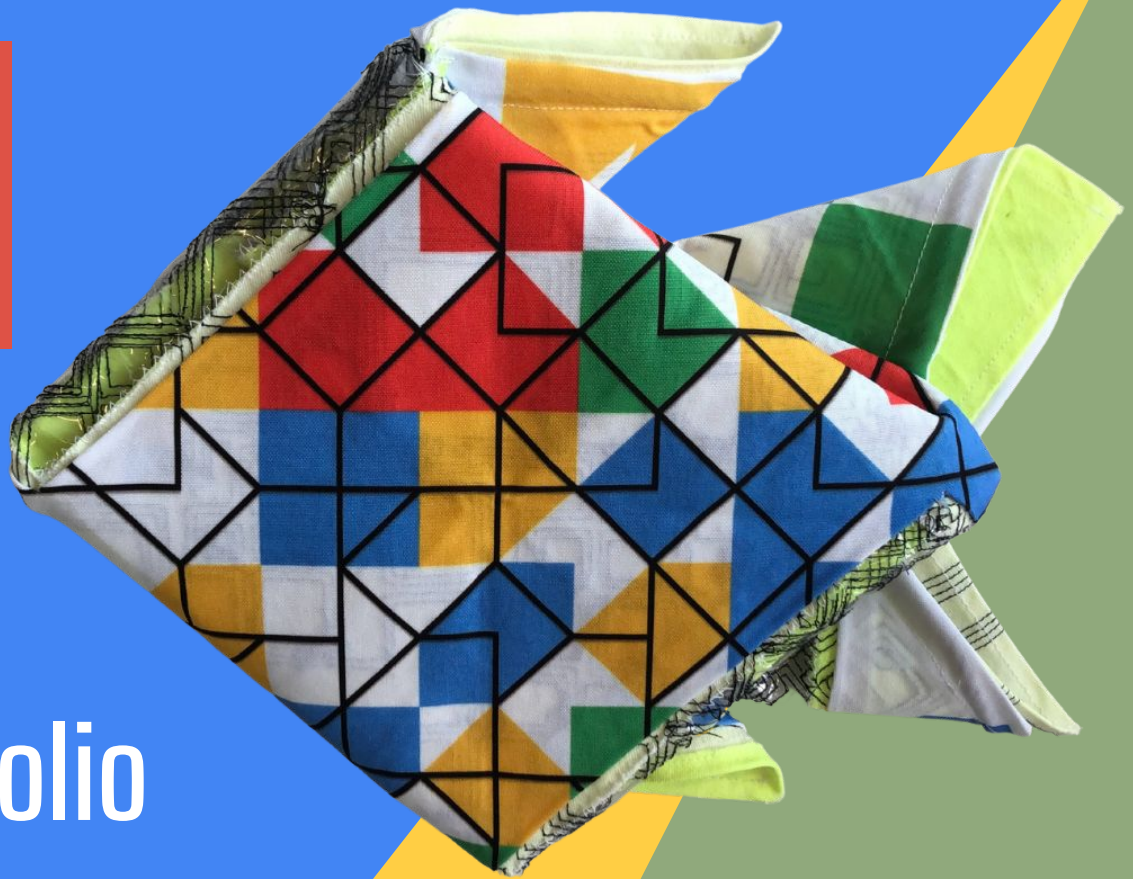
Oribaggu



Group 12
Annotated Portfolio

Digital Craftsmanship - DCB150

#1. Explorations on values

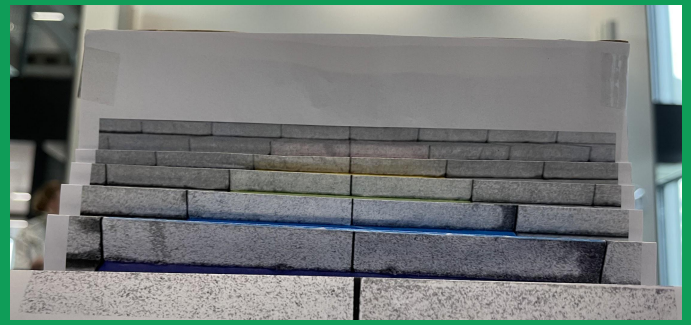
commonalities between our explorations

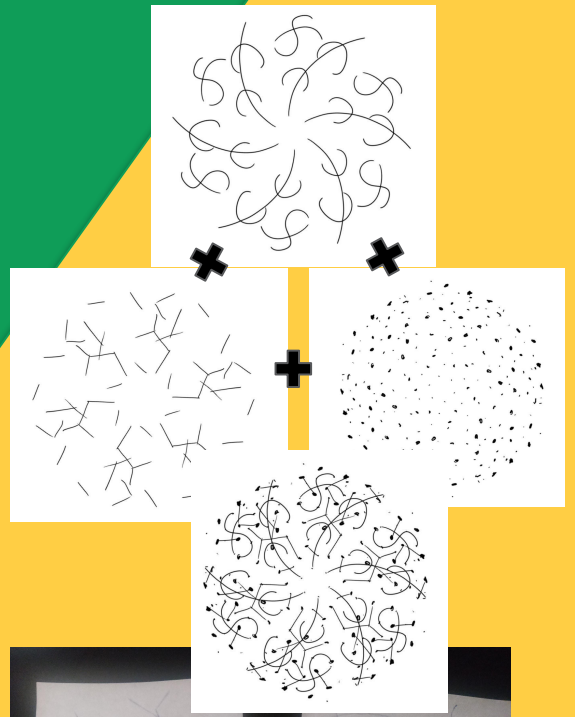
exploration on curiosity

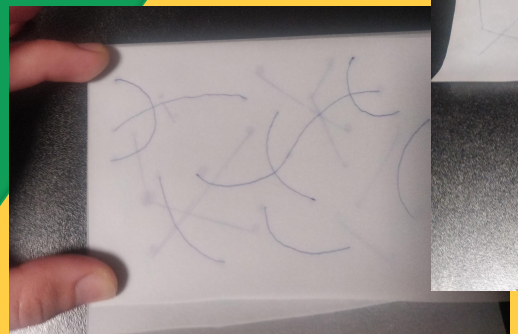
exploration on saving

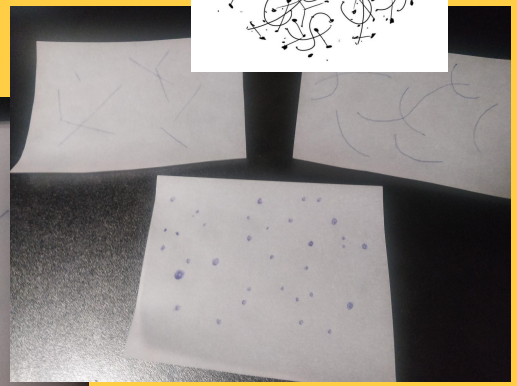
from one angle contents are hidden

from another angle openness is embraced, contents are visible







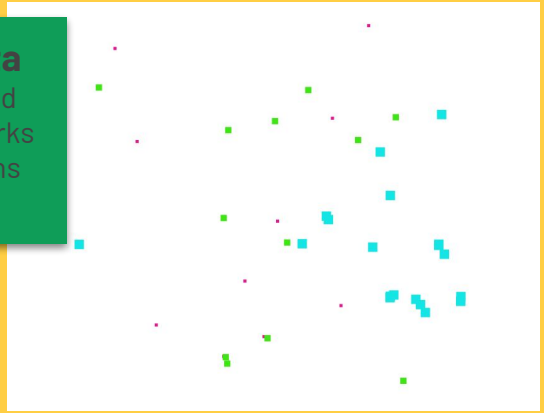


#2. Further exploring hiding and showing

Different way of hiding patterns by splitting and overlaying data

#3. Connecting hiding & showing with data & coding

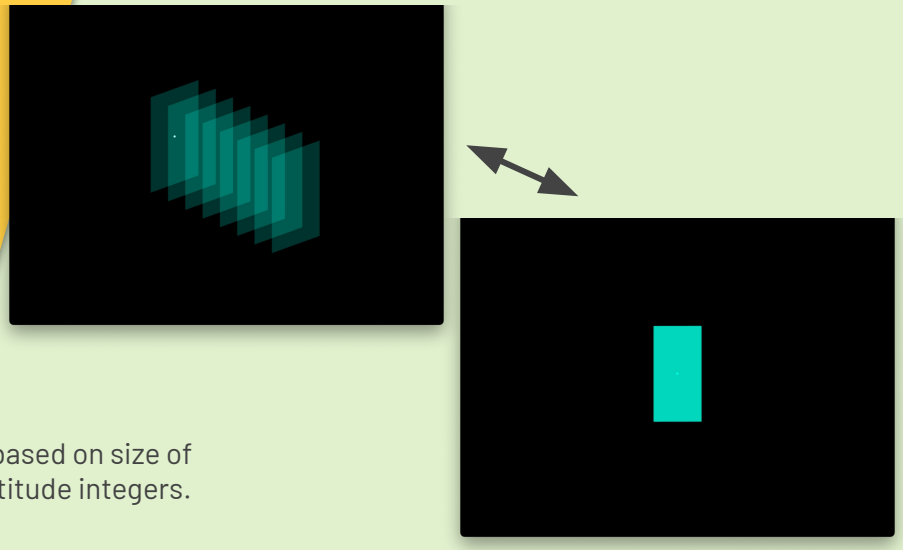
Coordinate data
Using Longitude and Latitude of landmarks to visualize locations of interest.



Mapping
Simple XY-plot

Waveforms
Length of lines based on size of longitude and latitude integers.

Layering
Using several planes of data visualization in combination in order to create a new pattern. The layering could be done for an endless amount of possibilities using different sets of data.



#4. Picking a theme:

Curiosity

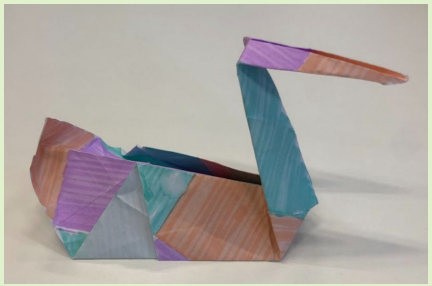
- Hide
- Show
- Openness
- Different view angles
- Explore
- Discover

(sub themes that came out of the previous explorations)

Curiosity /ˌkjʊə.riˈɒs.ə.ti/

1. an eager wish to know or learn about something
2. something that is interesting because it is rare and unusual

~Cambridge Dictionary



Rare and unusual objects.

Where did the folds come from?
Where could they go?

Vision Bags

Concept bag features

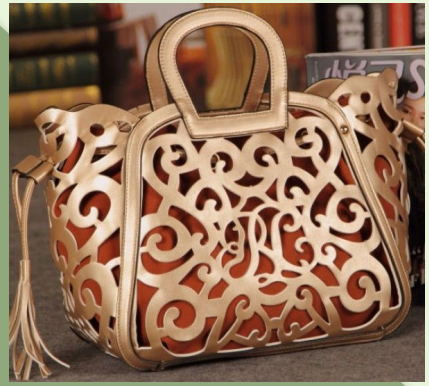


Image retrieved from http://www.siambag789.com/product/466/

Flexibility of the shape it holds

Furoshiki
Japanese cloth wrapping techniques

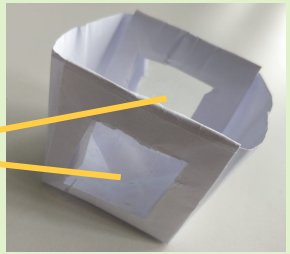
Desire to know what is held inside.

Image retrieved from
https://www.bragmybag.com/8-trending-transparent-bags-for-future-fashion-styles/

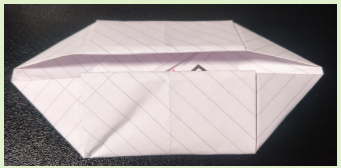
Image retrieved from
https://www.simplyzero.co/blogs/news/wrap-on-wrap-off-the-ultimate-guide-to-furoshiki-wrapping

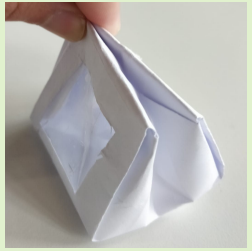
#5. Shape exploration with paper

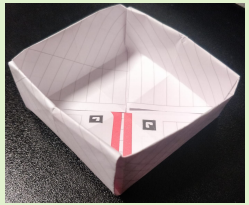
Transparency - Sparking looks from viewers. What is in there? Why can I look inside?



Paper template
Proving foldability of single plane in different shapes

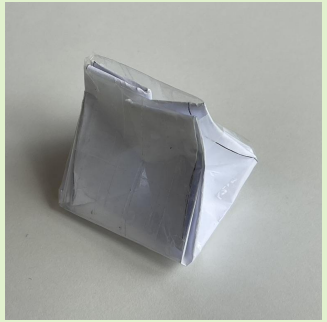






More “flat” options possible

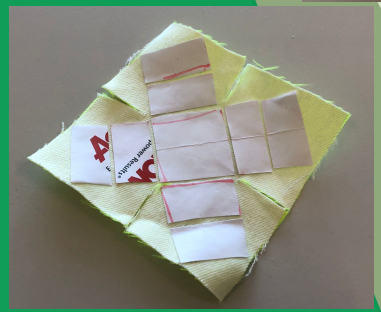
Folds create a pattern on their own



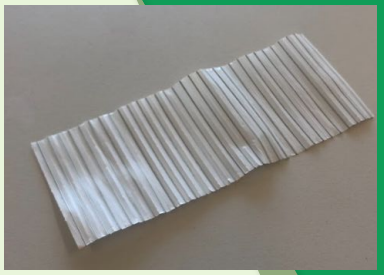
#6. Folding fabric

Paper/Fabric Layering
Adding rigidity

Full overlay vs Segmented
(Limited folds)

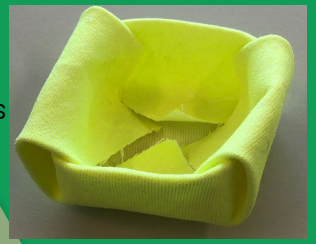


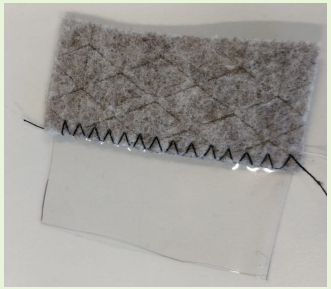
Wire on edges to add structure.

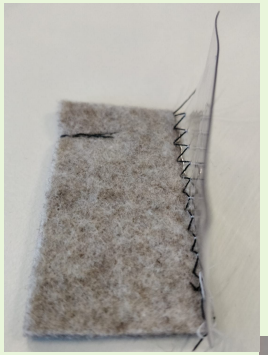


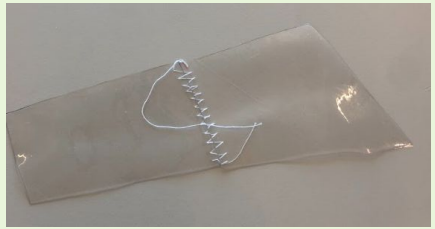
Wire between Fabrics, a lot of wire needed **adds weight**

Wireframing
Creating structure, but only on limited fold locations









Stitching
Creating designated fold lines, which are **limited**. Users can't explore more

Gluing
Added rigidity and stiffness, without restrictions
Best option!

#7. Extra mechanisms for holding the bag in shape

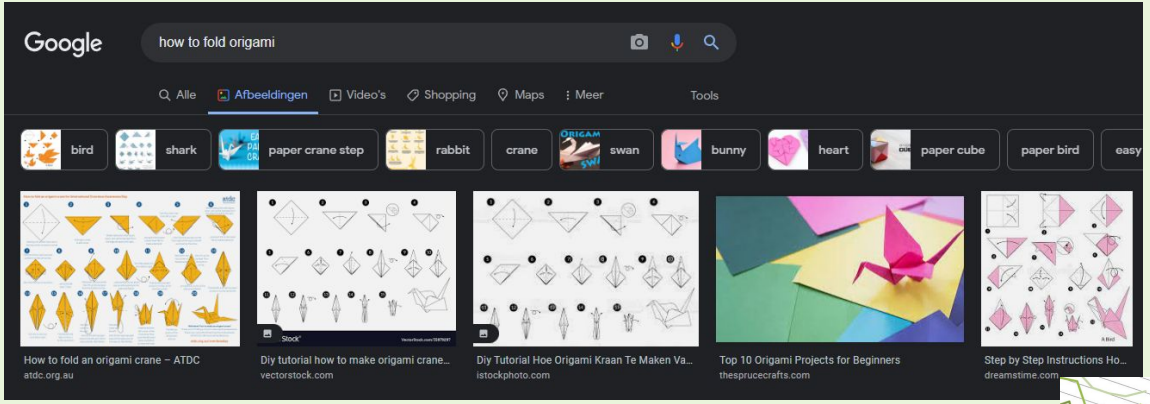
Gym bag style

Scrunch up an edge of the material in order to form a container.

Velcro

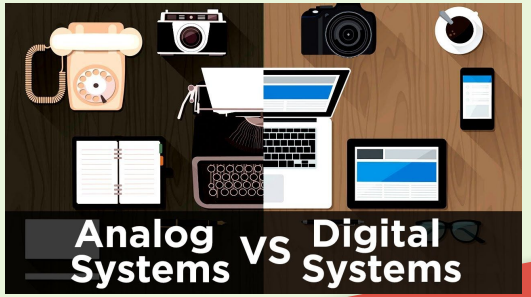
Attach Velcro on commonly folded sections in order to retain folds or shapes.

#8. Incorporating data & technology



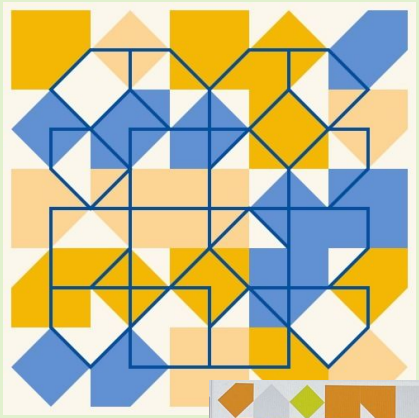
To explore curiosity, to discover something you that is unknown, the internet is used. Linking this technology to the theme.
For this reason Google's search engine data is used in order to compute our patterns and designs.

Taking the data from the curiosity of others to be able to explore our own, through the bag, with use of the digital visualization of this data. In the process creating contrast compared to it's the functionality.

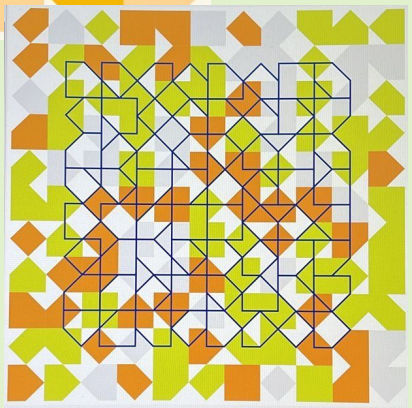


#9. Sublimation printing

Template used from *Roni Kaufman* (https://openprocessing.org/sketch/1535204)



Pattern represent the same ratio of the population of daily google searches.



```
let n = 11;
let s = (width-2*margin)/n;
```

Code generates an 11x11 pattern.

```
let d1 = 0;
let d2 = s*1.5;
```

11x11 pattern starts at the edge of the sketch. 2nd pattern starts 1.5 squares inwards in x and y direction.

Colorful pattern

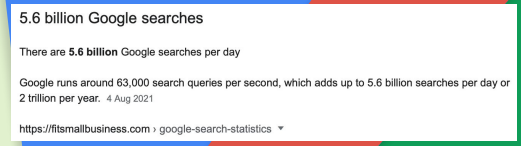
```
noStroke();
for (let x = margin+d1; x < width-margin-d1; x += s) {
  for (let y = margin+d1; y < height-margin-d1; y += s) {
    fill(random(palette));
    makeTile(x, y, s);
  }
}
```

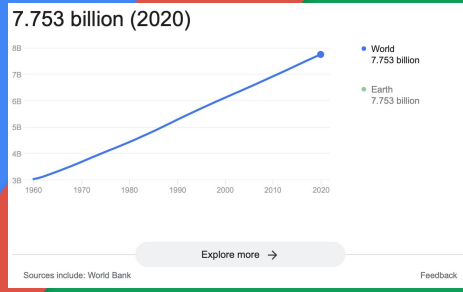
Inner pattern

```
noFill();
stroke("■#000");
strokeWeight(4);
for (let x = margin+d2; x < width-margin-d2; x += s) {
  for (let y = margin+d2; y < height-margin-d2; y += s) {
    makeTile(x, y, s);
  }
}
```

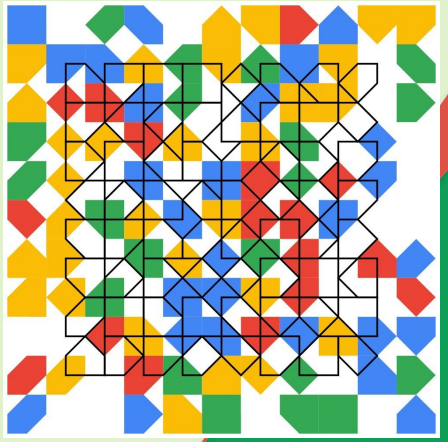
In the case of 11 squares wide the inner pattern is then 8.

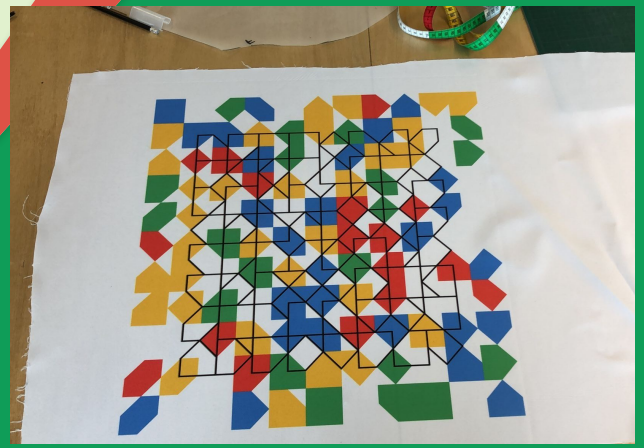
Relation between pattern and data: width of colourful pattern (=11) / width of inner pattern (=8) = world population (=7.7 billion) / google searches per day (=5.6 billion).



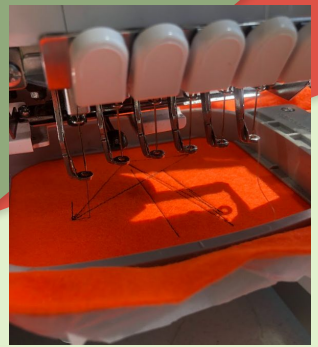


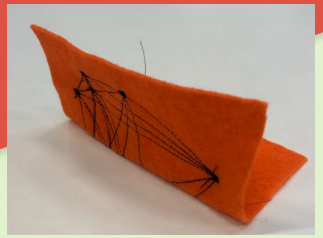
Colors were adjusted to link with those used by Google. Creating a subconscious connection with technology to the viewer.

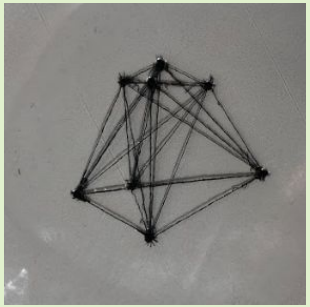


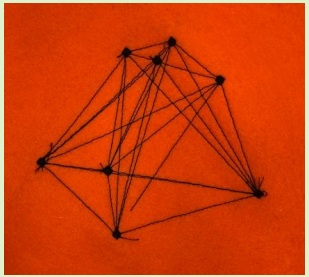


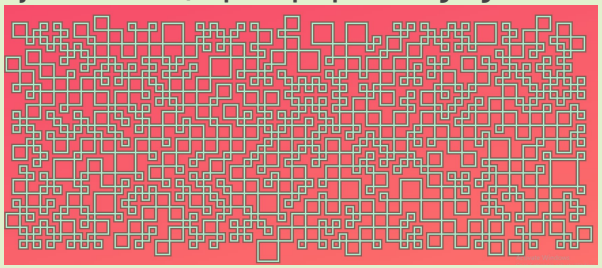
Original processing by Michael Lowe (https://openprocessing.org/sketch/1240566)









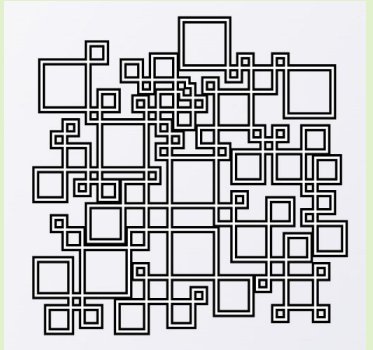


```
function getCellSizeAt(x, y) {
  let size = map(noise(x * noiseScale, y * noiseScale) ** p, 0.18 ** p, 0.82 ** p, cellSize, maxSquareSize);
  size = constrain(size, cellSize, maxSquareSize);
  size -= size % cellSize;
  return size;
}
```

Randomly generated size based on previous square size.

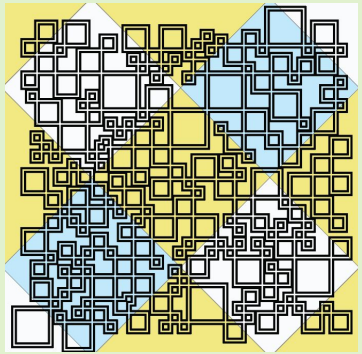
Embroidery testing
Effect of stitching pattern and distance on foldability of the fabric.

#10. Digital Embroidery Pattern & Data



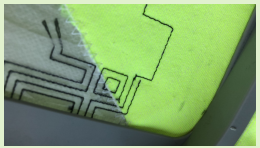
Data insertion
Square size is equal to Google search size distribution.
(1 to 6+ words on search query)
Color and shape corrected.

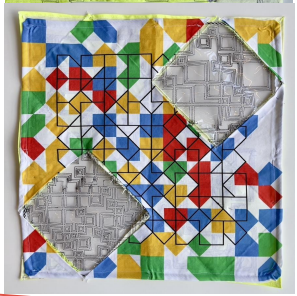
```
function getCellSizeAt(x, y) {
    let test=random(106)

    if (test<= 12.12){
        size=80;
    }
    else if (test<=20.82 ){
                        size=60;
                        }
    else if (test<= 34.62){
                        size=50;
                        }
    else if (test<= 54.22){
                        size=40;
                        }
    else if (test<= 78.2){
                        size=30;
                        }
    else if (test<= 106){
                        size=20;
                        }
    return size;
}
```



Pattern laid over different bag materials

Final embroidery





#11. Final Product Oribaggu

From Japanese:

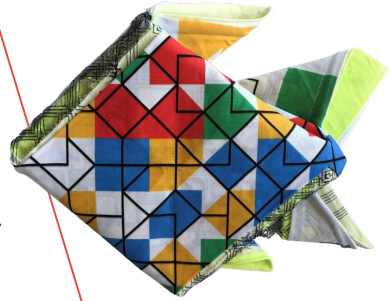
Ori - gami
Ori = Folding
Gami = Paper

Ori - baggu
Baggu = Bag

The purpose of Oribaggu is to allow the user to fully explore their curiosity through the bag.

The two patterns were fitted on the two sides of the bag.
No limited folding materials were used, so any form is possible.

Exploring Curiosity
What can be seen when a new animal/object is created?
An unusual and rare object can be formed by wanting to explore new shapes and forms.



Note the vibrant colors of the fabrics used, made to draw even more attention to the bag from the outside, to spark interest and mystery for viewers.

Functionality
Bag shapes can be formed displaying or hiding the inside

Different folds combine both data types