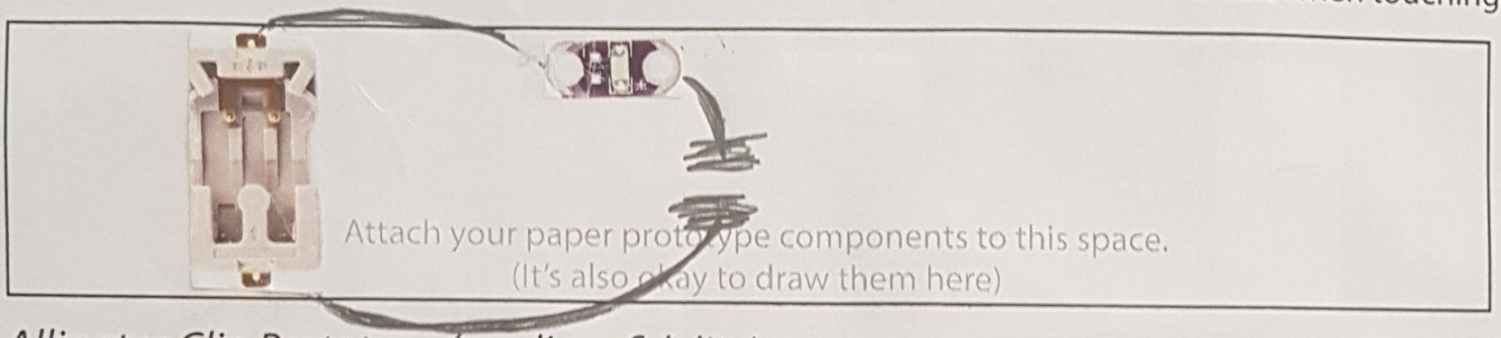
Name: Rebecca Kim

Assignment: Homemade Switches - due Tuesday, beginning of class

For this assignment, we're prototyping and implementing a simplified Assignment: Simple Circuits 4. but with conductive thread patches and a conductive fabric switch instead of components. HAND IN THIS SHEET + make a post to your Project Website - see Course Website for more details!

Paper Prototype (low fidelity)

Paper prototype a circuit that: (1) lights up 1 LED and (2) has a break in a trace of the circuit. (3) Add in two patches of satin-stitched conductive thread that will close the break in the circuit when touching.

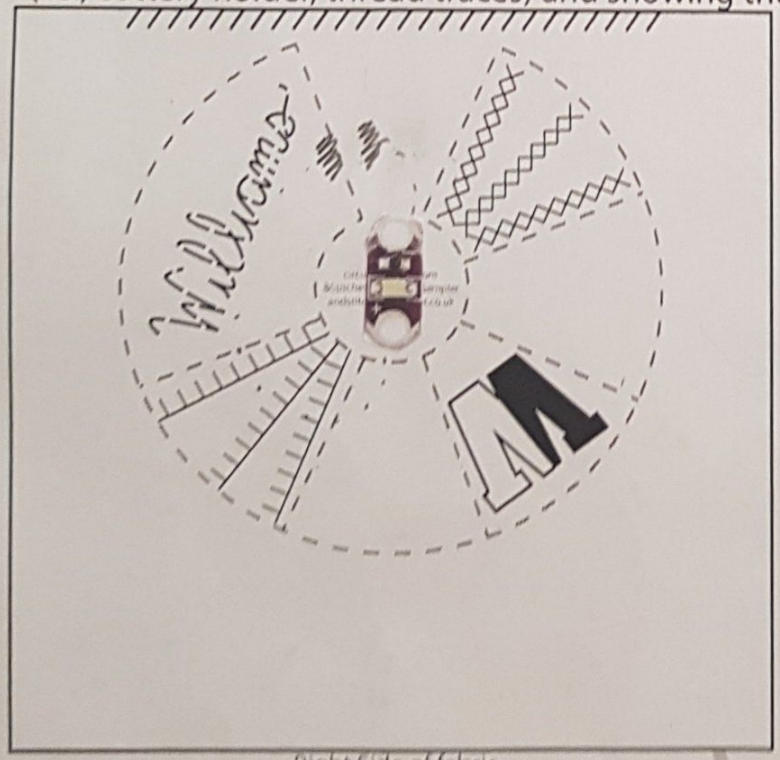


Alligator Clip Prototype (medium fidelity)

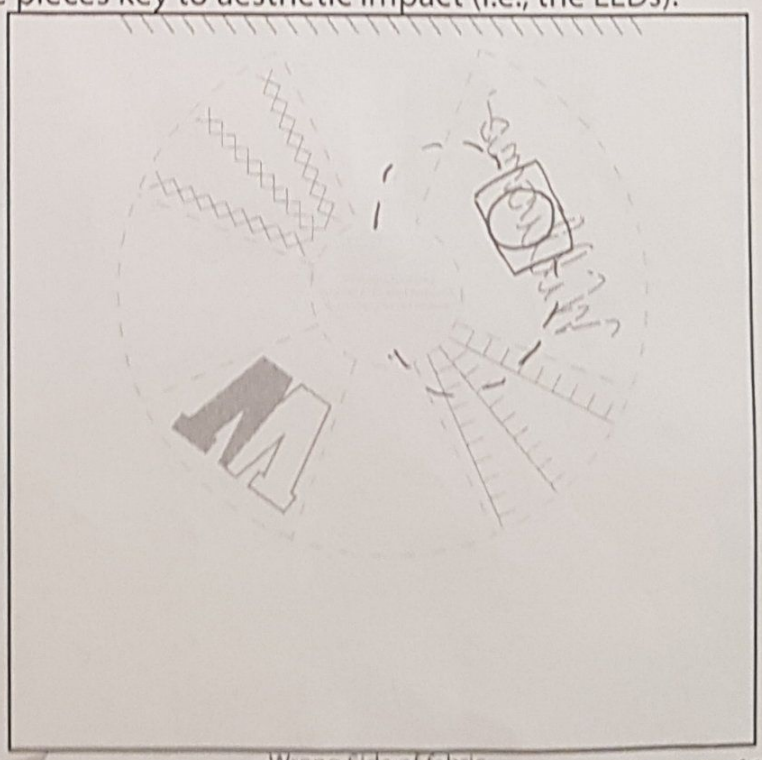
Using the components you'll need and alligator clips, test your paper prototype design above.
Always fix your paper prototype design to have the expected/correct circuit behavior.
Did you have to make any modifications to your original prototype? If so, what were they?

Design the Layout

Using the diagram below, draw the location of your componenets on your embroidery sampler. Try to maximize aesthetic impact by hiding components not instrumental to visual aesthetics (i.e., battery holder, thread traces) and showing the pieces key to aesthetic impact (i.e., the LEDs).



Right Side of fabric



Wrong Side of fabric

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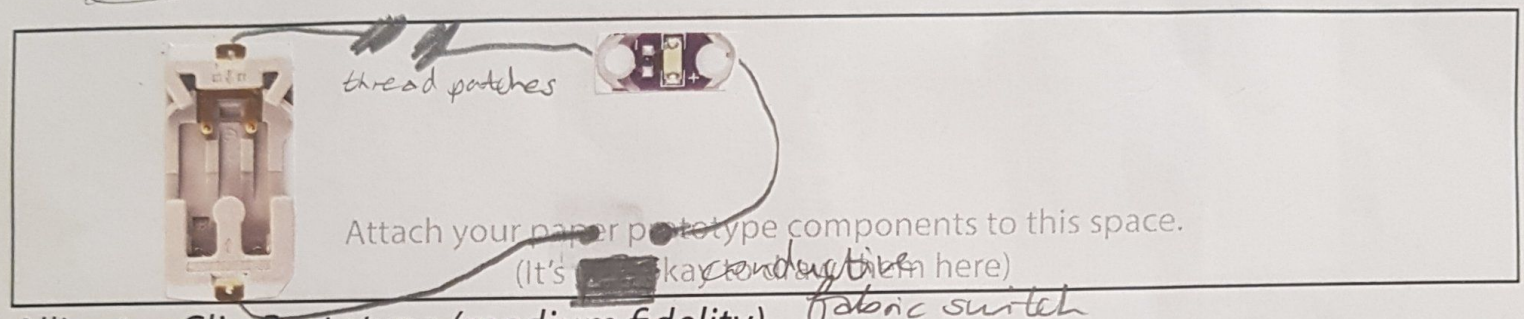
Paper Prototype (low fidelity)

Using the paper prototype on the previous page, how might your prototype change if you were to use two patches of conductive satin-stitching, and a piece of conductive fabric to close the circuit?

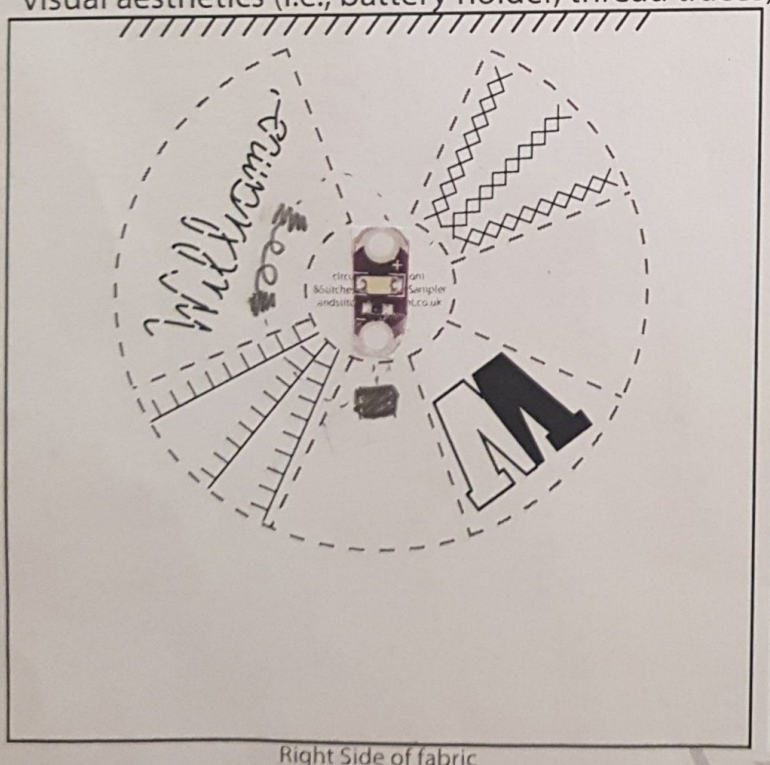


Alligator Clip Prototype (medium fidelity)

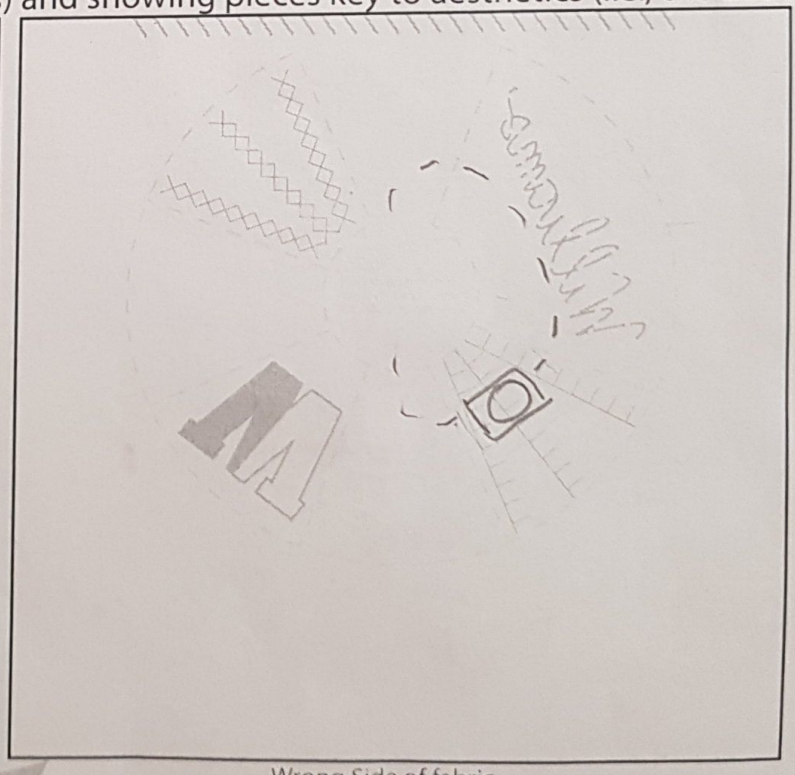
Using the components you'll need and alligator clips, test your paper prototype design above.
Always fix your paper prototype design to have the expected/correct circuit behavior.

Design the Layout

Using the diagram below and your design from above, draw the location of your componenets on your embroidery sampler. Try to maximize aesthetic impact by hiding components not instrumental to visual aesthetics (i.e., battery holder, thread traces) and showing pieces key to aesthetics (i.e., the LEDs).



Right Side of fabric



Wrong Side of fabric

Implement Your Design

Using appropriate electric components and conductive thread, implement your designs on this second page (with the two conductive patches and square of conductive fabric). Be prepared to demo your project to the class.