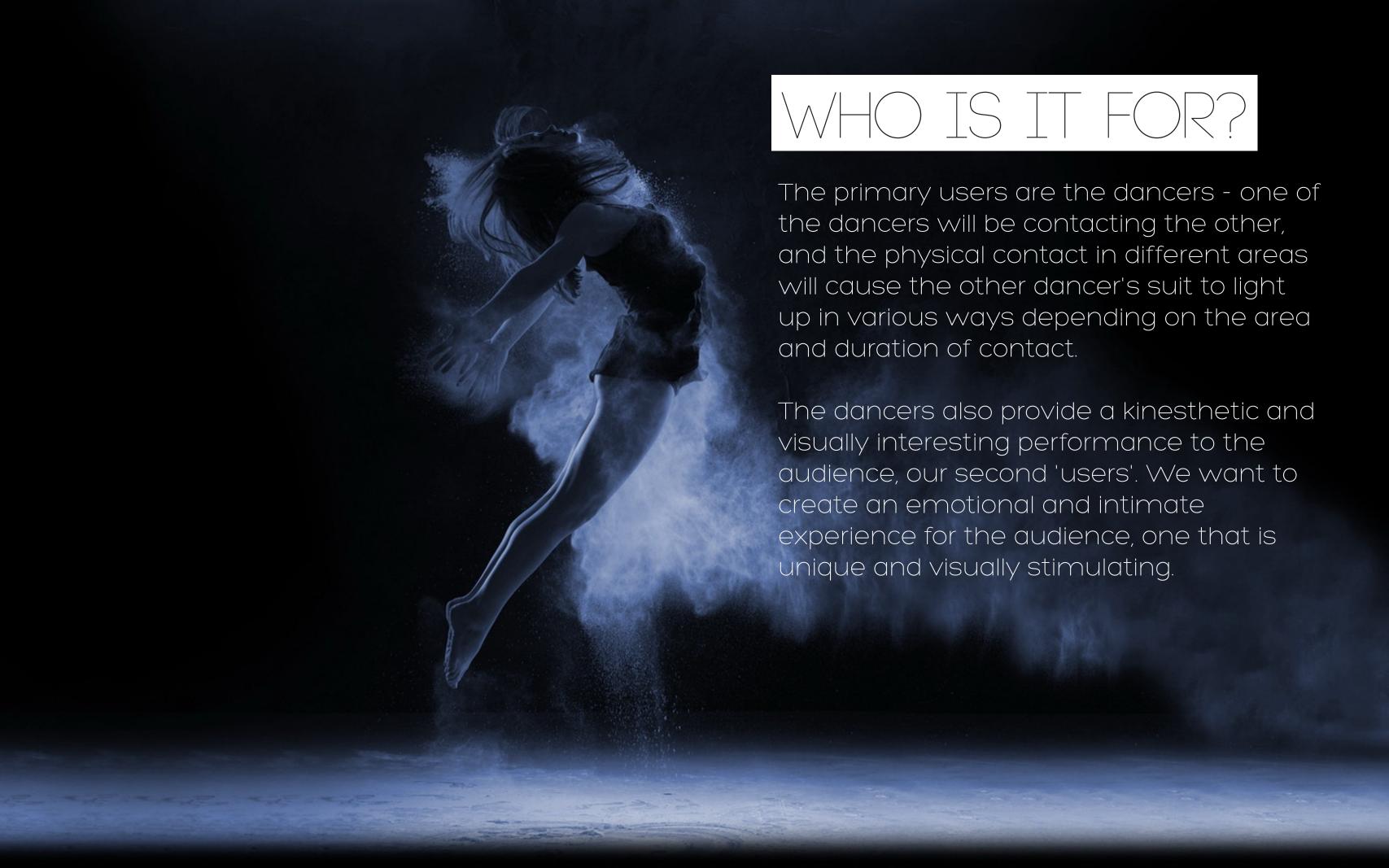


BRENDAN LANE ANDREW TSO CHRISTIE WONG KEN CALDER



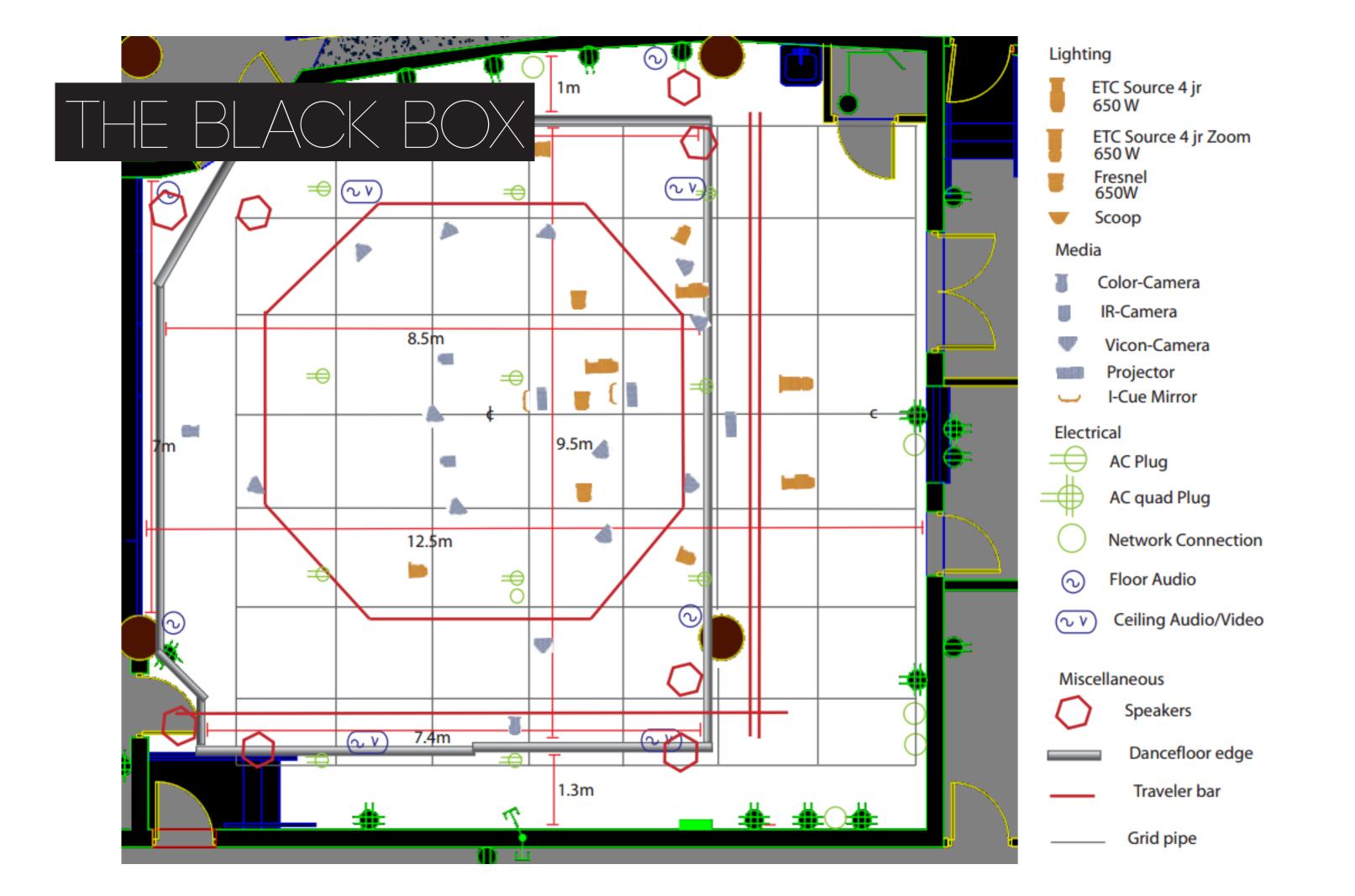
WHAT IS INNER LIGHT?

Inner Light is an explorative, modern dance performance for two performers that chronicles the emotional journey of one lonely man as he physically and socially interacts with someone else for the very first time.





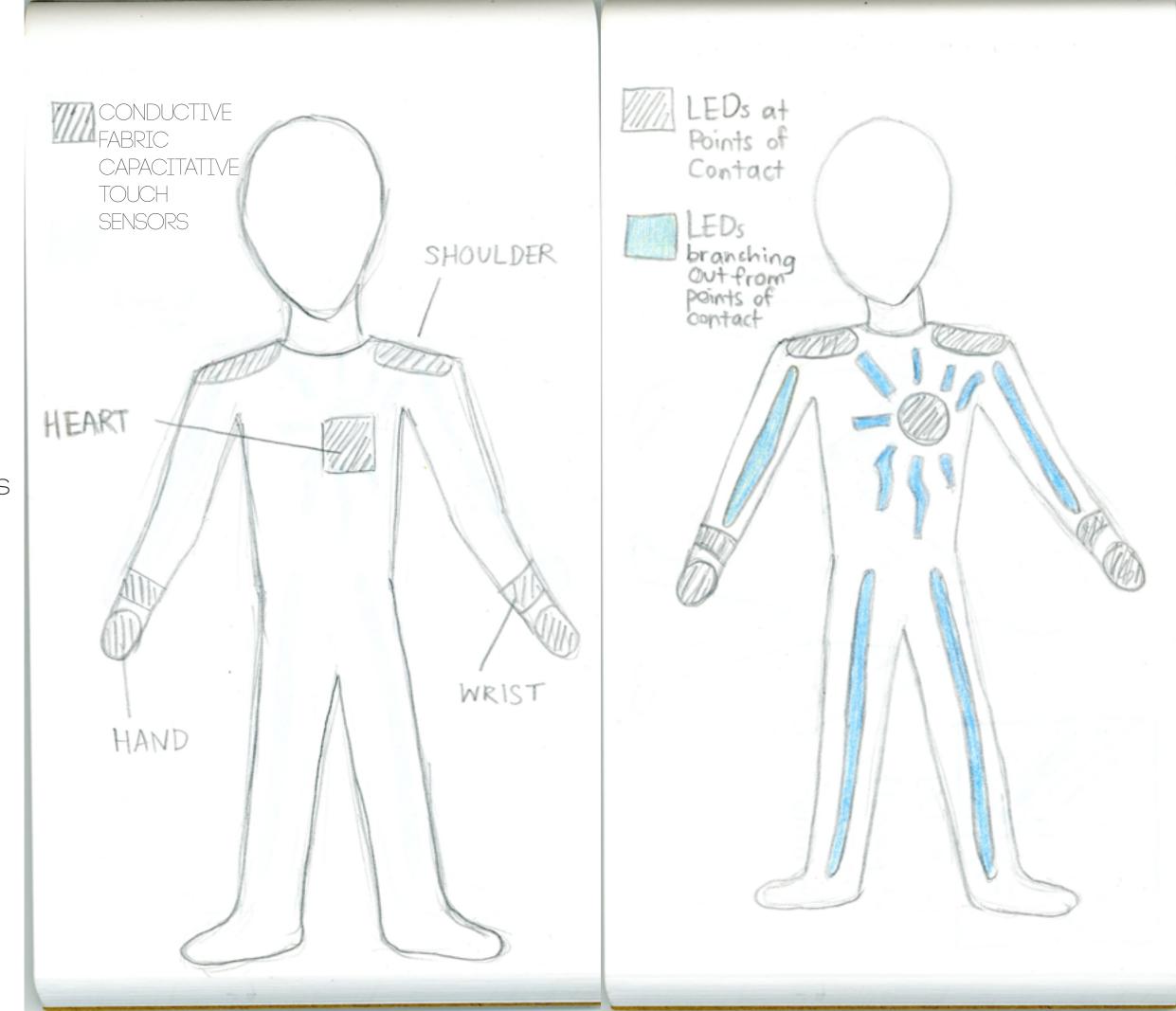
The performance will take place in SFU's Black Box, a small dark room. The room is equipped with a dance floor and controllable ambient lighting, allowing us to set the stage. The small size helps us to capture an intimate setting, and speakers allow us to play ambient music in the background. Because the room is dark, both performers will wear lit bodysuits to communicate to each other and to the audience. The performance will be under ten minutes long to avoid losing the audience's attention.



.speakers IN THE THEATRE around Stage area

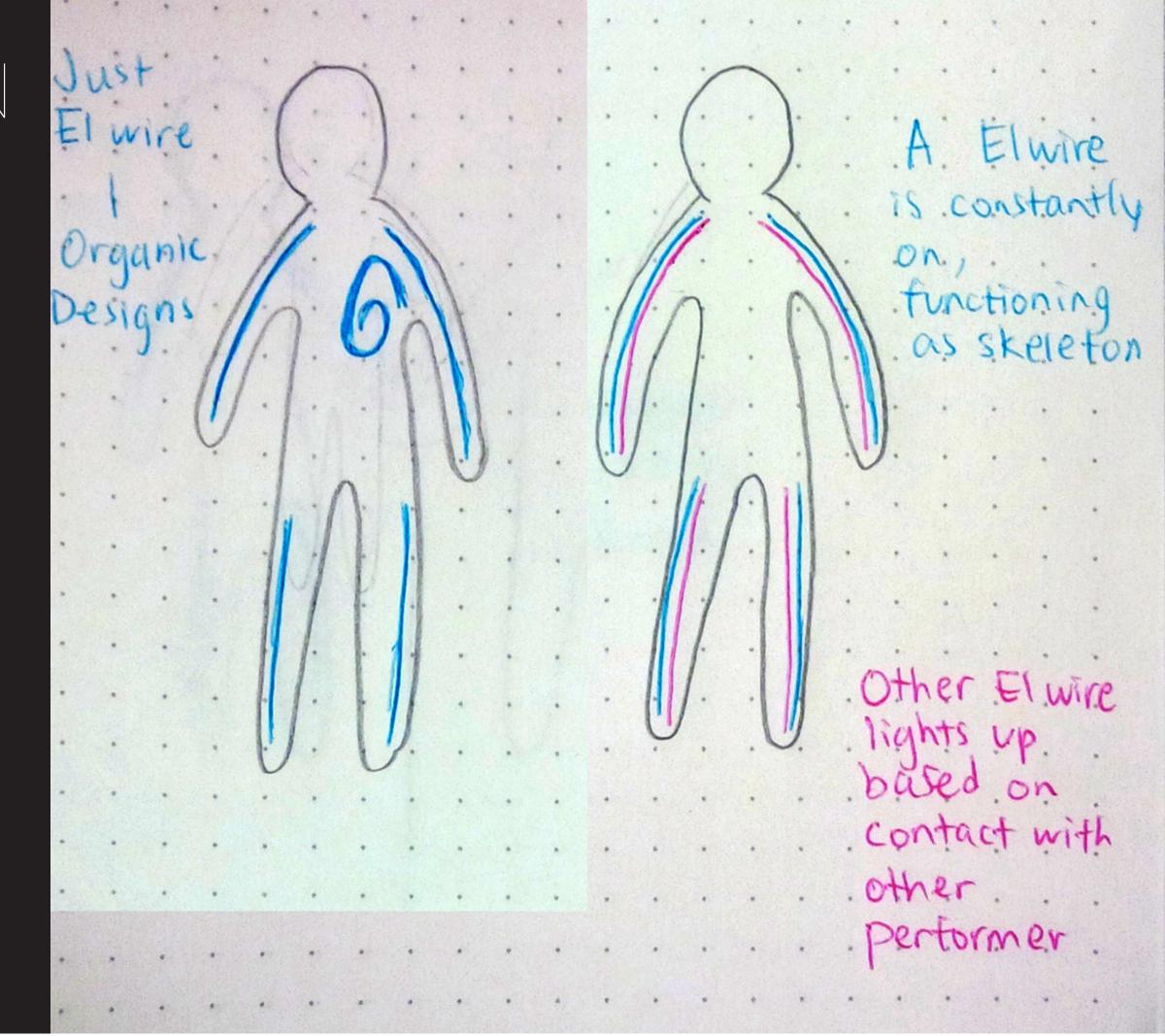
SETUP

The other human touches various touch points on the lonely man's body to introduce him to physical contact. By altering the duration and location of touch, the other human causes the light on the lonely man's body to alter in various ways, representing changes in his emotional state.



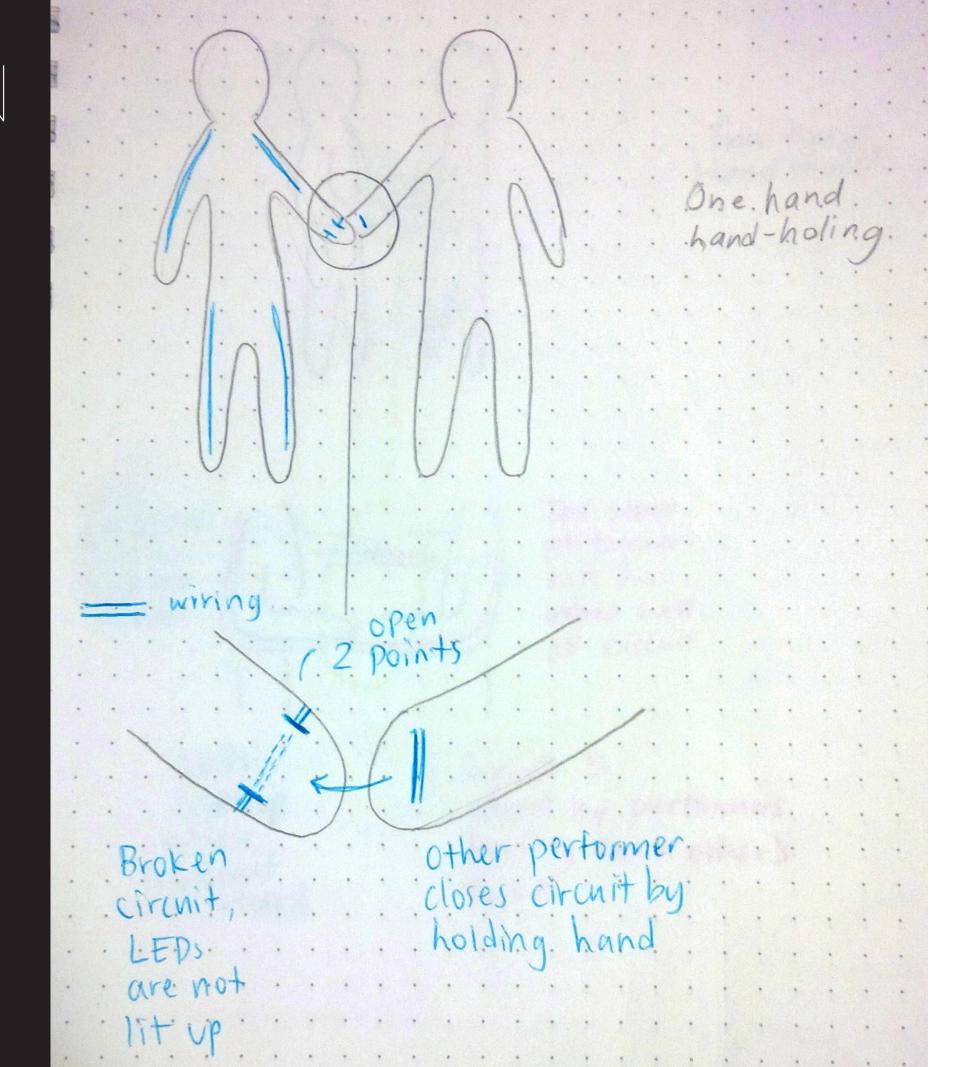
INTERACTION MODEL

The lonely man wears a bodysuit covered in segments of coloured el-wire. Some of this wire is always on to display his body form, but other segments light up in response to him being touched by the other dancer.



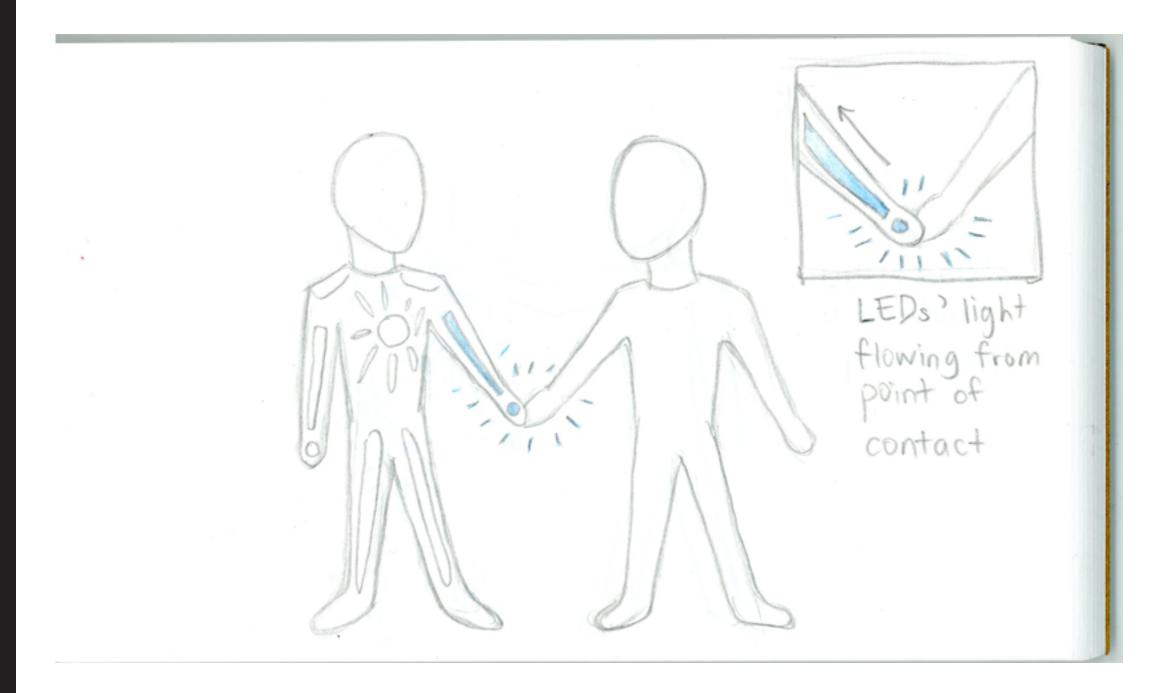
INTERACTION MODEL

The touch points will involve either two pieces of conductive fabric at the ends of a broken circuit, or a conductive fabric capacitative touch sensor. The sensors are activated when the second dancer touches specific touch points on the first dancer's body.



INTERACTION MODEL

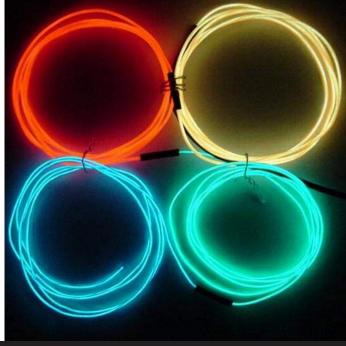
When the touch point is activated, the segment of el-wire closest to that touch point is lit up, and the other segments of el-wire also flicker to simulate a wave of emotion radiating from the point of contact.

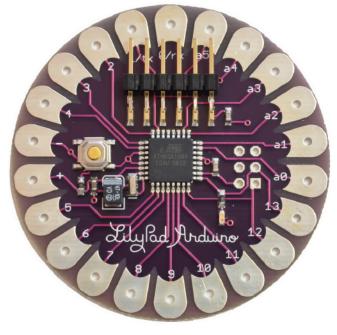


THE EQUIPMENT WE NEED

The bodysuit will have touch sensors made of conductive fabric and thread at each of the touch points to detect touch. The light will be emitted by coloured el-wire. Wiring will be done with conductive thread to ensure ease of movement, and the system will be controlled by an Arduino Lilypad microcontroller. The microcontroller will likely also necessitate an el-shield, a power inverter, and batteries.











OUR KEY QUESTIONS

- We must consider how the light can be shown on all sides of the dancers and be visible to the audience, as they will be moving and in contact, and we don't want the light feedback to be hidden from the audience
- We must think about how to make the suit flexible for dancers comfortable and durable
- We must think about more advanced electrical concepts how do we solder? How do we change the current or voltage of a circuit?
- We must consider the fabric and materials does conductive fabric work with a flexible bodysuit? How do we sew a flexible material? Should we use a flexible material at all?
- Will the light be a fresh experience or will it prove to be a distraction for the dancers?
- Will the dancers be able to see and effectively communicate with and contact each other?
- Will the audience understand that the light is being controlled by touch? Will this have the desired effect of inciting emotional empathy from them?

