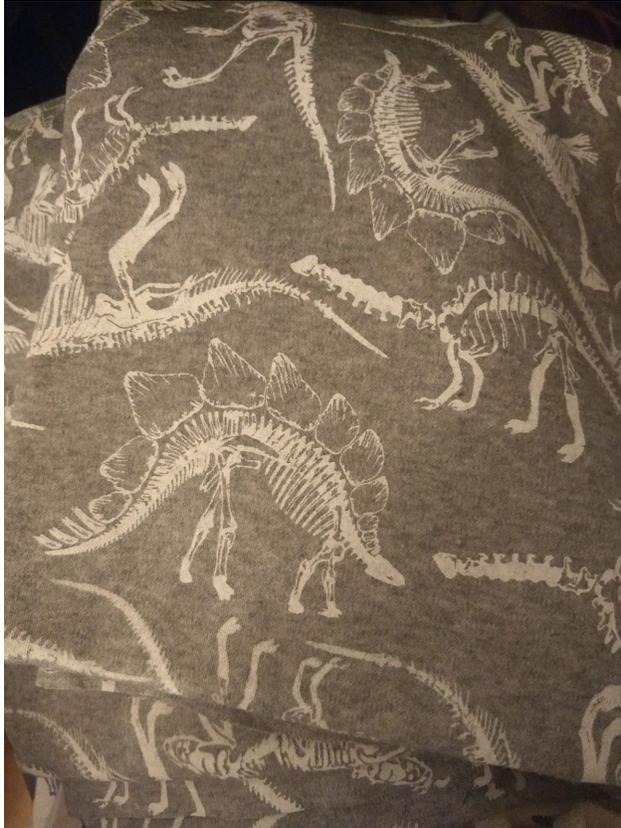




I wanted to make an article of clothing instead of one of the pre-approved projects because I didn't have an immediate use for stuffed animals or bags, but clothes are always useful. I've had some fabric that I've been wanting to make a shirt out of for a while, so I decided to make a t-shirt.

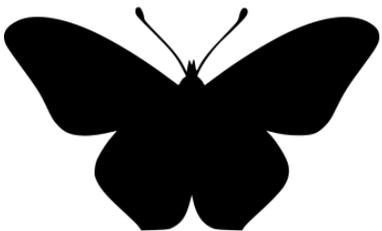
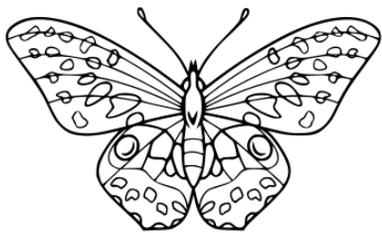
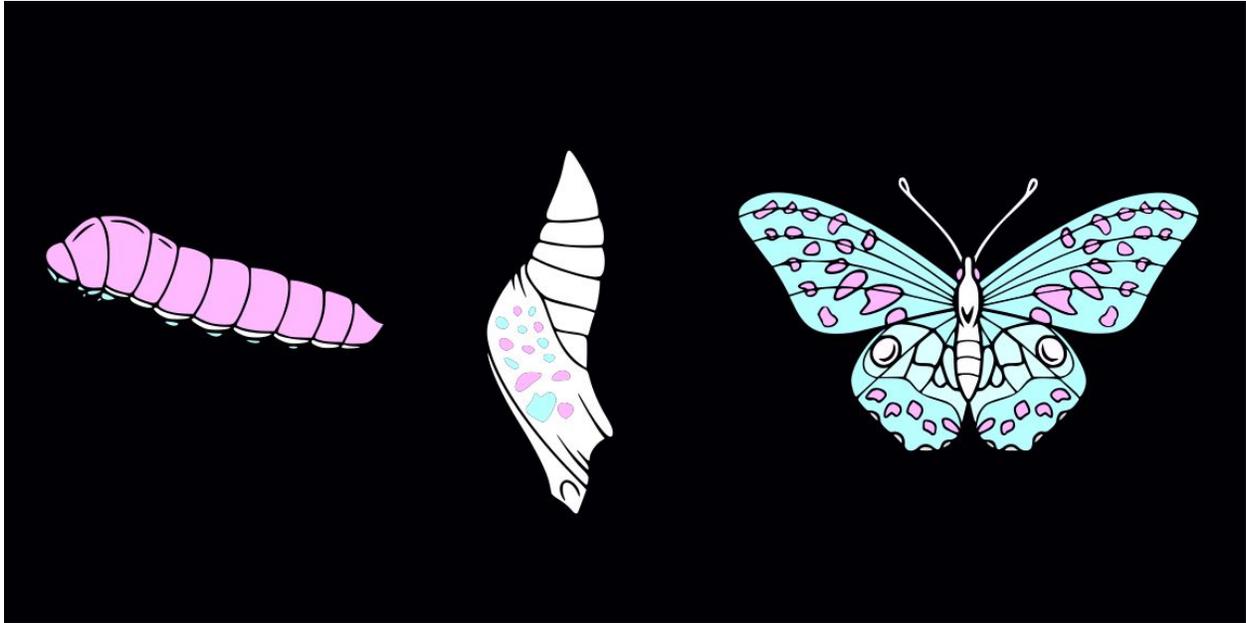


At first I considered doing a dinosaur embroidery design to match the fabric I already had, but since the fabric was already pretty busy, adding embroidery would make it too crowded. So instead I decided to build my design around some multi-colored thread I had:



I've always liked butterflies, so I started by looking for butterfly designs online. A lot of butterfly embroidery designs online have butterflies flying around the whole shirt, so I decided to have simple one-color silhouettes or outlines flying around, with a more complicated main embroidery to be on a pocket, because I figured it would be easiest to do a multi-color embroidery on a separate piece of fabric that could be added to the t-shirt afterwards. However, I stumbled across coloring page site with line art for various stages of life of [monarch butterflies](#), [painted ladies](#), and generic [butterflies](#), and I liked the idea of doing a caterpillar-cocoon-butterfly progression, so I did that instead of the pocket. I chose the generic butterfly because I liked the simple caterpillar best, and also because monarch butterflies and painted ladies have distinct, recognizable colors in real life, and I didn't want to feel obligated to try to match those.

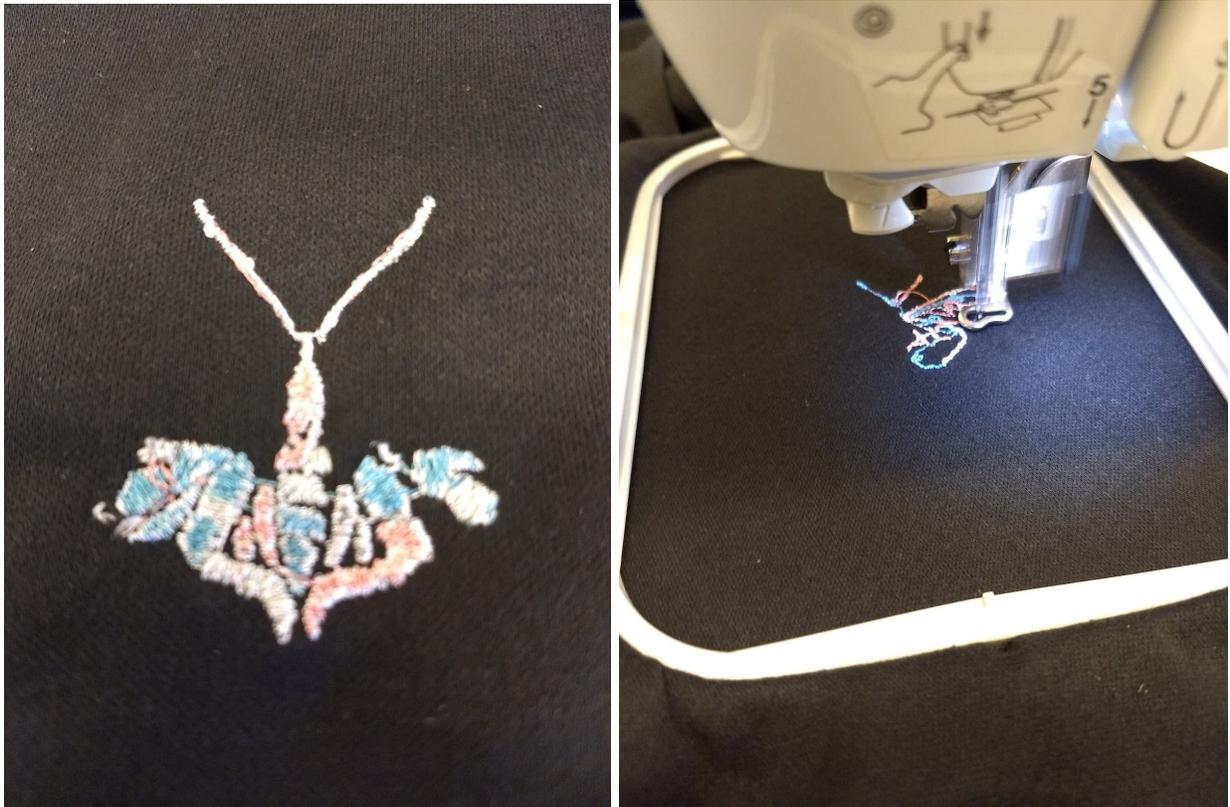
I used Inkscape to convert the coloring page to images for PE Design. I chose to remove the outlines to simplify things. I went with a pink-white-blue color scheme to match my multi-colored thread, and decided to use black fabric to make the light colors pop. I made both a silhouette and an outline for the butterfly, but decided to use the outline version since I thought it would be subtler and I worried the silhouette would use too much thread.



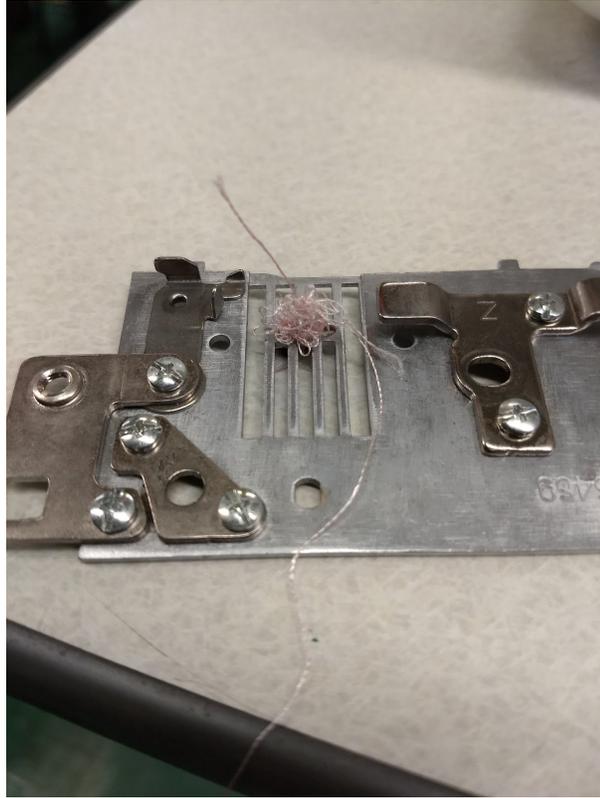
For my fabric, I chose a black interlock knit fabric. I originally wanted a jersey knit or something similar with 4-way stretch, but interlock is more stable, which I thought would make the embroidery easier.

I followed an [online tutorial](#) for most of my process. I started by cutting the necessary pieces, then embroidering. When I brought my images into PE Design, the auto-punch function didn't

detect some of the smaller parts of my design, so I simplified them slightly. I did a test embroidery to see how the multi-colored thread would look. Some of the white bobbin thread got pulled through to the front of the design, so I used multi-colored thread in the bobbin for the butterfly outlines on the back of the shirt.



Next, I did the front embroidery. I started with the cocoon in the center, then moved onto the caterpillar. My friend Craig's embroidering got stretched and he was told to use a stabilizer, so I added that for the caterpillar. However, my machine jammed while embroidering the caterpillar, and I had to cut the fabric a little to get it unstuck.



I cut a new front piece for the shirt and started again on the cocoon, but it jammed again, giving me two partly-embroidered holey pieces. A lot of my fellow students were also having issues with their embroidery messing up, so I gave up on the idea of getting the caterpillar and butterfly done. I think maybe because I was using a jersey needle with a rounded tip (these are good for knit fabrics, since the rounded needle will pass between the knit threads instead of piercing them), the needle wasn't piercing the stabilizer well enough, but I was working on this after break when it was very busy in the Fab Lab, so I didn't ask.

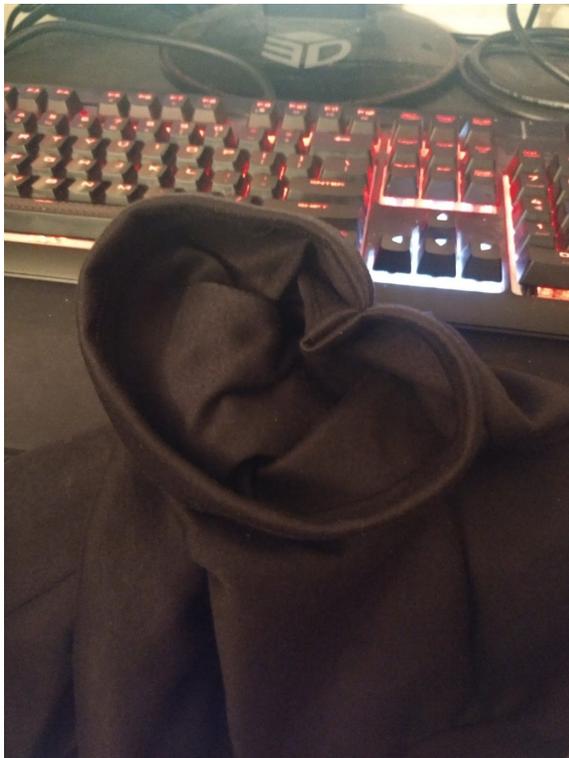
I saw another student, Mike, had put his embroidery on a separate fabric and sewn it onto his main piece (similar to my original idea with the pocket), so I decided to do that with my shirt. I thought I could attach my embroidery with a zigzag stitch that would hide the cut edge of the fabric. I tested this idea on scrap fabric with my multi-colored thread, and it looked pretty cool, so I cut out my first cocoon and sewed it over the failed second attempt.



Nest it was time to actually put the shirt together! This was the easy part. I just followed the tutorial for most of it. I hemmed the sleeves with multi-colored thread, but I forgot to switch out my black bobbin thread, so I ended up with a very subtle line, which actually looked kind of cool.



After trying it on, I decided the sleeve holes were too big, so I decided to take them in a bit. I should probably cut off the excess fabric, but it didn't bother me when wearing the shirt so I left it. At least if I ever get really big biceps, I'll have room to grow with this shirt!



Overall, I think this project turned out okay, but not great. Normally when using a new pattern, you're supposed to make a practice garment first to iron out all the fit issues, but I skipped that step due to time constraints, so at the very least this was good practice. I'm pleasantly surprised at how well the edges lie considering I skipped out on ironing them (not strictly because of time

constraints, mostly because I hate ironing). The collar is a bit higher than I'd prefer, since the shirt I used to make the pattern has a small neck hole, and the embroidery ended up a bit higher than I'd imagined so I didn't want to bring the neckline down too much. I'm also unsure about the length of the shirt. Since the fabric only stretches horizontally, I think ideally I might like it slightly longer, but it's close enough (and there are enough other issues with the shirt) that I don't want to pick the seam to fix it. In the future, I would probably choose a jersey knit for the vertical stretch since you can use a stabilizer to help with the embroidery part, which I didn't realize beforehand.

