# **OMNIBAG**

## PROBLEM

Fashion-oriented people are sensitive to what they wear because they use fashion as a form of self-expression. Backpack is universal accessory that elevates fashion style, but it is hard to match your backpack with many other different styles of fashion.

## SOLUTION

Omnibag is a smart backpack that can customize with changing colors, patterns, and premade designs by its connection to a smartphone or smartwatch. Omnibag is designed with innovative technology for people who want to be more expressive as an universal accessory. One essential feature is that Omnibag reacts depends on your geolocation for functional use. Omnibag is truly an irreplaceable and sustainable product that will replace more than hundreds of bags.

### NEEDS

To make it happen, we need to use Internet of things (IOT) technology that enables to change the backpack colors and patterns. In addition, we need to use fabric that is made with thermochromatic dye so color changes when temperature increases or decreases.

For pattern, there are two choices that I can think of. First is conductive thread which is woven into textiles, it can detect human touch and able to use miniature LED which helps to display our designs. Second, I think using bendable display (Flexible display) would be also good idea because it is slim so we can attach it to our backpack.

Installing RGB LED to breadboard and show various color changes through smart phone would be another idea for prototype.

# **BARRIER**

The current technology is keep developing and there are many possibilities to implement this idea, so I need to choose from those variations.