**PROJECT\_CURRENT\_STATUS**

**PROTOTYPE I**

Battery and LEDs have been purchased to display the output.

* Upper and lower conductive layers with resistive layer in between are formed by sewing them together. This is the first prototype without have additional sensitivity integrated
* Testing the first prototype with LEDs.

**PROTOTYPE II**

Trying sensitivity with copper conductive thread and testing the output. The copper conductive thread is embedded and sewed in sensing areas and then tested.

**PROTOTYPE III**

Trying more sensitivity with thick copper strips and testing the output. The copper tapes are embedded and sewed in sensing areas and then tested.

**TECHNICAL IMPLEMENTATION CHALLENGES**

I have decided to build the pressure sensor without Arduino controller, but produce output using a LED, which is a challenge for the below reason.

* In software like tinker cad, when there is a change in resistance (potentiometer), output in LED is well and precisely noticeable. But when it comes to hardware, it is a challenge to make the led glow when there is slight change in resistance.
* Sometimes the brightness of LED might not be noticeable.
* Developing our project-sensor in the given wooden frame.

**INTERACTION DESIGN CHALLENGES**

* Twist is also a form of pressure, but since we have to integrate our projects in the 15\*15 wooden frame, we should restrict ourselves from twist input.
* Level of pressure and corresponding sensitivity.
* In order to optimize the sensor and produce a better output, I have planned to make the sensor area more sensitive.