

# Sound and Image Processing

## Project Process Log

**Project:** Build a Turnip (Pixels)

### Idea

A simple interactive dress up game that allows users to create their own character. To implement a topic from this unit, the character would be pixelated using the function taught in class.

### Starter code

```
img.loadPixels();
const colTile = 7; //command d to replace multiple v colTiles
for (let y = 0; y < img.height; y += colTile) {
  for (let x = 0; x < img.width; x += colTile) {
    const pixValue = (y*img.width+x)*4;

    const colR = (img.pixels[pixValue]);
    const colG = (img.pixels[pixValue+1]);
    const colB = (img.pixels[pixValue+2]);
    const colA = (img.pixels[pixValue+3]);

    fill(colR,colG,colB, colA);
    rect(x, y, colTile, colTile);
  }
}
```

The code above is how I will be processing my images for it to look pixelated.

### Building Interactivity Element

For the interactivity element I utilize the mousePressed function to create button so users can change the elements of the character.

```
function mousePressed() {
  if (a >= 2) {
    a = -1;
  }
  let d = dist(mouseX, mouseY, 150, 250);
  if (d < 25) {
    a++;
    slide = loadImage(pics[a]);
  }
}
```

The function is for one of the button. The photographs as confined in an array represented by “a”, for every time a user click on the location, it would increase “a” and trigger the change of pictures.

```
let save_dist = dist(mouseX, mouseY, 830, 820);
if (save_dist < 80) {
  click_s.play();
  let to_save = get(260, 210, 565, 590);
  to_save.save("your turnip.png");
}
}
```

The code above is also within the mousePressed function, however instead of triggering a different picture it allows the user to save the image in a specific parameter.

## Conflict

When this project is done and working, I was able to point out on things that I could Improve:

- Efficiency in coding, I processed all the character or jpeg one by one making the project code very repetitive.